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Nov 1802.1.5



ANNUAL REPORT

OF THE

OPERATIONS

OF THE

UNITED STATES LIFE-SAVING SERVICE

FOR THE

FISCAL YEAR ENDING JUNE 30, 1879.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1879.

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The Treasury Dept.

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ORGANIZATION OF THE UNITED STATES LIFE-SAVING SERVICE.

(In conformity to act of Congress approved June 18, 1878.)

SUMNER I. KIMBALL, General Superintendent.

WILLIAM D. O'CONNOR, Assistant General Superintendent.

CAPT. JAMES H. MERRYMAN, United States Revenue Marine, Inspector of Life-Saving Stations.

CAPT. JOHN MCGOWAN, United States Revenue Marine, } Superintendents of Construction of Life-
CAPT. JAMES H. MERRYMAN, United States Revenue Marine, } Saving Stations.

ASSISTANT INSPECTORS.

First District.—CAPT. DANIEL B. HODGSDON, United States Revenue Marine, Portland, Maine.

Second District.—CAPT. ERIC GABRIELSON, United States Revenue Marine, Boston, Massachusetts.

Third District.—LIEUT. CHARLES H. McLELLAN, United States Revenue Marine, Bay Shore, New York.

Fourth District.—LIEUT. WILLIAM C. DE HART, United States Revenue Marine, Tom's River, New Jersey.

Fifth District.—LIEUT. WILLIAM J. HERRING, United States Revenue Marine, Chincoteague, Virginia.

Sixth District.—LIEUT. FRANK H. NEWCOMB, United States Revenue Marine, Manteo, North Carolina.

Seventh District.—CAPT. RUSSELL GLOVER, United States Revenue Marine, Key West, Florida.

Ninth District.—CAPT. JOHN CARSON, United States Revenue Marine, Oswego, New York.

Tenth District.—CAPT. GEORGE R. SLICER, United States Revenue Marine, Detroit, Michigan.

Eleventh District.—LIEUT. WALTER WALTON, United States Revenue Marine, Milwaukee, Wisconsin.

Twelfth District.—CAPT. JOHN W. WHITE, United States Revenue Marine, Alameda, California.

LIEUT. CHARLES F. SHOEMAKER, United States Revenue Marine, on special duty, Washington, D. C.

LIEUT. THOMAS D. WALKER, United States Revenue Marine, on special duty, New York City.

DISTRICT SUPERINTENDENTS.

First District.—JOHN M. RICHARDSON, Portland, Maine.

Second District.—BENJAMIN C. SPARROW, East Orleans, Massachusetts.

Third District.—HENRY E. HUNTING, Bridgehampton, New York.

Fourth District.—JOHN G. W. HAVENS, Metedeconk, New Jersey.

Fifth District.—BENJAMIN S. RICH, Onancock, Virginia.

Sixth District.—JOSEPH W. ETHERIDGE, Manteo, North Carolina.

Seventh District.—WILLIAM H. HUNT, Biscayne, Florida.

Ninth District.—DAVID P. DOBBINS, Buffalo, New York.

Tenth District.—JOSEPH SAWYER, Detroit, Michigan.

Eleventh District.—WILLIAM R. LOUITT, Grand Haven, Michigan.

Twelfth District.—CAPT. JOHN W. WHITE, United States Revenue Marine (Acting), Alameda, California.

ASSISTANT DISTRICT SUPERINTENDENT.

Third District.—NICHOLAS BALL, New Shoreham, Rhode Island.

BOARD FOR THE EXAMINATION OF PLANS, DEVICES, AND INVENTIONS (EXCEPT WRECK-ORDNANCE AND SIGNALS).

R. B. FORBES, Esq., *President.*

CAPT. GEORGE W. MOORE, United States Revenue Marine.

LIEUT. CHARLES F. SHOEMAKER, United States Revenue Marine, Assistant Inspector Life-Saving Stations, *Recorder.*

BENJAMIN C. SPARROW, Superintendent Second District, Life-Saving Service.

FRANKLIN C. JESSUP, Keeper Station No. 17, Third District, Life-Saving Service.

**BOARD FOR THE EXAMINATION OF DEVICES AND INVENTIONS RELATING TO
WRECK-ORDNANCE.**

CAPT. J. H. MERRYMAN, United States Revenue Marine, Inspector Life-Saving Stations, *President*.

LIEUT. D. A. LYLE, Ordnance Department, United States Army.

LIEUT. T. D. WALKER, United States Revenue Marine, Assistant Inspector Life-Saving Stations,

Recorder.

DAVID P. DOBBINS, Superintendent Ninth District, Life-Saving Service.

JOHN C. PATTERSON, Keeper Station No. 1, Fourth District, Life-Saving Service.

LETTER OF TRANSMITTAL.

TREASURY DEPARTMENT,
UNITED STATES LIFE-SAVING SERVICE,
Washington, D. C., November 27, 1879.

SIR: I have the honor to submit the following report of the operations of the Life-Saving Service for the fiscal year ending June 30, 1879, and of the expenditures of the moneys appropriated for the maintenance of the service for that period, in accordance with the requirements of section 7 of the act of June 18, 1878.

A compilation of the statistics of wrecks and casualties which have occurred on or near the coasts and on the rivers of the United States, and to American vessels at sea or on the coasts of foreign countries, collected under the authority of the act of June 20, 1874, is included.

I have the honor to be, very respectfully,

SUMNER I. KIMBALL,
General Superintendent.

Hon. JOHN SHERMAN,
Secretary of the Treasury.

OPERATIONS
OF THE
UNITED STATES LIFE-SAVING SERVICE.
1879.

REPORT

OF THE

UNITED STATES LIFE-SAVING SERVICE.

OPERATIONS.

The life-saving establishment at the close of the last fiscal year embraced 173 stations, as follows:

District No. 1 (coast of Maine and New Hampshire)	6
District No. 2 (coast of Massachusetts)	14
District No. 3 (coast of Rhode Island and Long Island).....	38
District No. 4 (coast of New Jersey)	40
District No. 5 (coast from Cape Henlopen to Cape Charles)	11
District No. 6 (coast from Cape Henry to Cape Hatteras)	23
District No. 7 (eastern coast of Florida)	5
District No. 9 (Lakes Erie and Ontario)	9
District No. 10 (Lakes Huron and Superior)	9
District No. 11 (Lake Michigan)	12
District No. 12 (Pacific coast).....	6

The following statement shows the periods of the employment of surfmen at such of the stations as were manned with crews during any portion of the year, which periods respectively constituted what is termed the active season.

Employment of surfmen, season of 1878-'79.

District.	Stations.	Number of stations.	Number of surfmen.	Period of employment.
1 {	1 and 4	2	12	September 1, 1878, to April 30, 1879, inclusive.
	2, 3, 5, and 6	4	24	September 15, 1878, to April 30, 1879, inclusive.
2 {	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15.	14	84	September 1, 1878, to April 30, 1879, inclusive.
3 {	5, 7, 8, 9, 15, 18, 22, 25, 28, 33, and 2.	11	66	September 1, 1878, to April 30, 1879, inclusive.
	1, 4, 10, 11, 12, 13, 14, 16, 17, 19, 20, 21, 23, 24, 26, 27, 29, 31, 32, 34, 35, 36, and 38.	23	138	September 15, 1878, to March 31, 1879, inclusive
	37	1	6	November 1, 1878, to April 30, 1879, inclusive.

Employment of surfmen, season of 1878-'79—Continued.

District.	Stations.	Number of stations.	Number of surfmen.	Period of employment.
4	2, 3, 8, 10, 12, 14, 17, 19, 21, 23, 25, 27, 30, 32, 34, 35, 36, and 39	18	108	September 1, 1878, to April 30, 1879, inclusive.
	1, 4, 6, 7, 9, 11, 13, 15, 16, 18, 20, 22, 24, 28, 29, 31, 33, 37, 38, and 40	20	120	September 15, 1878, to April 15, 1879, inclusive.
	5	1	6	January 18, 1879, to April 30, 1879, inclusive.
5	1, 7, 10, and 11	4	24	September 1, 1878, to April 30, 1879, inclusive.
	3, 5, 8, and 9	4	24	September 15, 1878, to April 30, 1879, inclusive.
	2	1	6	December 17, 1878, to April 30, 1879, inclusive.
	6	1	6	December 20, 1878, to April 30, 1879, inclusive.
6	4	1	6	December 25, 1878, to April 30, 1879, inclusive.
	1, 3, 5, 8, 10, 12, 14, 16, 18, and 20	10	60	September 1, 1878, to April 30, 1879, inclusive.
	11	1	6	December 17, 1878, to April 30, 1879, inclusive.
	9	1	6	December 19, 1878, to April 30, 1879, inclusive.
	6	1	6	January 8, 1879, to April 30, 1879, inclusive.
	15	1	6	January 16, 1879, to April 30, 1879, inclusive.
	13	1	6	January 17, 1879, to April 30, 1879, inclusive.
	19	1	6	January 20, 1879, to April 30, 1879, inclusive.
	21	1	6	January 23, 1879, to April 30, 1879, inclusive.
	22	1	6	January 27, 1879, to April 30, 1879, inclusive.
	7	1	6	January 29, 1879, to April 30, 1879, inclusive.
	17	1	6	February 1, 1879, to April 30, 1879, inclusive.
	23	1	6	February 25, 1879, to April 30, 1879, inclusive.
	4	1	6	March 3, 1879, to April 30, 1879, inclusive.
	2	1	6	March 7, 1879, to April 30, 1879, inclusive.
9	1, 2, and 6	3	18	July 1, 1878, to December 15, 1878, inclusive.
	3, 5, 7, 8, and 9	5	5	November 1, 1878, to December 15, 1878, inclusive.
	1, 2, 3, 4, 5, 6, 7, 8, and 9	9	24	April 1, 1879, to June 30, 1879, inclusive.
10	9, 10, 11, and 12	4	24	July 1, 1878, to December 1, 1878, inclusive.
	2, 4, 5, 6, and 8	5	32	July 1, 1878, to December 15, 1878, inclusive.
	2, 4, 5, 6, and 8	5	32	April 1, 1879, to June 30, 1879, inclusive.
	9, 10, 11, and 12	4	24	May 15, 1879, to June 30, 1879, inclusive.
11	12	1	6	July 1, 1878, to December 15, 1878, inclusive.
	4 and 6	2	12	July 15, 1878, to November 30, 1878, inclusive.
	11	1	9	July 22, 1878, to December 31, 1878, inclusive.
	11	1	9	April 1, 1879, to June 30, 1879, inclusive.
	4 and 6	2	12	April 16, 1879, to June 30, 1879, inclusive.
	12	1	6	May 1, 1879, to June 30, 1879, inclusive.

It will be observed that Districts Nos. 7, 8, and 12 are omitted in the foregoing statement. The first of these embraces the eastern coast of Florida, and contains only houses of refuge, which contemplate no other life-saving operations than affording succor to shipwrecked persons who may be cast ashore, and who in the absence of such means of relief would be liable to perish from hunger and thirst in that desolate region. Crews of surfmen are not needed here, but the keepers and members of their families are required to go along the beach, in both directions, in search of castaways immediately after a storm.

District No. 8 embraces the Gulf coast, on which none of the stations authorized by law have yet been completed, and District No. 12 (Pacific coast) contains only life-boat stations, depending upon the service of volunteers.

Experience has made apparent the necessity of employing regular crews during a portion of the year at several of the life-boat stations on the Lakes, but the appropriations for the last year were not sufficient to provide them at all needed points. It was found possible, however, to furnish crews to the important stations at Chicago and Thunder Bay Island, and to employ at several others a single expert surfman, a step which has resulted in great advantage. It is gratifying to state that the appropriation for the current year permits the employment of regular crews wherever necessary.

STATISTICS.

The reports of the district officers show that 219 disasters to vessels have occurred within the scope of the operations of the service during the year. There were 2,105 persons on board these vessels, of whom 2,049 were saved and 56 lost. There were succored at the stations 371 shipwrecked persons, to whom 1,074 days of relief in the aggregate were furnished. The estimated value of the vessels involved in these disasters was \$1,922,276, and that of their cargoes \$965,610, making the total value of the property imperiled \$2,887,886. Of this amount \$1,445,086 was saved, and \$1,442,800 lost. The number of disasters involving the total loss of the vessels was 54.

In rendering assistance the surf-boat was used 154 times, 260 trips being made by it. The self-righting and self-bailing life-boat was used 16 times, making 24 trips. The life-car was used on one occasion and made 4 passages. The breeches-buoy was used 7 times, making 66 passages. On two occasions the rubber life-saving dress was employed. The wreck-gun was brought into requisition 13 times, and 43 shots were fired by it. By the surf-boat 297 persons were landed; by the life-boat, 14; by the life-car, 3; by the breeches-buoy, 87; by the use of the rubber dress 3 persons were saved from drowning in the surf; and 8 persons were similarly rescued by surfmen going after them into the undertow, secured by lines around their bodies, held by the hands of comrades.

In 89 instances vessels were hove off when stranded, piloted out of dangerous places, repaired when damaged, or similarly assisted by the life-saving crews, sometimes working in conjunction with other wrecking agencies, but in most cases by themselves and the ships' companies alone. Without this aid both vessels and crews, in many of these instances, would have been destroyed. A detailed statement, showing exactly what was done by the life-saving crews upon the several occasions of disaster, will be found in another part of this report.

The apportionment of the foregoing statistics to the several districts is as follows:

District No. 1.

Number of disasters	40
Value of vessels	\$134, 571
Value of cargoes	\$41, 889
Total value of property	\$176, 460

Number of persons on board vessels.....	193
Number of persons saved.....	192
Number of persons lost.....	1
Number of shipwrecked persons sheltered at stations.....	36
Number of days' shelter afforded.....	75
Value of property saved.....	\$119,965
Value of property lost.....	\$56,495
Number of disasters involving total loss of vessels.....	7

District No. 2.

Number of disasters.....	26
Value of vessels.....	\$90,290
Value of cargoes.....	\$66,700
Total value of property.....	\$156,990
Number of persons on board vessels.....	128
Number of persons saved.....	124
Number of persons lost.....	4
Number of shipwrecked persons sheltered at stations.....	19
Number of days' shelter afforded.....	48
Value of property saved.....	\$112,575
Value of property lost.....	\$44,415
Number of disasters involving total loss of vessels.....	8

District No. 3.

Number of disasters.....	28
Value of vessels.....	\$276,800
Value of cargoes.....	\$158,646
Total value of property.....	\$435,446
Number of persons on board vessels.....	184
Number of persons saved.....	183
Number of persons lost.....	1
Number of shipwrecked persons sheltered at stations.....	70
Number of days' shelter afforded.....	168
Value of property saved.....	\$212,126
Value of property lost.....	\$223,320
Number of disasters involving total loss of vessels.....	6

District No. 4.

Number of disasters.....	48
Value of vessels.....	\$345,700
Value of cargoes.....	\$114,455
Total value of property.....	\$460,155
Number of persons on board vessels.....	310
Number of persons saved.....	301
Number of persons lost.....	9
Number of shipwrecked persons sheltered at stations.....	137
Number of days' shelter afforded.....	457
Value of property saved.....	\$222,442
Value of property lost.....	\$237,713
Number of disasters involving total loss of vessels.....	16

District No. 5.

Number of disasters.....	11
Value of vessels.....	\$82,800
Value of cargoes.....	\$70,242

Total value of property	\$153, 042
Number of persons on board vessels	77
Number of persons saved	77
Number of persons lost	None
Number of shipwrecked persons sheltered at stations	32
Number of days' shelter afforded	129
Value of property saved	\$111, 342
Value of property lost	\$41, 700
Number of disasters involving total loss of vessels	6

District No. 6.

Number of disasters	
Value of vessels	\$200, 000
Value of cargoes	\$222, 163
Total value of property	\$422, 163
Number of persons on board vessels	80
Number of persons saved	61
Number of persons lost	19
Number of shipwrecked persons sheltered at stations	19
Number of days' shelter afforded	22
Value of property saved	244, 813
Value of property lost	177, 350
Number of disasters involving total loss of vessels	4

District No. 7.

Number of disasters	4
Value of vessels	\$23, 000
Value of cargoes	\$55, 500
Total value of property	\$78, 500
Number of persons on board vessels	40
Number of persons saved	38
Number of persons lost	2
Number of shipwrecked persons sheltered at stations	30
Number of days' shelter afforded	143
Value of property saved	Nothing.
Value of property lost	\$78, 500
Number of disasters involving total loss of vessels	4

District No. 8.

(This district was not in operation during the year.)

District No. 9.

Number of disasters	25
Value of vessels	\$121, 520
Value of cargoes	\$19, 945
Total value of property	\$141, 465
Number of persons on board vessels	128
Number of persons saved	126
Number of persons lost	2
Number of shipwrecked persons sheltered at stations	8
Number of days' shelter afforded	10
Value of property saved	\$105, 733
Value of property lost	\$35, 732
Number of disasters involving total loss of vessels	2

District No. 10.

Number of disasters.....	7
Value of vessels	\$63,400
Value of cargoes	\$13,400
Total value of property	\$76,800
Number of persons on board vessels.....	62
Number of persons saved	62
Number of persons lost.....	None.
Number of shipwrecked persons sheltered at stations.....	5
Number of days' shelter afforded	7
Value of property saved	\$74,250
Value of property lost	\$2,550
Number of disasters involving total loss of vessels.....	1

District No. 11.

Number of disasters.....	21
Value of vessels	\$194,195
Value of cargoes	\$122,670
Total value of property	\$316,865
Number of persons on board vessels.....	185
Number of persons saved	181
Number of persons lost	4
Number of shipwrecked persons sheltered at stations.....	15
Number of days' shelter afforded	15
Value of property saved	\$188,090
Value of property lost.....	\$128,775
Number of disasters involving total loss of vessels.....	2

District No. 12.

Number of disasters.....	3
Value of vessels	\$390,000
Value of cargoes	\$80,000
Total value of property.....	\$470,000
Number of persons on board vessels.....	718
Number of persons saved	704
Number of persons lost	14
Number of shipwrecked persons sheltered at stations.....	None.
Number of days' shelter afforded	None.
Value of property saved	\$53,750
Value of property lost	\$416,250
Number of disasters involving total loss of vessels.....	2

REMARKS ON STATISTICS.

It will be seen by the foregoing tables that the total number of disasters to vessels occurring within the scope of the Life-Saving Service is 219. The number is greater than that of any previous year since the adoption of the present system in 1871; a circumstance in part accounted for by the fact that the range of the service having been considerably extended during the past year, the disasters upon previously outlying coasts have now to be included, and in part by the occurrence of several gales of exceptional violence, which wrought unusual damage to shipping, including one, referred to in another place, which reached the fury of an actual hurricane. The same reasons gen-

erally explain the increased loss of life of the past year, which, although greater in the aggregate than that of any preceding year, is not, however, greater in proportion to the number of casualties, and the number of persons imperiled, in which relation it remains about the same. The particular manner in which the loss of life occurred is given in detail further on. It will be seen that of the 56 persons lost, 16 perished unnecessarily by attempting to land without assistance from the shore; 19 by the immediate destruction of a vessel upon striking in the hurricane above mentioned; 4 by being instantly swept off vessels upon stranding; 5 before the life-saving crews, hastening to their aid, could reach them; 9 others during energetic operations for rescue; 1 in attempting to swim back to the vessel after he had reached the shore; 1 in a necessary effort to gain the beach in the ship's boat; and 1 by injuries received, of which he died some hours after being landed.

The subjoined table gives a summary of results in the field of life-saving operations for the last eight years, the period since the introduction of the present system.

GENERAL SUMMARY

*Of disasters which have occurred within the scope of life-saving operations, from November 1, 1871 (date of introduction of present system), to close of fiscal year ending June 30, 1879.**

Total number of disasters	797
Total value of vessels	\$10,722,733
Total value of cargoes	\$5,923,294
Total value of property saved	\$9,510,408
Total value of property lost	\$7,099,619
Total number of persons on vessels	8,392
Total number of persons saved	8,030
Total number of lives lost	362†
Total number of persons sheltered	1,753
Total number of days' shelter afforded	4,790

LOSS OF LIFE.

The mortuary record of the year is happily undarkened by any fatality of great magnitude like that of the *Circassian*, the *Metropolis*, or the *Huron*, and the individual groups of the lost are severally comparatively small. Harrowing as each occasion has necessarily and, in some instan-

* It should be observed that the operations of the service during this period have been limited as follows: Season of 1871-'72, to the coasts of Long Island and New Jersey; seasons of 1872-'74, to the coasts of Cape Cod, Long Island, and New Jersey; season of 1874-'75, to the coasts of New England, Long Island, New Jersey, and coast from Cape Henry to Cape Hatteras; season of 1875-'76, coasts of New England, Long Island, New Jersey, coast from Cape Henlopen to Cape Charles, and coast from Cape Henry to Cape Hatteras; season of 1876-'77, and since, all the foregoing, with the addition of the eastern coast of Florida and portions of the Lake coasts.

† One hundred and eighty-three of these were lost at the disasters of the steamers *Huron* and *Metropolis*—in the case of the former when the stations were not open, and in the latter when service was impeded by distance; and fourteen others in the same year, owing to similar causes.

ces, peculiarly been, the vastness of catastrophe has been spared, and has not, as in the cases named, overshadowed the story of service or failure on the part of the life-saving crews. What the latter have been able or have failed to do in mitigation of the tragedy which all loss of life at scenes of shipwreck must involve, will appear in the circumstantial narration of each disaster in its order as given below.

WRECK OF THE ALEXANDER NICKELS.

The first wreck of the year, involving loss of life, within the scope of the operations of the service was that of the brig *Alexander Nickels*, of New York, bound from Cienfuegos to Boston with a cargo of sugar, which ran ashore in a violent tempest on September 7 at five o'clock in the evening, a mile and a half south of New River, Florida, and about twenty-three miles north of House of Refuge No. 5, Seventh District. It appears that the gale was extremely violent in this locality. The beach was broken through in five places by the sea, one of these being about a mile south of the House of Refuge. The surf was also very high, washing entirely over the beach into the bush. For these reasons the keeper was unable to make the search upon the coast for persons cast ashore, customary with keepers of houses of refuge after storm, until the 10th of September, upon which date he sallied up the beach, and met the captain of the wrecked brig, the second mate, and three colored sailors, these five men being the survivors of the disaster. They were dreadfully exhausted, having had nothing to eat since the evening of the wreck, except some dead fish which had washed ashore, and which they had, of course, devoured raw. One man was entirely without clothing, and the others nearly so. The captain was very lame, and not able to walk by himself, being helped on by the others. The party had wandered over eight miles from the spot where they had got ashore, and were so enfeebled that it was with difficulty that the keeper got them to the station. They had at first attempted to go to the northward, but after some travel found the way impassible, and turning, proceeded in the opposite direction until they were come upon by the custodian of the House of Refuge. To this asylum they were now conveyed by him, supplied with clothing, and for seven days succored and cared for, at the expiration of which period they were furnished with two days' rations, and left for Key West.

From information given by the captain, it appears that after the brig stranded, he, the second mate, and one of the men reached the shore upon the top of the forward house, which was torn from the deck by the seas. Another man was washed ashore, and one gained the beach by swimming. These five were the persons saved. A sixth, the first mate, perished when the brig first struck. He had got into a small boat, which was launched immediately upon the stranding, and was engaged in bailing it out with a bucket, when the boat capsized, righted with the mate still in her, but instantly capsized again, broke loose, and was

swept upon the beach, and the unfortunate man was never seen alive again. His body was found several days after by the keeper of another House of Refuge, No. 4, seventeen and a half miles from the wreck, and nine miles above this station, and was buried by him. Two other men belonging to the crew had been washed overboard and lost when the vessel was at sea.

WRECK OF THE SÈVRE.

Next in the list of fatal disasters of which the service takes cognizance, is the wreck of the French brig *Sèvre*, bound from Tampico, Mexico, to Havre, France, with a general cargo, and having on board a crew of ten men, including the captain. The vessel was caught in a heavy gale on the 6th of September, 1878, before which she ran until the 11th, when she drove ashore and struck at three o'clock in the morning on the coast of Florida, 16 miles north of House of Refuge No. 1, Seventh District. The crew all swam ashore safely after the vessel struck, but one man in attempting to swim back to the ship was drowned. Eight of the men were found by a man named Peter Wright, and conducted by him to Titusville. The remaining man was found by the keeper of the House of Refuge, far gone with hunger and thirst. He was taken to the station and kept for ten days before he was fit to travel.

WRECK OF THE PEARL.

Six days later, on September 13, 1878, another life was lost from the steamer *Pearl*, of Detroit, Mich. This vessel was moored inside the piers of the harbor of Fairport, Lake Erie, during a northwest gale, which became so violent, and raised such a sea in the harbor that, at eight o'clock in the morning, two barges broke their moorings and drifted down on to the *Pearl*, jostling her with such force that she parted her cables, tore several piles out of the pier, and swept out into the lake where a heavy sea was raging, and where in attempting to get back she went ashore 160 rods east of the harbor. As the steamer drifted away, 20 of her crew of 26 leaped for the pier. Nineteen of them reached it in safety, but one fell short and was drowned. The current in the river was so strong that the crew of Station No. 7, Ninth District, composed at that time of volunteers resident in the town, could not get across to the station on the other side, and obtaining a yawl from one of the barges, they pulled out to the stranded steamer and took off the 6 persons left on board, one of whom was a woman.

WRECK OF THE A. S. DAVIS.

The next fatal wreck of the year, relevant to the operations of the service, was that of the stanch ship *A. S. Davis*, which took place in the memorable gale of October 22 and 23, a mile and a half north of Life-Saving Station No. 2, Sixth District, North Carolina. A brief reference to this singular and terrible disaster was made in the last annual report, and also to the storm in which it occurred; one which will long be re-

membered in the middle region of the Atlantic seaboard, along which its track was marked by peculiar havoc. Thirty churches and hundreds of dwellings were unroofed or seriously injured in Philadelphia. In Norfolk the ruin was serious. New York, Newport, Albany, Trenton, and Baltimore suffered considerably, and all through New Jersey, Eastern Pennsylvania, Delaware, Maryland, and Virginia, manufactories and workshops were destroyed, innumerable dwellings racked and overthrown, trees uprooted, and barns and out-buildings scattered. In some localities farms and meadows were flooded and whole herds of animals drowned by the rising of the waters. The ravage in Chesapeake Bay was indescribable. Numbers of the truck and oyster boats were sunk or stranded. One of the large bay steamers suffered the loss of 20 lives, swept away by the sea. In one instance the gale drove a schooner from her anchorage sheer into the woods. Most of the coast islands were flooded or submerged, to the great danger of their inhabitants and the destruction of property. The fury of the tempest upon the open beaches may be readily conceived. Many of the life-saving stations were damaged, and some nearly destroyed. At one place the house was suddenly invaded by the sea at two o'clock in the morning, and, as the doors of the boat-room burst in under the rush of the flood, the crew escaped in the floated surf-boat by rowing out through the portal, their heads nearly grazing the lintel, while the building was ripped from its sills and whirled inland. Another neighborhood was submerged and the station torn from its position. At still another, the sea burst through the station windows, filling the house, from which the crew rowed out, as in the instance previously cited, in the surf-boat. In many localities the beaches were cloven through with new inlets, breaking up the beat of the patrols. The oldest surfmen testify that in all their experience they never knew such a wind and sea. Five of the crew of Station No. 2, on the North Carolina beaches, aver that, although they have lived all their lives on this coast and have followed surf-fishing a great many years, they never saw such a gale and sea combined as raged on that night and morning. Another deposes: "The surf was the biggest I ever saw, and ran full with the hills. I have been on this coast all my life and had to do with the surf since I was old enough, and I know I never saw such a night or such a surf before."

The storm of which these witnesses speak began (October 22) with a fresh wind and rain from the east. By sunset the wind had increased to a strong gale, and the surf was raging. Even then the launch of a boat would have been impossible. At eight o'clock, according to the register of the Signal Service, the wind was blowing 25 miles an hour; by eleven it had increased to 44; at one o'clock it was driving at the rate of 50 miles; within the next hour, and up to two o'clock, it reached the fearful height of 84. The surf was furiously spreading and leaping beyond its usual limits, reaching the beach hills, which, in places, it rent and tore away. Nothing living was abroad, except, here and there, miles

apart, the solitary patrolmen staggering on through the utter darkness in the forlorn effort to maintain their watch, drenched by the cataract of rain, half suffocated by the blasts, and repeatedly and with violence blown down. To breathe in this atmosphere was well-nigh impossible. No eye could look to windward, for the flying sand. It was in the height of all this fury that the A. S. Davis drove ashore.

The ship had sailed from Callao, Peru, on the 23d of July, for Hampton Roads, Va., with a cargo of guano. She was quite a large vessel, her burden being 1,399 tons; was nearly new, her age being three years, and was very strongly built. Of the twenty men on board, comprising her captain and crew, her wreck left only one survivor, William H. Minton. It is from him that the particulars of her loss are derived. After the tempest began she sailed under only her upper canvas until the wind blew a whole gale. By midnight her lower main-topsail, which was new, was blown out of the bolt-ropes and the mizzen, lower topsail was taken in. Finally, with only her fore-topsail and fore-topmast stay-sail set, she was racing through the darkness with headlong velocity, amidst the roar of the hurricane, when suddenly, with a shivering shock, she plunged aground. In a moment all was over with her. "There was time for nothing after the ship struck," says the witness, "except for all hands to get into the rigging." The unhappy men sprang for the main and mizzen shrouds. At once, behind the vessel, held by her bows as in a vice, the sea arose like a mountain and fell down with a stunning crash upon the stern, which it stove in at one blow, filling the vessel and sweeping over her from end to end. A few moments of horrible confusion and uproar, and the ship was torn to pieces. Those who saw the fragments marveled at a destruction which had been as utter as it had been speedy. "I visited the scene of the wreck about sunrise on the morning of the 23d," says the wreck commissioner of that region, "and could not conceive it possible that a ship could be so completely broken up." The surviving witness sets the hour of the striking of the vessel at two o'clock. Little more than an hour later the beach patrolman found her scattered in pieces for a mile along the shore. In the utter gloom which enveloped the whole scene of convulsion, no eye could have descried from the beach the brief and dread dismemberment, nor, had an army of men been gathered there, could any help have been afforded to either vessel or crew. From one of those on board, the survivor, the sea tore all his clothing, save the fragment of a shirt, and threw him, bruised and bleeding, upon the shore. Of the other nineteen men there were only found, within forty hours later, the dead bodies of seventeen, grotesquely clad in tatters of their former garb, and horribly mangled by the wreckage. They had voyaged for three months, and over ten thousand miles, to perish within three hours' sail of their haven.

In this long night of horror and catastrophe, the sturdy constancy with which the patrolmen of the Life-Saving Service kept, or strove to

keep, their watch along the whole extent of the tempest-shaken beaches, is worthy of every admiration. This was the night following which a station crew on the Virginia coast, putting out in the boat along the flooded beach in search of a comrade who had not returned from his beat, found him at length upon a point which had escaped submersion, the summit of a beach hillock, where he lay prone, nearly dead, clinging to the tufted ground, with the water, which had hunted him from place to place for hours, all around him. On another beach the blast whipped the lantern out of a patrolman's hand, and blew the man over a sand-bank several feet high. One of the surfmen states that "it was all a man could do to keep his feet, so powerful was the wind." Another, that he "walked his beat with great difficulty; the night was intensely dark and he could see nothing; the wind frequently almost took him off his feet." It was under such conditions that the heroic watch was maintained. At Station No. 2, Sixth District, the domain of the wreck under notice, the first patrol, consisting of two men, one bound north and one south, started out at sunset and got back at midnight, reporting, in the words of Keeper Barco, that "it was a dreadful night for any man to be on the beach." The tempest was then mounting to its final frenzy. Nevertheless, the second patrol, consisting of James Balass and John T. Atwood, set out from the station. The beat of each was half-way to the next house, a distance of five miles. James Balass took the road to the south, and did not succeed in returning to the station until morning. He was pitched over three times by the wind, and finally, as the hurricane increased, was compelled to lie down behind the low breastwork of the beach hills, and await the abatement of the gale. The other patrolman, John T. Atwood, took the northern beat, and struggled valiantly forward, literally fighting his way over the rough beach. It is probable that it was something after one o'clock when he passed the point abreast of which, about forty minutes later, the ship was destined to perish. She was at that moment flying toward him from the sea to her doom. Had she been then stranded, with the surf rending her asunder, no sight nor sound of her presence could have reached him in the darkness and the uproar of the wind and sea. He struggled on, succeeding in making about four miles of his beat, when the hurricane became irresistible and he could no longer stand. After some time, in a partial lull, he set out on his return. The wind soon veered from east to south-southeast, so that he had to face it directly, and it blew with great violence, but the rain began to moderate, and, as he testifies, "it seemed to light up somewhat, so that I could see a little." Perhaps no words could better express than these the dreadful obscurity through which the patrolman had hitherto groped his way. He had traveled somewhat over a mile, when this livid light enabled him to perceive pieces of wreck of all sizes, washed up along his path by the surf. They increased in quantity, until the beach became fairly covered with broken planks and timbers, in every variety of mutila-

tion and fracture. These were to him the first tokens that a ship had been wrecked near by.

As soon as the patrolman saw the first pieces of wreckage, he began to search carefully as he walked for whoever might have come ashore with it, but found no one. Pursuing his way beyond the point where the strewn of *débris* ended, which was abreast of where the vessel had run aground, he suddenly observed by the breaking daylight a track of naked foot-prints in the sand, which he followed for about a hundred yards, into the beach hills, alternately losing and finding them, until at length they disappeared. As he went back to the beach he saw there a naked man. It was the sailor Minton. He had clung to a piece of the ship's rail when she broke up, and had been flung with it, cut and badly bruised, upon the shore. Not having been, fortunately, deprived of his senses, and being without clothing and very cold, he had crawled up to the sand-hills into which he burrowed up to his neck to keep warm, and where he lay till daybreak. He had just got out of his hole, and limped down to the beach, when the patrolman saw him. As the latter approached, a young man, named Quidley, who had come down from the neighborhood, as he expressed it, "to look around," drew near from another direction. Patrolman Atwood stripped off his oilskin trousers and helped to put them on the unfortunate sailor; then leaving him to be conducted to the station by the youth, hurried on ahead to give the alarm.

He arrived at the station by five o'clock, and reported the facts. Keeper Barco, who had been awake all night, instantly set out with his crew, and for three and a half miles searched the beach. The search was not discontinued until October 25, resulting only in the recovery of the bodies, as before described. It was plain that the only person spared from the dreadful catastrophe was the seaman Minton. He remained at the station for eight days, during which time his wounds and bruises were dressed, and he was kept and succored.

Such was the wreck of the A. S. Davis, as gathered from the official investigation customary in such cases. It is evident that the sorrowful loss of life involved could have been prevented by no human power.

WRECK OF THE H. F. POTTER.

On the New Jersey coast, as upon the North Carolina, the hurricane, arriving a few hours later, was scarcely less awful. It is perhaps noteworthy that upon this coast the weather of the day preceding (October 22) was clear and cool, with a light southwest wind. By noon, however, it became slightly hazy, and there was a circle around the sun. It was not until midnight that the storm began, with a fresh east wind and squalls of rain. Before daybreak of October 23 it had become terrible, and the surf was tremendous. At five o'clock in the morning, the crew of Station No. 36 (Fourth District), walked in water. The storm-tide had invaded the house and was six

inches deep on the lower floors. Presently the surf burst in a furious flood through the windows, and wrenched the house from its underpinning. Not knowing what would happen next, the endangered crew got into the surf-boat, and rowed out of the station to the light-house, half a mile away. By half-past eight o'clock the water had somewhat abated, and the crew returned to the station. Shortly after, they discovered the three-masted schooner H. F. Potter, of Middletown, Conn., bound from Fernandina, Fla., to New York, with a cargo of pine lumber, ashore one mile south of Hereford Shoals, with the waves breaking over her. An enormous sea was running, but the crew, as soon as possible, launched the surf-boat, in a noble effort to reach the wreck. The vessel lay 800 yards from the beach. With extreme difficulty and danger, the life-saving crew succeeded in getting their boat through the breakers, and had actually managed to make 400 yards of the distance, when a great wave filled the boat to the thwarts and they were forced to put back to the shore.

Another attempt was made shortly afterward, but failed, owing to the heavy sea and the dangerous masses of wreckage continually thrown off from the disintegrating vessel. Finally, after a desperate and obstinate effort, attended with great peril, Keeper Maurice Cresse and his men succeeded in getting their boat to the wreck, and took off the four survivors of a crew of six, whom they brought safely to shore. The other two men had been washed from the rigging and drowned. The men saved were kept and cared for at the station for four days.

WRECK OF THE SARAH CLARK.

A schooner of 163 tons, the Sarah Clark, of Greenport, Long Island, N. Y., bound from Jacksonville, Fla., to New York, with a deck-load of heart-pine lumber, and a crew of six men, was at sea laboring heavily in this gale of October 23, with the water perpetually sweeping over her, when, at five o'clock in the morning, the fore-hatch was washed off and the vessel began to fill. An attempt was made to put her before the wind, in order to get a chance to batten down the hatch, through which the flood was pouring, when her deck-load of lumber broke loose, tumbling in all directions, and the crew fled aft for their lives. The schooner was soon filled through the open hatches, became water-logged and unmanageable, and rolled over upon her beam-ends. The shock of the capsize threw the mate overboard, and he was drowned. Soon after a piece of timber struck a sailor, killing him and knocking him into the sea. At length, in the violent rolling of the hull the masts broke off and the vessel righted. Land was made soon afterward, and the schooner, with four men still clinging to her, was tossed shoreward, and at half past seven o'clock in the morning stranded one mile east of Life-Saving Station No. 31, Fourth District, New Jersey. She was soon discovered by one of the indomitable patrolmen. He could not get sufficiently near her to make out her condition, the tide and surf being all over the beach,

but he hurried back to the station, from whence all hands at once started for the wreck. At first sight it was thought that every one on the schooner had been washed off, but soon a man was descried on board, and active preparations were made for the rescue. The wind was so violent, and the surf ran so high, that it was thought best to use the wreck-gun and take the men off the vessel by the breeches-buoy, but when, after terrible exertion the life-saving crew had dragged the ordnance and its appurtenances through the slushy sand and against the resisting gale to the scene of action, it was found impracticable to get within firing range of the wreck on account of the surf, which ran riot all over the beach up to the hills. Despite their fatigue, and the uncertainty of being able to effect a launch, the life-saving men ran back to the station for the surf-boat. To prevent it from being blown away, so great was the stress of the wind, they lashed the boat to its carriage, and, after a severe tug, arrived, abreast of the wreck.

The perilous and difficult maneuvers incident to carrying the boat through the frightful ranks of breakers were then entered upon. It was half past seven o'clock when the stranded hulk was discovered, and such was the alacrity with which the life-saving crew labored, that, notwithstanding all the obstacles thrown in their way by the tempest, by half past nine o'clock they had boarded the wreck and taken off the four surviving men, whom they brought safely on shore. The men rescued were all badly bruised and crippled by the floating lumber and *débris* tossing about them on the vessel. They were carried to the station, provided with dry clothing, and made as comfortable as possible. It was necessary for three of them, the steward and two seamen, to remain for twelve days, when, as Keeper Stites says in his report, in words simple and a little quaint, "they left the station, expressing their feelings and thanks to us for the kindness and attention shown them, and departed, apparently feeling very sad, to their homes." The fourth man, the captain, remained five days longer.

WRECK OF THE L. C. WOODRUFF.

The services often rendered by the volunteer life-boat crews upon the Lakes during the past year were in every respect admirable, as their record, contained in another part of this report, shows only too inadequately. More praiseworthy even than their feats in saving life and property at wrecks, was their voluntary assumption of patrol duty, under the most forbidding circumstances, at seasons when tempests menaced the shipping of those waters. It will be remembered that this guardianship is only required of regular life-saving crews, the volunteer life-boat crews appearing at call simply upon occasions for rescue. Nevertheless when storms gathered upon their coasts, these men, in a number of instances, without the slightest remuneration, assembled and kept vigilant watch night and day upon the beaches and piers, dividing their little bands

into reliefs for the more thorough performance of the task so generously assumed.

Among these crews, credit is due the men of Life-Boat Station No. 9, Eleventh District, Grand Haven, Mich., who during a large part of October and November (1878), when the lake was swept by a succession of westerly gales, were on the alert, at one time patrolling beach and piers for two weeks without intermission, half the number alternating with the other half by night hourly. For most of this period, it was impossible to go upon the north pier at Grand Haven without being soaked to the skin by the spray and sea which constantly dashed over it. There was no fire in the boat-house, where for the whole fortnight, the men were always in attendance, save when half their number were out on the tramp in the wind and rain, or the odd moments when the remainder could get a chance to run home for something to eat, or to change their wet clothing. Eleven disasters took place during this time at the port, nine of the vessels being driven ashore.

The heroic efforts of the station crew had their culmination on November 1, a day in which they gave aid and succor to five wrecks, and rescued 29 persons. One of these wrecks, unhappily the occasion for a series of untoward accidents in regard to life-saving endeavor, was that of the bark L. C. Woodruff.

On the 31st of October this vessel was at anchor in Lake Michigan, off White Lake, a body of water making inland therefrom. The evening previous all her sails, except her main staysail, had been carried away in a northwest blow, together with her jibboom, foretop-mast, and mizzen mast; the latter, however, still held upright by the rigging. About midnight of the 31st, the wind began to blow from the southwest, and the vessel so dragged her anchors toward shore, that by four o'clock in the morning of November 1, her stern was in the outer breakers. Here she held until daylight, when she began to drag again, and by eight o'clock in the morning, she fetched up on a bar in 13 feet of water, when her mizzen mast went over the side. At nine o'clock the gale had grown so violent, that the crew of the vessel were obliged to take to the fore-rigging, the decks being swept by furious seas, and the situation had become alarming.

The position of the bark was half a mile north of the piers at the entrance to White Lake, and opposite a saw-mill, in front of which, protruding upon the water, was an ugly bank 12 feet high, consisting of slabs, edgings, and refuse stuff, the whole being covered with sawdust. The ends of the edgings bristled out all over the bank. Between the bank and the vessel was an old sunken wreck, an obstruction increased by an accumulation of refuse stuff from the saw-mill. Within a hundred yards was a beach of sand, on which and on the bank an excited crowd of spectators had gathered from the neighborhood, and from ten to twelve vessels windbound in White Lake. The captains and men of these vessels made repeated attempts to launch from the beach a yawl

belonging to the schooner Ellen Ellinwood, and go out to the relief of the crew of the Woodruff, but the boat was swamped at every effort. Finally, at about nine o'clock in the morning, it was decided to telegraph from Whitehall, at the head of White Lake, to Grand Haven, for the assistance of the life-boat crew.

The telegram arrived about eleven o'clock, and by noon Keeper Connell, of Station No. 9, with a crew of four men, all that could be spared from wreck service then requisite at Grand Haven, started for the rescue by special train, taking with him the wreck ordnance and life-car. The distance was 42 miles, the route taken being by the train to Whitehall, where the life-boat crew, with their apparatus, were transferred to a tugboat, which carried them across the inland waters of White Lake to the scene of the wreck, at which they arrived by two o'clock in the afternoon.

The vessel lay within 150 yards of the shore, with a terrible running sea breaking over her, and her crew of ten men up in the fore-rigging, under the eyes of the throng on land. Keeper Connell planted the wreck-gun on the bank, and at the first shot sent a line over the vessel just abaft of the main rigging. A tail-block with a one and a half inch double line was next bent on the shot-line, and the men on the wreck began hauling it off. An awful sea was then breaking against the bank and a strong current parallel with the shore was running rapidly. This current caused one part of the whip-line to sag to leeward, and when the tail-block at the end was about 40 yards from shore, the line unfortunately became entangled in the sunken wreck, while at the same time another part of it fouled in the jagged *chevaux-de-frise* of the protruding edgings. While an effort was made to clear the line, the hauling on the wreck continued, and the shot-line parted. In the midst of a scene of intense excitement and confusion on the part of the spectators, the whip-line was hauled in by the life-boat crew, and operations were recommenced.

The second shot fell short, the line being wet; but a third, carrying a dry line, was successful, and the line was seized by the men in the rigging. The keeper, in view of the experience of the former trial, judiciously determined to now send out the tail-block with a single part of the whip-line rove through it, having a bowline in the end, to which another shot-line was bent on for the purpose of hauling the end of the whip through the block back to shore after the block should be secured to the wreck. The tail-block reached the wreck, and was made fast, but unluckily in hauling the end of the whip-line ashore the shot-line fouled in a sunken obstruction. In the midst of an attempt to set it free, the excited crowd insisted, despite remonstrance, upon a volunteer attempt to reach the wreck by working out the yawl, attached by a painter to the whip-line suspended between the wreck and the shore, an attempt which resulted in the boat being capsized, and the five volunteers who had undertaken to haul themselves out in this way being thrown into the water, from whence they were rescued with great difficulty, but fortunately without loss.

The efforts of the keeper and crew, impeded by these accidents and interruptions, had up to this time resulted only in getting a single rope stretched between the wreck and the shore, and it was now beginning to grow dark. In his sworn testimony, obtained in the official investigation of this disaster, the keeper, sustained by the testimony of his crew, states that at this point he proceeded to make ready the life-car, with the intention of having it hauled out to the wreck by the suspended whip-line in the hands of the men on board, arriving at which it could be drawn back by those on shore. Had this maneuver been executed, there is no doubt that all on board could have been quickly and easily landed. It appears, however, that the captain and some of the men on the wreck, despairing, in the growing darkness, of help from the shore, and unaware of any further attempt being made for their relief, had resolved, at this stage, to endeavor to work themselves along the whip-line to land, and the keeper while engaged, as he states, at the life-car, looking up as he heard a shout from the crowd, saw four of the men from the Woodruff in the water making their way along the rope. He at once rushed for the shore end of the whip-line, but at least fifty excited men had hold of it, and without listening or heeding, possessed with the one thought of dragging the sailors to land, they ran pell-mell up the bank, straining the line until it snapped near the tail-block on the wreck, thus severing the connection which had been affected with so much difficulty, and continued their headlong course, hauling the four sailors rapidly through and beneath the water until the capsized yawl, still attached to the whip-line, was reached, when boat and men came all together, over and under, in a terrible manner, to the shore. The captain, when the yawl was reached, had contrived to seize and hold on to it, and came in scathless, but the three men were perfectly insensible when jerked up the bank from the sea, not only being nearly drowned by their sub-marine transit, but having suffered from the severe pounding of the boat, as it thrashed and tumbled with them through the water. The keeper at once went to work and succeeded in restoring them to consciousness by the practice of the method of resuscitation in use by the service, but one of them, the mate, died subsequently from his injuries.

The mainmast of the vessel now went over the side, and her stern began to break up. All connection with the shore being severed, the six men remaining on the wreck hastily made rafts of the floating deck planks, on which they endeavored to land. One sank and was drowned about 100 feet from the vessel. One came ashore safely a mile and a half up the beach, and another two miles and a half. Two others got to the bank abreast of the wreck. The sixth man perished obscurely, not having even been seen to leave the vessel. Thus of the ten men on board, two were drowned and one died of injuries incident to his rescue.

The result must be deeply regretted; yet it is difficult to see how it

could have been otherwise. The recital of the disaster afforded by the evidence shows that the keeper and his men were victims of a series of adverse circumstances, which appear to have been incapable of mastery, and which baffled measures certainly well taken for the deliverance of those on board the vessel.

WRECK OF THE AUSTRALIA.

While Keeper Connell and four of his men were preparing to depart to the wreck of the L. C. Woodruff, the schooner *Australia*, of Muskegon, Mich., laden with lumber and with eight men on board, while endeavoring to make the entrance between the piers at Grand Haven, which is about 400 feet wide, missed, by the strong current drifting her to leeward, and struck the north pier heavily with her bow, which was stove in. There was a southwest gale raging with a heavy sea, and the schooner, with her sails on her, continued to thump along the end of the pier, with a torrent of water flying over her. During these collisions, one of her crew jumped safely on to the pier, but another, in attempting to follow him, was swept overboard by a heavy sea, and after a momentary struggle was engulfed and lost. The schooner presently cleared the end of the pier and worked up within about 20 feet alongside, where she grounded. The life-boat crew were promptly on the pier, and throwing heaving-lines to her, made her fast, thus preventing her from swinging broadside to, when she would have been thrown into the trough of the sea, whose billows would have broken over her. By the aid of their heaving-lines, they then drew planks from the deck load of the vessel to the pier, forming a dangerous gangway, across which, however, steadied by lines, the six men remaining on board were led in safety. The rescue was effected by noon.

The remnant of the life-boat crew, under the command of Surfman John De Young, subsequently, on the same day, saved eight persons from the schooner *America* and eight from the schooner *Montpelier* in the life-boat; and by getting a line to the schooner *Elvina*, which they did by wading out into the breakers, made her fast, and prevented the damage which would have resulted from her swinging, as she then was, against another vessel's bow in the storm.

WRECK OF THE JAMES A. POTTER.

The wreck next in order, whereby life was lost, within the scope of life-saving operations, was that of the three-masted schooner *James A. Potter*, on the coast of Long Island, which occurred at four o'clock in the morning of December 22, 1878, three-quarters of a mile east of Station No. 10, Third District. The vessel was loaded with lumber, and bound from Pensacola for Boston, with a crew of eight men, including the captain. Upon approaching the coast a strong current carried her out of her course, and she struck upon a bar 125 yards from shore. Although the weather was clear, there was a heavy sea running, which at once

made a clean breach over the vessel, and her crew were forced to take to the rigging for safety. The beach was so flooded by the surf, which ran in many places sheer to the hills, that the patrolmen were at times forced to leave it, and make their way by long detours around submerged places and broad sluices to regain their beat. In this way, when within half a mile of the wreck, on his way back to the station, the patrolman of the eastern beat, meeting with a deep stream pouring from the beach hills, was obliged to go around a mile before he could come back upon the beach, so that he did not discover the wreck until about six o'clock, when he came within sight of it nearly simultaneously with another patrolman, who had meanwhile started from the station in the same direction.

The news of the wreck was soon brought by these men to the station, and shortly after the whole crew were on their way to the scene with a team which the keeper had procured to haul the surf-boat on its wagon, while the men propelled the wreck-gun and its appurtenances in the station handcart. The journey was extremely difficult, on account of the flooded condition of the beach and the frequent quicksand, and after their arrival the crew were surrounded a number of times with water during the operation of getting a line to the vessel.

At the first shot the line fell over the topmast stays, and shortly afterward the men on board were safely landed by the breeches-buoy. In the words of the captain of the vessel, "the work was well done and done quickly." The men were badly bruised and one cut in the face by wreckage from the vessel, which soon became a total wreck. They were taken to the station, where their wounds and bruises were dressed and they were succored for four days. The loss of life involved in this disaster was that of a single seaman, who was swept overboard immediately after the vessel struck.

WRECK OF THE DAVID H. TOLCK.

The saddest shipwreck of the year was that of the David H. Tolck, involving as it did the loss of five lives, although six were saved, and riveting the attention of the country for many days by the circumstance of the rescue of a little child on board whose parents perished.

The vessel was a three-masted schooner of 445 tons, bound from Sagua la Grande, Cuba, for New York, with a cargo of sugar. She stranded on the bar off Long Beach, New Jersey, at three o'clock in the morning of February 26, 1879, having on board eleven persons. These were a crew of eight men; the captain, Irving E. Sawyer; his wife, Mrs. Ida Sawyer; and their little girl, Genevra, eighteen months old.

At first sight, as the vessel struck within 200 yards of the beach, and only half a mile from the nearest life-saving station, it would seem to have been, despite the heavy surf then prevailing, a comparatively easy task to have saved every one on board by the life-lines, all the more that the weather was not particularly stormy. There were, moreover, three life-

saving crews upon the beach during the progress of operations, comprising in their number surfmen of unquestionable experience and ability, and among the fifty spectators present there were experts whose names upon the coast are certificates of professional skill in dealing with the sea, and whose advice and suggestions were available. There appears to have been no disposition to spare effort, nor were constancy and heroism wanting, yet the bitter endeavor at rescue lasted a whole day and was half baffled, when upon similar occasions, and under apparently worse conditions, deliverance has been the work of an hour; and five persons perished whom at dawn there was every apparent reason to think would soon be safely drawn to land.

At the time it was freely charged that the stranding of the vessel was due to the captain's mistaking a patrolman's lantern for Barnegat Light and steering his course accordingly. This, however, was not the case, as the evidence taken in the course of the official investigation which followed the wreck clearly established. The light referred to was seen by the captain when he must have been about four miles from shore, and that he could have confounded the lofty brilliance of Barnegat, which is a flash-light bursting out every ten seconds from the summit of a tower 165 feet high, with the twinkle of a lantern creeping along the low beach in the hand of a watchman, is a patent absurdity. The evidence indicates that the captain, when about four miles from land, supposing himself to be about seventeen, mistook the Tucker's Beach flash-light for that of Barnegat, and, therefore, changed his course too soon. Even then, however, his error would not have proved fatal had soundings been regularly taken as they should have been when approaching so near the land; but the evidence of the surviving officers shows that the lead had not been hove since the previous forenoon. Consequently, the rapid shoaling of the water was not detected, and the first intimation of peril was received when the vessel, running before the wind under all sail, at the rate of eight knots an hour, struck with a crash, hard and fast aground, and the rough seas at once began to break over her from end to end.

The misfortunes which give an air of fatality to this shipwreck seem to have begun with the very beginning of the movement for rescue. The patrolman of Life-saving Station No. 19 was on the beach nearly abreast of the vessel as she came on an oblique course toward the land, and although it was very dark he saw her running lights, and, understanding her peril, swung his lantern, the instinctive danger-signal practiced by beachmen. The startled haste with which he did this put out the light. In an instant he snatched a Coston signal from his haversack, thrust it into the holder, and struck the plunger, which, by percussion, ignites the cartridge. But in the hurry, induced by his sense of the immediate necessity of warning the vessel to tack and stand away from the shore, he had failed to securely fasten the cartridge in the clamp of the holder, and as it blazed up it flew from the socket under the stroke of the

plunger, and fell upon the beach, where it was at once quenched by an incoming wave. The accident was of little consequence, for the momentary signal was seen on board the vessel; too late, however, for at the same instant she struck. The patrolman at once ran for the station and roused the crew.

In the mean time an attempt was made on board the vessel to back her off with the foresail, but before long the sailors felt the bottom crushing in beneath their feet and gave up the endeavor. The pumps showed 19 inches of water in the hold. All sail was taken in, and the crew waited patiently until daylight. For a while the captain, who had been ill for several days, remained in the cabin with his wife and child, but, as it soon filled with water, they removed to the cabin-top, about three feet above the deck, where they stood with the first and second mate, while the sailors were grouped on the top of the forward house. The decks below them were flooded every instant by the seas which broke over the stern, washing about all movable articles. The ship's boat, which had lain on deck across the main hatch, was smashed to pieces. Every one on board was drenched by the flying water, except the baby, whom the first mate held carefully wrapped up in his arms.

Meanwhile the crew of Station No. 19, roused by the patrolman, had hurried from the station, under the command of Keeper B. F. Martin, dragging the boat on its carriage. The vessel could be just seen, like a sort of shadow, through the smoky darkness, not plainly enough to distinguish her rig, nor her condition in the water. The first intention was to go out to her in the boat, but, although the tide was low, the surf on the beach was so bad that the keeper determined to attempt the rescue by the breeches-buoy, which, with the wreck-gun and lines, was accordingly brought from the station. Operations by these means were necessarily delayed until daylight should disclose the situation and condition of the vessel, the life-saving crew busying themselves meanwhile in planting the sand-anchor and getting the gear in readiness for action.

The light of dawn showed the position of the schooner; the gun was at once placed, and the first shot fired. The shot fell short, but a second was successful, and carried the line attached over the wreck between the main and mizzen masts, where it was caught by the sailors. By this time the rapidly swelling tide increased the seas, the violence of which began to break up the vessel about the decks, and forced the ship's company to take to the rigging, with the shot-line in their hands. It was another misfortune that they chose for their position the main and mizzen rigging, because it placed them farther from the shore and less accessible to the life-saving crew, besides putting them in the very quarter where the seas, tumbling in enormous volumes over the stern, made it most difficult, if not impossible, to reach them by the boat, should boat-service in any subsidence of the swollen water, become feasible. The choice was, however, dictated by consideration for the captain's wife and child, who, having been with him on the

top of the cabin, could most easily gain the mizzen ratlines. The foremast was also working badly in its step, and seemed to be in danger of falling. Another unfortunate impediment was the fact that the position of the sailors up in the rigging, balanced on their frail foothold of rope, made it impracticable for more than two to haul upon the shot-line at a time, and greatly diminished the force of the hauling. To add to their difficulties, the seas came with such tremendous fury and washed so high as to frequently carry the men on the ratlines off their feet and straighten them out almost horizontally, while they clung by their hands. The sufficiently terrible labors imposed by these conditions were further increased by the shot-line having to be hauled, together with the 1½-inch whip-line with its block which the life-saving crew had now bent on to it, through a lateral current between the wreck and the shore, rushing with a velocity equal to the speed of a running man, which carried the lines, as they were paid out from the shore, far to the northward of the vessel, and by thus obliging a greater quantity to be let go from the land, augmented the weight to a degree that made it almost impossible for the unfortunate men on board to haul. Between eight and nine o'clock the keeper and crew of Life-Saving Station No. 18 arrived upon the scene, and assisted the crew of Station No. 19 in their efforts to aid the sailors in getting the whip line to the vessel, which was done by walking to windward with the gathered-up slack of the line, and suddenly letting it go—a maneuver which enabled those on board to haul in a few fathoms before the current carried the line again past the vessel. Shortly after the arrival of this crew, and in the midst of these efforts, the shot-line, which was of the best quality, perfectly new, with a tensile strength of 624 pounds, suddenly parted, sundered doubtless by some of the wreckage perpetually thrown off by the ship and swept along in the current. Thus, in a moment, the labor of several hours was lost, and the whole had to be begun anew.

The scene at this time was dreadful. About 200 yards from the beach, disclosed by the clear light of day, in the great expanse of stormy water, the vessel lay careened, stern to the sea; her lower part, except the starboard waist, bowsprit, and jibboom completely smothered up in raging surf; empty hogsheads continually coming out of her; her masts and yards aslant, standing away from the riot of breakers below; and ten dark figures scattered about up in the main and mizzen ratlines, some moving, others in quietude, lashed to the rigging. One of these figures held something like a bundle. It was the mate, with the baby in his arms. Near by, bound upright on the cross-work of the ratlines, was the mother. Forty or fifty spectators watched this spectacle from the shore.

As soon as the shot-line parted, the life-saving crews hauled back the whip-line attached thereto. It came ashore so terribly kinked and snarled that it took a long time to straighten it. As it was clear that the men on the wreck were unable to haul out the whip-line double,

it was determined to unreeve it from the tail-block and send it out single and without incumbrance. At the time severe censure was cast upon the life-saving men for not sending out the tail-block, but this was omitted only after experience had shown that it was useless to endeavor to send out the double line, to which it is an adjunct, in the enfeebled condition of the men on the wreck. Nevertheless, it must be said that the single line might have been passed through the block, with a bow-line in its end and a shot line attached thereto, to enable the life-saving men to haul it back to the shore, as was done at the wreck of the Woodruff, by Keeper Connell. In this way, and, indeed, in other ways, the tail-block might have been sent out, and the usual double hauling-line established, relieving the sailors of any share in the labor of rescue beyond the pulling out of the single line and securing the block. The idea, however, does not appear to have occurred to the surfmen present, nor to have been suggested by any of the experienced wreckers on the spot as spectators. Had this plan been thought of and carried into execution the result of the wreck might probably have been materially changed.

The necessary preparations having been made, another shot was fired, which missed, but the one following fell near the mizzen-rigging, and the line it carried was secured by the sailors. The single $1\frac{1}{2}$ -inch line was then bent on to it, and, after laborious effort on the part of the poor men in the rigging, was got on board about one o'clock, and made fast to the mizzen mast-head, on the starboard or northerly side of the vessel.

Line communication was now at length established, and the breeches-buoy was being rigged on for the first transit, when one of the sailors, named Henry Johnson, became exhausted and fell in an unconscious state into the sea. His loss greatly shocked the captain, who was lashed to the rigging, and Mrs. Sawyer was almost paralyzed by the spectacle.

This catastrophe was immediately succeeded by the first rescue. The breeches-buoy, with a bight of the shot-line by which the single part of the whip-line had been drawn to the vessel attached to it as a hauling-line, was pulled out to the wreck by those on board. It was agreed that the second mate, Emanuel Clausen, should make the endeavor to save the child first of all. For this purpose, holding the baby in his arms, he took his seat in the buoy, suspended on the traveler-rope by its pulley-block above the breakers. At a signal the life-saving crews pulled away at their end of the hauling-line, and the two began their fearful journey. They had been drawn about midway when the part of the hauling-line on board the vessel became entangled in the wreckage of the spanker-boom and could not be cleared by the men in the cross-trees. It was a moment of supreme horror. The buoy was held to the wreck by the entangled line, and the baby and her protector were stopped in the midst of the surf, half-way between ship

and shore. In this terrible exigency the life-saving crews did the only thing that could be done—they ran up the beach in mass, hauling with all their strength, with the design of either clearing or breaking the line. If the line broke between the shore and the buoy, the infant and the man would still remain where they were and be quickly drowned in the torrents of the breakers. The suspense was short, for presently, by good fortune, the violent strain broke the line between them and the wreck, leaving the buoy free to come in. In an instant it was run through the surf to the beach, and the poor baby and the mate were seized, lifted out of the buoy, and carried with shouts of exultation to a wagon near by, which rattled away with them to a place of succor half a mile distant.

The excitement of the first rescue at once gave place to the contemplation of the seriousness of the situation of those remaining in the rigging of the wreck. The traveler-rope alone stretched between the beach and the mizzen head, and the necessitated breaking of the hauling-line for the deliverance of the couple just saved left the life-saving crew without immediate means of again sending off the breeches-buoy. A hasty consultation was held, and it was resolved to try to reach the wreck with the boat. The step was desperate and involved extreme danger. The sea had swollen tremendously, and such enormous breakers were tumbling over the nearly submerged hull that there was no more at least than a possibility that a boat might be able to live alongside, even if it survived the attempt to leave the beach; while should it prove to be feasible to maintain a position near the masses of surf which incessantly broke over the miserable wreck, there was still the terrible problem how the people were to be got down and across them into the boat. The stake, therefore, rested upon the barest chance, but it was resolved to stand the hazard. A picked crew was selected from the men of both stations, Keeper Grimm of No. 18 taking the stroke-oar; Keeper Martin of No. 19 took off his boots and coat, and seized the steering-oar; and the perilous launch was made. The boat went off gallantly until it reached the fierce current which set between ship and shore, when, despite the utmost strength of the oarsmen, it was swept far northward of the vessel, and the baffled crew were forced to regain the beach. Another launch was at once made, the point of departure being taken further down the beach, to allow for the stress of the current, and the oarsmen exerted themselves to the utmost. They succeeded in nearly reaching the bar on which the vessel lay, when a heavy sea struck the boat, throwing one man from his thwart, bruising the wrist of another, and knocking the keeper overboard. He caught as he went at the gunwale, which he seized, still retaining his steering-oar, and was dragged back into the boat by the powerful arm of Keeper Grimm. The boat meanwhile lost way, and was in the fatal current. Again baffled, the discomfited crew had to make the shore.

The failure with the boat caused those upon the wreck to begin to lose

hope. The sick captain and his wife had meanwhile become insensible, and within an hour later they both died, lashed to the rigging.

It was now about four o'clock in the afternoon. As soon as the second attempt with the boat had failed, the station-men endeavored to re-establish the means of transit from the wreck by supplying the sailors in the cross-trees with a hauling-line. The Lyle gun was again fired, and threw a shot-line on to the vessel, but it could not be reached by the men. Another expedient was then resorted to. Keeper Martin waded out as far as possible into the surf and bent on a shot-line to the 1½-inch rope, which was still stretched from the mizzen head of the wreck to the beach, where it was held by a sand-anchor. The rope was then slacked from the sand-anchor, and, at a signal, hauled in by the sailors until the shot-line attached to it was in their hands. The breeches-buoy was then run on to the standing-rope, ready to be worked to and fro by the newly extended shot-line, and the standing-rope again secured to the beach by the sand anchor. These operations were assisted in by Keeper Ridgway, of No. 17, and four of his crew, who had arrived upon the beach near sundown. Darkness had now set in and rain began to fall. With the exception of two-or three persons, all the spectators left the beach, which was thus nearly abandoned to the members of the three life-saving crews, some of whom kept a bright fire burning to encourage the sailors, while the others assisted in getting off the breeches-buoy to the wreck, which was now undistinguishable. The intensity of the darkness made the work slow, but two trips were made by the buoy from the vessel, each bringing in safely two men. One of this quartette was the mate, from whom the life-saving crews learned that the captain and his wife were dead in the rigging, he having examined them some time before. There were, therefore, left upon the wreck only two living persons, Frank June and Richard Gordon. They had been all day the most hopeful and active men on board, and had agreed to leave the vessel last. The buoy was hauled out by them, and soon their voices were heard in the darkness, calling to the crews to haul away. They came rapidly in, the standing-line swaying in the surf with their weight, when suddenly the buoy was felt to stop as though the hauling-line was slowly twining around some part of the wreck. It came on again a few feet by jerks and finally stopped altogether. The unfortunate men had unaccountably neglected to cast off or cut the line behind them before leaving the vessel. Knowing that they could not long remain in the buoy, with the surf overwhelming them every instant, the station-men kept up a steady strain upon the shore-line, hoping to make the outer line, which had fouled in the wreck, give way. The last stroke of misfortune was now dealt, for it was the line they held that broke, and the hapless men were soon torn from the buoy by the breakers and drowned. Their bruised and disfigured bodies were cast up by the surf the next day, several miles north of the place where they met their doom. The body

of the man who fell from the rigging at noon came on shore at the same time.

Nothing living was now left upon the wreck, and in the late darkness the labors of the station crews ended. The next day, under the lead of Keeper Grimm, they went out in the boat, and brought the bodies of Captain Sawyer and his wife ashore.

The foregoing is a candid and impartial account of all the essential circumstances of this melancholy shipwreck. The protracted toil and endeavor of the life-saving crews resulted in the rescue of six persons. Five, however, were lost, and in the official investigation which followed, it became necessary to determine whether this loss was chargeable to any defect of conduct on the part of Keeper Martin, who was in command and responsible for all operations at the wreck. It is evident from the recital that the slow process of hauling the lines on board the vessel consequent upon the strength of the current and the inconvenient position of the sailors in the rigging, and the repeated severance of the hauling-lines by their fouling with wreck and wreckage, caused hinderances and disasters in the progress of operations which cannot be imputed to the keeper in charge. Persistent effort and heroic and even desperate courage, mark, at different stages, his conduct upon the occasion: Whether he showed as much skill as he unquestionably did bravery in the two abortive efforts he made to reach the vessel with the surf-boat is a question upon which the experts present disagree. By some it was roundly asserted, as appears in the testimony procured by the investigation, that the swollen surf and rushing current made the task impossible, and that even if the boat could have been maneuvered or forced through such a sea, the breakers pouring over the wreck would have barred close approach to her imperiled company, already inaccessible by their position in the after-rigging. On the other hand, some experts declared, without, however, impugning the courage of the effort made, that it failed from lack of ability, and were confident that they personally could have taken out a boat to the wreck and effected a rescue. Their declarations must be received with the reflection that none of them made the attempt, although the opportunity was open, and the lives of the people on board trembled in the balance. The situation as regards boat service is perhaps summed up in the dry language of a prominent witness, "Outside of the crews of the stations, I saw none that were at all anxious to go." It was charged at the time that there were men upon the beach who were willing to take out the boat to the vessel, and were prevented, owing to an alleged rule of the service forbidding the use of the boats by volunteers. Nothing of the kind is true. There is no rule of the service forbidding any of its apparatus from being used to save life, in the absence or defect of regular effort. So far is this charge from being well founded, that the evidence taken at the investigation shows explicitly that the boat was offered to the most experienced surfman among the spectators on the beach, with

the proposition to make the attempt to reach the vessel, and was peremptorily declined, although the human life on board was then at the highest point of agonized hazard, and no expert of true manliness could have shrunk from the endeavor to rescue, save from the conviction of its utter impossibility. That rescue by the boat was at that time impossible there is little room to doubt; but, although it may be conceded that Keeper Martin's failure in this effort was not due to lack of skill, when no skill could probably have availed, it is still a question whether his management of the boat upon this occasion was such as to leave no doubt of his mastership as a surfman. This question the evidence fails to satisfactorily settle, and the officer who conducted the investigation was compelled to incline to an adverse opinion. It is plain that any uncertainty in regard to the ability of a keeper in this respect must be fatal to his tenure in office. There was, however, still one other point in Keeper Martin's conduct of operations gravely open to criticism. The chances of his being able to gain the vessel by the boat during the day, when the flood-tide had swollen the surf and the hull was submerged, were of course greatly diminished, if not destroyed. But at dawn, when he was abreast of the wreck with his crew, the tide was low, and the question is open whether this was not the opportunity for a bold sortie with the boat, and perhaps the swift rescue of every one on board. It is probable that then, if ever, was the opportunity of gaining the vessel by the boat, and as the trial, though precarious, involved the chance of success, in failing to make it the keeper committed an error of judgment which perhaps cost a day of extreme jeopardy, suffering, and struggle, and the sacrifice of five lives. The neglect to make the effort with the boat at this early hour was considered by several of the witnesses at the investigation as a serious fault on the part of Keeper Martin; and as this view was concurred in by the officer who conducted the inquiry, to which the doubt in regard to his mastery at the steering-oar gives cumulative force, the respect felt for his personal character and for his earnest efforts upon this occasion could not suffice to make his retention in the service expedient, and he was accordingly removed.

• WRECK OF THE SARAH J. FORT.

The wreck next in order of time which involved loss of life within the range of life-saving operations was that of the three-masted schooner Sarah J. Fort, of Tuckerton, N. J., bound from Hoboken, N. J., to Boston, Mass., with a cargo of coal, and took place on April 4, 1879, about one mile and a half west of Station No. 7, Second District, Cape Cod. A thick snow-storm was raging, with a strong northerly gale and a heavy sea, and by an error in navigation the vessel struck on one of the outer Peaked Hill bars, at one o'clock in the morning, about a quarter of a mile from the shore. Owing to the darkness and the snow, together with her distance from land, she could not be discovered

by the patrolman then on the beach. An hour later, two fresh patrolmen from Station No. 7, going in opposite directions, encountered small pieces of wreck-stuff thrown up by the surf at their feet, and, although supposing them to have come from a vessel sunk near Scituate some days before, returned to the station to report. They then resumed their respective beats, and one of them arriving near three o'clock in the morning about a mile beyond the point where he had met with wreckage, found pieces of a boat and deck-plank, and saw dimly sketched upon the obscurity the outlines of the vessel. Hurrying back to the station, he roused the crew, who at once loaded the cart with the Lyle gun and appurtenances and started, under the lead of Keeper D. H. Atkins, for the wreck.

The sand, converted by the snow and surf into a species of slush, was in a terrible condition for hauling, and the progress of the men, tugging their load, was greatly retarded. After getting on nearly a mile, Keeper Atkins hastened ahead of his men for observation, and upon sighting the wreck judged her to be too distant to be reached by the Lyle gun, and, hurrying back, took a portion of his crew to fetch from the station the Parrott gun, which being a heavier piece of ordnance, he supposed to have a greater range than the other. This was a grievous error, only extenuated by the circumstance that the Lyle gun had recently been supplied to the station, and its powers had not become apprehended. On his way back the keeper came upon a horse and cart, which he immediately engaged of the driver to convey the surf-boat on its carriage, together with extra shot-lines, to the wreck, while he and his detail took the Parrott gun on a hand-barrow. Making the most violent exertions, the advanced portion of the crew contrived to come abreast of the wreck about daybreak, or half past four o'clock, and the remainder with the heavy gun and the surf-boat arrived within an hour later. Shortly afterward Keeper Young, of Station No. 6, joined them with three of his men, followed subsequently by Keeper Worthen, and two men, of Station No. 8, all of whom lent energetic assistance to the operations.

Preparations were immediately made for firing a line to the wreck. The tide was full, and the magnitude and violence of the surf precluded boat service. The schooner's hull was almost buried in the water, which perpetually rushed over her, and her crew of six men, including the captain, were up in the fore-rigging, clinging for life. She lay nearly broadside to, canted over to seaward, her head to the east, her main and mizzen masts unstepped and tottering, with all their hamper, to a fall, and masses of wreck-stuff continually flung off from her already disintegrating frame, and whirling and leaping about between her and the shore. About seven o'clock, while the life-saving crew were using the ordnance, the main and mizzen masts fell.

The Parrott gun and the shot-lines having been speedily brought into position by the crews, the firing began, and from this time until

nearly noon nine shots were fired, none of which succeeded in reaching the vessel. The firing was directly in the wind's eye, and the lines either fell short or were snapped by the heavy charges of powder employed to strain the gun's carrying power to its utmost. Before the firing ceased, the foremast fell, though it still remained attached to the vessel, thrashing and plunging about her hull. Fortunately, the tide had ebbcd, which had enabled the men to leave the rigging of the fallen spar, and huddle together in the port bow. Although ebb-tide, this small portion of the wreck, to which the men clung, was the only part not submerged by the tremendous sea. During all the time of the firing the vessel steadily continued to break up. About ten o'clock, while all hands were yet in the rigging, the cook fell into the sea from exhaustion, and perished, and shortly after the mate also. The survivors in the port bow were four.

At low tide it had become in some degree possible to attempt a rescue with the boat. The keeper, therefore, discontinued further effort with the gun, and made up a selected crew of four men from No. 7, and three from No. 6. To these were added Capt. Isaac F. Mayo, of Provincetown, a surfman of great experience and bravery, who had come upon the beach with a number of citizens from Provincetown, drawn by the news of a wreck, and now begged permission to be taken in with the crew as a volunteer.

The boat was launched and keeper and crew sprang to their places, but at the same instant the surf boarded her and filled her half full. She was immediately dragged back upon the beach, emptied, and made ready for a second trial.

An interval of twenty minutes was allowed in the hope that the continuing ebb would diminish the surf, and the effort was then renewed with the same crew. The launch was made, and the boat cleared the first breaker. The second, however, combed over and filled her. A moment after, full to her gunwales, she rose on the summit of an enormous sea which cast her and her crew back upon the beach with a heavy shock, springing five of her timbers and splitting her garboard. The hardy men spilled from her, scrambling up and hauling her out of reach of the surf, examined and found her disabled and unfit for service.

It is probable that in the intense excitement and confusion following this failure, the injuries to the boat were magnified, and that she might soon have been rudely repaired and got ready for another trial. Another boat, however, was approaching. During the firing of the forenoon, Capt. Harvey S. Cook, of Provincetown, coming down to the beach in a buggy, at the report of a wreck, had driven back again to town, with the assent of Keeper Atkins, to send a whale-boat to the scene for service. The news he brought of the disaster, had started Captain Mayo to the beach, together with a considerable number of town's people, who arrived by a short cut in advance of the team he had engaged at once to convey the contemplated means of rescue. The boat brought proved to

be a different and smaller model than that which had been proposed, a circumstance which happened to be favorable, considering the condition of the sea. She arrived upon the beach a short time after the failure to effect a launch of the surf-boat, and Captain Mayo, to whose charge she appears to have been consigned, assumed command and chose a crew of fresh men for her, declining to receive on board Keeper Atkins and several members of his crew who pleaded to be allowed to go. In taking this course, Captain Mayo was undoubtedly justified. The keeper and his men having eaten nothing since the evening before, and being much spent by their exertions since about three o'clock in the morning, and their long exposure upon the wintry beach, could not reasonably be preferred by the leader of a volunteer effort, to an unworn crew.

As soon as the preliminaries were settled, the launch was made, the life-saving crews assisting, but the boat instantly filled and had to be hauled up on the beach and emptied. Upon a second trial, the boat became half full, but was pulled through the breakers, and bailed in the comparatively unbroken water outside. The most difficult and dangerous part of the exploit was then entered upon. The unstable sea, upon which the gallant volunteers were lifting and falling in their frail craft, was encumbered with masses of wreck *débris*, snarls of cordage, wefts of canvas, broken planks and timbers convulsively driving and tumbling on every side; and to pilot the boat through this obstructing and perilous drift, required as much skill and patience as courage. The obstacles and dangers thickened as the wreck was gained, and fresh difficulties were added by the helplessness of the exhausted men on board, the captain especially being far gone. By taking time, and exercising great skill and perseverance, they were finally taken off the wreck one by one. The boat being small, their number crowded her very much, and made her management on the return to land no easy matter, the hazard of the surf in a following sea being always great. Notwithstanding the precautions taken, a heavy wave swept up under the stern as the boat reached the last breaker, and threw her end over end, tossing every one on board into the surf and undertow. An instantaneous rush was made by all on shore, and the people were seized by scores of hands and dragged from the water. Some were under the boat, and all were in imminent danger of being swept away and drowned. It is fortunate that the great crowd of spectators present made abundant assistance available, as otherwise loss of life would probably have ensued.

The rescued men from the vessel were nearly insensible with cold and exhaustion when brought ashore, and their hands were badly frost-bitten. They were at once conveyed to Station No. 7, where the life-saving crew upon arriving, faint with hunger and fatigue, were gladdened to find that food had been prepared for all hands by the keeper's wife and Mrs. Mayo, the mother of one of the station men, who had walked out from town through the storm for the purpose of providing them with this

comfortable reception. These ladies were also of great service in dressing the frost-bitten hands of the rescued sailors, relieving at the same time the weary surfmen of this humane duty. The unfortunate men were at once given restoratives from the medicine chest, and put into warm blankets. The port physician, Dr. Crocker, upon being sent for by the keeper, came out to them and assisted in their gradual recovery. Two of them were succored at the station four days, and the others remained a shorter period.

The award of a gold medal to Captain Mayo, in recognition of the services he rendered in this rescue, is mentioned in another place. It is to be regretted that Keeper Atkins's success was not equal to his efforts on this occasion. He has always been regarded as an efficient keeper, and his record for fidelity, courage, and energy at scenes of shipwreck, is known to the officers of the service. The Lyle gun would probably have established the desired line communication with the wreck, and his failure to employ it, through a strange inapprehension of its merits, must be deplored.

WRECK OF THE GREAT REPUBLIC.

On the 19th of April, 1879, the steamship *Great Republic*, of San Francisco, Cal., bound from San Francisco to Portland, Oreg., with a cargo of general merchandise, a crew of 94 persons including her captain, and 579 passengers, ran aground in the attempt to enter the Columbia River at one o'clock in the morning, on the southeast end of Sand Island, two miles from Life-Boat Station No. 3, Twelfth District. It was four hours after high water at the time, calm weather, clear starlight, and the sea very smooth. The disaster appears to have been occasioned by an error of navigation on the part of the pilot.

It was confidently expected that the steamship would float at the next high water, and in view of the tranquility of the weather and the sea, no effort was made at that time to get the vessel off by the aid of steam-tugs, as might easily have been done, nor to land any of her passengers, which would also have been an easy matter, Sand Island being not more than a quarter of a mile away, and the ship having on board fourteen metallic boats, seven of which were life-boats, together with eight large fishing-boats, carried as part of her freight.

The vessel was first seen from Astoria at about five o'clock in the morning, and about the same hour from Cape Disappointment by the keeper of the life-boat station and the master and pilot of the steam-tug *J. C. Benham*. She was seen by them to be aground, but was evidently in no danger and made no signal for assistance. By the afternoon her officers had engaged the *J. C. Benham* and several other steam-tugs to convey the passengers to Astoria, at which work, assisted by the light-house tender *Shubrick*, they continued until evening, when an intermission took place, the remainder of the passengers not desiring to leave the vessel after nightfall.

By morning the weather began to look threatening. The barometer fell, the wind blew strongly from the southward, and the sea roughened considerably. The keeper of the life-boat station, although his aid was not required, would have previously gone to the steamship, but for the want of an efficient crew, which was not obtainable in the immediate locality; but now that the weather became menacing, he judged it better to be on hand, and, obtaining a crew of eight soldiers, he went with them on board the tug J. C. Benham, taking, also, the surf-boat, mortar, life-car, and their appurtenances, and was conveyed to Sand Island.

When he arrived opposite the steamship the sea was not particularly rough, although the wind was blowing strongly from the south, with occasional rain-squalls. The vessel, however, was breaking up in her fore part, and her boats were actively engaged in taking ashore her crew and quantities of baggage, the passengers having already been landed. Seeing that a line stretched between the vessel and the shore would materially aid the boats in their transit, the keeper fired two shots in succession from the mortar, with the intention of establishing this help, and, although both shots fell short, owing to the vessel being beyond range, his design was understood and appreciated by her commander, and the next boat's crew ran out from on board to the beach the required line, which had the foreseen effect of assisting the boats in landing.

It was near noon when the last of the crew, comprising seventeen persons, put out from the ship for the land, leaving the captain, pilot, and one other person on board. As nearly as can be ascertained, the steering-oar broke, which caused the boat, on its passage through the swollen sea, to broach to, become unmanageable, and, finally, roll over. The men on board were all, of course, thrown into the water, and fourteen of them were drowned.

This unhappy accident lengthened the mortuary list of the Life-Saving Service by the addition of fourteen lives, but it is plain that the keeper of the life-boat station was in no manner responsible for the loss. The effort to save the baggage on board the steamship continued until five o'clock in the afternoon of that day, when the increasing sea, and the rapid breaking up of the vessel, arrested further endeavor, and the captain, pilot, and the one man with them, came ashore in one of the ship's life-boats, aided by the intervening line. The steamship became a total loss.

WRECK OF THE ZINA.

On the 6th of May, 1879, the schooner Zina, of Machias, Me., bound from Boston, Mass., to that place with a general cargo, struck at three o'clock in the morning, upon Eastern Egg Rock, in a heavy sea and dense fog, several miles distant from the nearest life-saving station, which was upon Browney's Island, near Jonesport, Me., and was closed at the time, the appointed season for station operations having passed. No news of the disaster reached the keeper of the station for several days

afterward. When the vessel struck the sea broke completely over her, washing off the galley and carrying away the cook, who was never seen again. The schooner became a total wreck, and the remainder of her unfortunate crew—four persons—escaped upon the rock, where they remained for thirty-six hours without food or drink. They were finally found by a man named Luther Leighton, who took them off the rock in a small boat and carried them to a place of succor.

WRECK OF A ROW-BOAT.

On the 26th of May, 1879, the keeper of Station No. 8, Ninth District, Lake Huron, saw a row-boat, containing a man and a woman, suddenly capsize by bad management several hundred yards from the pier at Cleveland. It was about nine o'clock in the morning, and a heavy sea was running. The keeper instantly made signal for his crew to assemble, and began to get out the surf-boat, but before a launch could be effected a steam-tug in the lake ran up and saved the man. The woman appeared to be under the capsized boat and could not be seen, and the tug was unable to keep alongside the boat in order to right it. When the surf-boat came up and righted the boat, the woman could not be found, and six discharges of the Lyle gun, which the crew brought out subsequently on a scow and fired over the spot, failed to bring her body to the surface.

WRECK OF THE NELLIE WALKER.

A sail-boat, named the Nellie Walker, running with two men on board from Scituate to Plymouth, in Massachusetts, on the 6th of June, 1879, the weather being clear, though a strong gale was prevailing, with a rough sea, capsized at three o'clock in the afternoon, a quarter of a mile from Gurnet Point, in an attempt to wear, or turn the boat, and the two men were drowned. Two members of Station No. 4, Second District, who saw the accident, put out from shore at once to their relief, but were unable to find them. The boat was subsequently picked up three miles from the point.

EXAMINATION OF KEEPERS AND CREWS.

The annual scrutiny into the qualifications of the keepers and crews of the life-saving stations in the several districts was made last year as usual. What is believed to be a marked improvement was effected in the composition of the respective examining boards charged with the conduct of the examinations of the stations upon the Atlantic seaboard. Each board included as formerly, first, an inspector of the service (an officer of the Revenue Marine), who, in addition to his inquiries into the professional qualifications and personal behavior of the station men, minutely inspected the condition of the stations and their appointments; and secondly, a medical officer (a surgeon of the Marine Hospital Service), who subjected each person to a thorough test of his physical soundness, and also gave the usual instructions in

the method of resuscitating the apparently drowned, practiced by the establishment. To these, in each instance, it was deemed proper to add, in place of the second Revenue Marine officer formerly detailed for the duty, a practical surfman of eminence in his profession, qualified by long experience and ripe judgment to decide upon the professional abilities of the keepers and crews as they were put through the maneuvers of handling their boats in the surf before him, or conducting operations with the wreck-guns and life-car gear in use upon occasions of shipwreck. On the Lakes and the Pacific coast, in view of the different character of the organization from that of the Atlantic seaboard—the stations being mainly life-boat stations—it was deemed expedient and proper to confide the examinations to the inspecting officers and superintendents in the several districts, as explained in former reports. The same course was pursued with reference to the houses of refuge on the Florida coast, where crews are not employed.

The results obtained by the examinations were more than usually satisfactory, although, indeed, reflecting credit upon the capacity and thoroughness of former examining officers. Of the whole corps of keepers and surfmen, it was found necessary to set aside one for professional deficiency, one for relationship to the keeper in charge, one for inexperience, seven for physical disability, and seven for general unfitness of one kind or another. Thus, of the entire number of keepers and surfmen, 1,046 in all, there were found only 17 men whose places the officers believed could be better supplied. The advance upon the preceding year, when 51 persons were found disqualified, is heightened by the consideration that the number employed was last year augmented by the increase in the number of stations, so that the ratio of necessary dismissals proves considerably less.

This favorable showing, largely due, no doubt, to the faithful winnowing processes of former boards, continually bringing the *personnel* of the service to greater efficiency, must also be credited to the influence of the act of June 18, 1878, which, by offering substantial attractions to keepers of ability and character to become attached to the stations, has also resulted in greater care in the selection of their crews, better surfmen being in turn drawn to enter the service by the general prestige which this legislation has created, and continues to create, for it.

ESTABLISHMENT OF STATIONS.

The station at Short Beach, now No. 30, in the Third District, the necessity for which was explained in last year's report, and which was then in process of erection, has been completed.

The act of June 18, 1878, authorized the establishment of 37 additional life-saving and life-boat stations. Special efforts were made to complete and put in operation for the winter of 1878-'79 as many of those allotted to the dangerous coasts of Delaware, Maryland, Virginia, and North Carolina as possible, and at the date of the last annual report there was

reason to believe that the three stations authorized for the Fifth District, and thirteen of the fifteen provided for the Sixth, could be occupied in the month of December. The three in the first-named district, and two in the latter, were all, however, that were opened in that month. Of the remaining eleven, seven were manned in January, two in February, and two in March, the delay being caused by the failure of the contractors to complete the buildings at the time stipulated.

The three stations authorized to be established at Cranberry Isles, Scituate, and Watch Hill, in the First, Second, and Third Districts, respectively, have all been built and are now occupied by crews. The five stations provided for the Eighth District are in process of erection. The terms of the contract provide for their completion on the last of October, but various difficulties have been encountered which have caused much delay. Only one is about completed, and it is not probable that the others will be finished before spring.

Three life-boat stations have been built in the Eleventh District (Lake Michigan), at Manistee, Muskegon, and Kenosha,* respectively, and another at Ludington is approaching completion.

The act referred to authorized the establishment of eight other stations, assigning them to the following points: Cape Lookout, and Cape Fear, in the Sixth District; Sand Beach Harbor, Port Austin, Middle Island, and the mouth of Portage Lake and Lake Superior Ship-Canal, in the Tenth District; and Sleeping Bear Point, and Bayley's Harbor, in the Eleventh. Sites have been selected for all these except at the mouth of the ship-canal and at Sleeping Bear Point, and titles have been secured; although with reference to the sites at Cape Fear and Middle Island some legal formalities remain to be complied with. It is expected that all these stations will be established before the close of another year.

It was mentioned in the last report that efforts were in progress to secure a site which had been selected for a station at Bolinas Bay, on the Pacific coast. These have been successful, and the station will soon be erected. The station authorized for Point Concepcion by the act of June 20, 1874, has not yet been built, as it has not been found possible to secure a proper location.

REBUILDING, REPAIR, AND IMPROVEMENT OF STATIONS.

The stations at Wreck Pond and Long Branch, Fourth District, which were in process of rebuilding at the date of the last annual report, in place of the old Stations Nos. 5 and 8, have been completed.

* For the site of the station at Kenosha, the service is indebted to Zalmon G. Simons, esq., who liberally donated a fine lot on Washington Island, opposite the city for this purpose. It being found desirable to place the station a little beyond one of the boundary lines of this lot, Samuel Y. Brande, esq., the owner of the adjacent lot, generously tendered so much of it as might be required for the purposes of the service. In this connection, thanks are also due to the firm of Brande & Thiers for gratuitous services in connection with the conveyance of title to both lots, and for other valued favors.

In the Fifth District, Stations Nos. 5, 7, 8, 9, and 11, some of which were nearly destroyed and others seriously injured in the hurricane of October 23, 1878, were made temporarily habitable at the time, and have since been thoroughly restored.

When certain of the life-boat stations upon the Lakes and Pacific coast were projected, it was considered necessary to put them in operation for saving life as soon as possible, and with this view they were completed only so far as was necessary to make them ready for use, leaving a number of accessories of secondary importance to be finished subsequently. During the past year a large portion of this work has been accomplished. To Stations No. 3, at Oswego, No. 7, at Fairport, No. 8, at Cleveland, and No. 9, at Marblehead (Ninth District), annexes were made supplying sheds for the boat-wagons and some required additional room. The station at Oswego was also moved to another site, which was donated to the government for the purpose, the foundation on the previous site having been washed away during a great storm in December last. At Marblehead, the station was also moved forward 15 feet, and an 80-foot pier built to facilitate the launching of the life-boat.

In the Tenth District, annexes, similar to those at the stations above mentioned, were made to Stations No. 9, at Grand Haven, No. 10, at Saint Joseph, No. 14, at Racine, No. 15, at Milwaukee, and No. 16, at Sheboygan. The Saint Joseph Station was also removed to a more advantageous site at the mouth of the harbor, and it was likewise found necessary to change the location of the station at Racine. A new inclined platform was constructed at the latter station, and one also for the station at Grand Haven. In the Twelfth District, annexes were made to Station No. 1, at Neah Bay, and No. 5, at Humboldt Bay. At the station last named a platform was constructed entirely around the building, being necessary to secure its foundation. At Station No. 7, Golden Gate Park, a wood-house was erected, a closet and store-room built, the attic of the house ceiled, and a wire fence put around the building.

IMPROVEMENT IN LIFE-SAVING APPLIANCES AND METHODS.

The attention of the officers in charge of the service has been especially devoted during the past year to the ever-important subject of the improvement of the boats, which are mainly relied upon for the rescue of persons from stranded vessels. The question of the species of boat best adapted for this purpose was elaborately discussed in a former report, and, although hospitality has been constantly extended to every proposition in this direction, neither the trial of new models nor experience with the old has given reason for any material change in the views then expressed.

The subject is one of the gravest importance, and it has always been, and will continue to be, one of anxious solicitude and unrelaxed inquiry and experiment. It is a subject, also, which presents many and diverse

problems, not only in its scientific bearings, but in its relation to the habitudes and even prejudices of the men of the coast whom it is necessary to employ as surfmen. As these men risk their lives upon occasions of going out through the surf at wrecks, it is of course not merely an obligation to furnish them with the best boats that can be constructed, but also with boats accommodated (so far as may be consistent with absolute requirements of another character) to their own wishes, their own modes of management, and their own notions of the sort of craft that can best master the surf, in order that confidence may be secured as the auxiliary of effort. The natural philosophy of the matter is not, therefore, though sufficiently involved and complex, the only consideration. It is not only necessary, for instance, to determine what particular form is best adapted to live in broken water, but it is equally necessary that the boat shall be fitted to the boatman, at least until he shall be educated to the acceptance of a superior model.

An inquirer journeying from the Isles of Shoals to Hatteras, along the stretch of our beaches, would soon find that there is no such thing in existence as "the best boat"; certainly not in the opinion of the sagest beachmen. Setting aside the fact that there are particular localities where coast conformation, the hydrography of peculiar shoals and bars, the eccentric action of tides and currents, or the habit of the surf, call for boats of special adaptation to the conflict with these conditions, he would discover, on beaches precisely or essentially the same, among surfmen of the longest experience and the soundest judgment, the most radical and irreconcilable differences in regard to the ideal surf-boat. One man will insist that it should be broad in the stern; on another beach it is demanded that the stern shall be sharp. Great sheer is the insistence of this expert; less sheer is the obstinate rejoinder of a second. In one opinion cork fenders are indispensable; another surfman will grimly strip them off the boat if sent him. The winds do not blow in a greater variety than is found in the views of these practical adepts in the art of surfing.

To conciliate these views, so far as may consist with the efficiency of the service upon occasions of rescue, is of course obviously necessary, while pursuing at the same time the constant search for improvement, and the no less constant effort to reconcile the attained result to the opposing convictions of intelligent and experienced beachmen.

The numerous inquiries set on foot among practical boat-builders and others by the officers in charge of the service, in aid of the development of the surf-boats now in general use, to a completer standard of perfection, in conjunction with the ever-widening interest in the problems of life-saving created by the successes of the service upon our beaches, has stimulated inventors in various parts of the country to offer for consideration a number of devices of this special character, together with improved life-rafts, self-righting life-boats (as distinguished from surf-boats), and a variety of other life-saving means and appliances. In

order to secure a thorough examination and discussion of these inventions, together with their trial in the surf or on the beach when practicable, and also to carry out the intention of the act of June 18, 1878, which provides that the General Superintendent "shall cause to be properly investigated all plans, devices, and inventions for the improvement of life-saving apparatus for use at the stations which may appear to be meritorious and available," it has been deemed expedient to organize two boards, composed of the most accomplished experts obtainable, whose functions shall cover the objects above named, and whose judgment upon all such matters, submitted in formal reports to the General Superintendent, shall aid him in his subsequent action, and thus prevent the public money from being spent upon projects which do not promise good results.

To one of these boards is confided the consideration of all propositions relating to boats, rafts, life-cars, transporting carriages, hauling-lines, and similar contrivances. The other board has charge of whatever pertains to wreck-ordnance and its appurtenances.

The list of the officers composing these boards is given in the initial pages of this report. In determining the presidency of one of them, it would have been impossible to overlook the honored name of R. B. Forbes. Specially known in New England by his prominent connection with the Massachusetts Humane Society, an association which antedates all others in effort for the succor of coast imperiled life, and in which his active labors can never be forgotten, he is also known along our seaboard, and in many places at home and abroad, as the warm and tireless friend of seafarers for more than a quarter of a century. He is, moreover, the author of the first standard work in this country upon the principal life-saving appliances, a subject upon which his frequent communications in the public journals have also given much information and valuable suggestion. In view of his authority upon such matters, his connection with the board referred to forms a guarantee of the fidelity and insight which should characterize its official action. His acceptance of the position, which carries no pecuniary recompense, is consonant with his humane and public-spirited life. Associated with him in his duties are, as will be seen, a group of Revenue Marine officers and skilled surfmen, eminently fitted by profession and experience for the tasks assigned them.

The board for the discussion of projects relating to wreck gunnery is presided over by the Inspector of the service, Capt. James H. Merryman, and is fortunate to comprise among its members Lieut. D. A. Lyle of the Ordnance Department of the Army, whose marked talents and professional attainments, already manifest in the service by the invention of the Lyle gun, have been rendered available to the establishment in this board by the courtesy of the War Department.

Immediately upon their organization, each board held a meeting and adopted rules and regulations for its government and for the government of inventors in submitting their devices for examination. With

a view of extending the information already promulgated in official circulars from the Treasury Department, these rules and regulations are herewith subjoined.

RULES AND REGULATIONS ADOPTED BY THE BOARD FOR THE EXAMINATION OF DEVICES AND INVENTIONS RELATING TO WRECK-ORDNANCE DESIGNED FOR USE AT UNITED STATES LIFE-SAVING STATIONS.

*Subjects to be considered by the Board.**

Mortars.

Guns and their appurtenances.

Rockets.

Line-carrying projectiles.

Shot-lines.

Faking-boxes, &c.

Powder and other ammunition.

Equipments, implements, &c., connected with wreck-ordnance, and such other matters as may be referred to the board by the General Superintendent of the United States Life-Saving Service.

The board will meet at the call of the president for the examination and discussion of such devices or apparatus as may be referred to it by the General Superintendent of the Life-Saving Service. A majority of the board shall constitute a quorum at any properly called meeting. The province of the board is to examine, test, and report upon such devices as may be referred to it by the General Superintendent, and it will not enter into protracted discussions with inventors or their agents as to the principles involved in the devices for the examination of which the board is constituted, nor is it under obligation to suggest methods of improvement in plans submitted, or how defects may be remedied. Due notice of meetings of the board will be sent to persons whose inventions have been referred to it.

General regulations.

I. No person will be admitted to the meetings of the board, or to the firing-ground, except the agents or inventors of the apparatus under discussion or trial.

II. All experiments and trials will be conducted under the immediate supervision of the board, and by its employes alone.

Inventors or exhibitors may have the privilege of displaying their apparatus, if desired, and of having the performance of the same noted in the record.

Any gun, rocket, or device in which explosives are used, to be first fired with at least three rounds of the maximum charge, by its exhibitor, as a safety test, before submission to the board.

III. The handling of apparatus by agents or inventors at any time after being submitted to the board is forbidden, except in the case of the display test above noted.

IV. Any apparatus which has been submitted to the board, and entered upon the record, will remain in the possession of the board for such time as may be necessary for completion of the trials and the final report upon the same.

V. All persons desiring to submit devices or inventions for the action of the board will be required to forward their applications to the General Superintendent in writing, embracing in detail the following points, in the order named:

First. Name or designation of device to be submitted.

Second. Whether or not covered by caveat or letters patent.

* Inventors will take notice that the duties of this board do not include action upon any life-saving plans, devices, or inventions to be used or carried on shipboard, the examination of these being the province of the Board of Supervising Inspectors of Steam-Vessels.

Third. Nomenclature of each separate part of the device, stated in list form, with reference letters corresponding to letters on accompanying drawings.

Fourth. Detailed description of device.

Fifth. Kinds and qualities of materials used.

Sixth. Dimensions of all parts.

Seventh. Weights of principal parts, and total weight of apparatus.

Eighth. Price at which device or apparatus will be furnished to the government.

Ninth. Construction, stating method of manufacture or fabrication of each device in detail.

Tenth. Description of method of using the apparatus in actual service.

Eleventh. Describe action of projectiles and line when used.

Twelfth. Accurate drawings must accompany all applications. Full-sized drawings preferred, but drawings to scale of very large parts will be accepted.

Thirteenth. Claims of inventors or exhibitors for their devices will be set forth specifically in full, and in numerical order.

Fourteenth. Letter of transmittal addressed to the General Superintendent of the Life-Saving Service, Treasury Department, Washington, D. C., will accompany above descriptions, drawings, &c.

VI. All apparatus connected with any device or invention will be delivered at the expense of the agent or inventor of same at such point and at such time as the board may direct, and returned at the expense of said agent or inventor when no longer required by the board.

VII. It is to be understood that the government is to incur no expense for ammunition or other articles used in the actual trials or tests of any apparatus presented for consideration.

Adopted at a meeting of the board, June 18, 1879.

J. H. MERRYMAN,
President.
T. D. WALKER,
Recorder.

Approved:

S. I. KIMBALL,
General Superintendent Life-Saving Service.

The following are the rules and regulations adopted by the board presided over by Mr. Forbes :

RULES AND REGULATIONS ADOPTED BY THE BOARD FOR THE EXAMINATION OF PLANS, DEVICES, AND INVENTIONS (EXCEPT WRECK-ORDNANCE AND SIGNALS) INTENDED FOR USE AT UNITED STATES LIFE-SAVING STATIONS.

1. *Subjects to be considered by the Board.**

Surf-boats and life-boats.

Life-rafts and life-cars.

Boat-wagons and devices for transportation of apparatus.

Patrol-lanterns.

Working-lines.

Blocks and tackles.

Sand-anchors.

* Inventors will take notice that the duties of this board do not include action upon any life-saving plans, devices, or inventions to be used or carried on shipboard, the examination of these being the province of the Board of Supervising Inspectors of Steam-Vessels.

Life-preservers and life-belts; and such other matters as may be referred to the board by the General Superintendent of the United States Life-Saving Service.

2. The province of the board is to examine, test, and report upon such devices as may be referred to it by the General Superintendent, and it will not enter into protracted discussions with inventors or their agents relative to the principles involved in the devices for the examination of which the board is constituted, nor is it under obligation to suggest methods of improvement in plans submitted or how defects may be remedied. Due notice of meetings of the board will be sent to persons whose inventions are referred to it.

3. The board will meet at the call of the president for the examination and discussion of such devices or apparatus as may be referred to it by the General Superintendent of the Life-Saving Service.

4. No person not connected with the Life-Saving Service will be admitted to the meetings of the board, except the agents or inventors of the apparatus under discussion or trial.

5. All experiments and trials will be conducted under the immediate supervision of the board. Inventors or exhibitors will be required to display their devices at their own expense, the privilege being given them of having the performance of the same noted in the record.

6. Any apparatus, models, or plans submitted to the board, and entered upon the record, shall remain in possession of the board such time as in its judgment may be necessary for completion of the examination and trials.

7. Persons desiring to submit devices or inventions for the action of the board will be required to forward their applications to the General Superintendent in writing, embracing, in detail, the following points, in the order named:

First. Name or designation of device to be submitted.

Second. Whether or not covered by caveat or letters patent.

Third. Nomenclature of each separate part of the device, stated in list form, with reference letters corresponding to letters on accompanying drawings.

Fourth. Detailed description of device.

Fifth. Kinds and qualities of materials used.

Sixth. Dimensions of all parts.

Seventh. Weights of principal parts and total weight of apparatus.

Eighth. Price at which device or apparatus will be furnished to the government.

Ninth. Construction, stating method of manufacture or fabrication of each device in detail.

Tenth. Description of method of using the apparatus in actual service.

Eleventh. Accurate drawings must accompany all applications. Full-sized drawings preferred, but drawings to scale of very large parts will be accepted.

Twelfth. Claims of inventors or exhibitors for their devices will be set forth specifically in full, and in numerical order.

Thirteenth. Letter of transmittal, addressed to the General Superintendent of the Life-Saving Service, Treasury Department, Washington, D. C., will accompany above descriptions, drawings, &c.

8. All apparatus connected with any device or invention will be delivered, at the expense of the agent or inventor of same, at such point and at such time as the board may direct, to be removed by and at the expense of said agent or inventor when no longer required by the board.

Adopted at a meeting of the board, June 20, 1879.

R. B. FORBES,

President.

CHAS. F. SHOEMAKER,

Recorder.

Approved:

S. I. KIMBALL,

General Superintendent Life-Saving Service.

At the first meeting of the organization whose rules and regulations are last given the subject of boats was one of the primary topics of discussion, and Mr. Forbes made an address, chiefly relating to floating life-saving appliances. It is extremely gratifying to find that the views presented, though from an independent stand-point, are in entire agreement with those entertained for years by the officers in charge of the service in regard to the boats adopted by them for the practical use of the establishment. Apart from the consideration of being thus sustained by an authority which derives weight from long and varied observation and experience on many coasts, is the satisfaction of finding the subject discussed in a manner so lucid and comprehensive as to justify the reproduction here of so much of the address as relates to the topic. The following is the portion referred to:

"It seems to me an appropriate occasion to say a few words on the general subject of the sort of boats likely to command the confidence of the men who are to risk their lives in them. As a rule, I deem it to be important to consult them as to the best model to give them confidence, but, in so doing, we must not lose sight of the fact that if we call together a dozen of the most experienced surfmen of any locality we shall find great divergence of opinion as to the best surf-boat. One man pins his faith on a peculiar boat in which he has been fortunate; another man, well knowing the weak points of all surf-boats, has got up a new model theoretically perfect and wants to try it; another has had great experience in landing goods from wrecks, and so has become well convinced that an enlarged Jersey model, with a flat bottom and a broad stern, is the best surf-boat. It is therefore very difficult to obtain a unanimous opinion from twelve or more good surfmen.

"Having thought much on the subject of surf-boats for localities where the population is scattered, during my long connection with the affairs of the Humane Society of Massachusetts, I ought to be capable of forming a good judgment upon surf-boats, and to be able to say that a certain model is the best for our coast and ought to be universally adopted. Yet nothing can be more inexpedient, for the reason that certain localities require a wholly different boat from others; so that, as I have said in the beginning, it will be well, as a general rule, to consult parties living near the spot.

"Take, as an illustration of what I have said, a boat built under the superintendence of Captain Snow, of Orleans, and a five-handed boat built for the Humane Society at Provincetown, and for a long time located at Peaked Hill Bar Station. The Orleans boat is full and burdensome; is well adapted to going off with a large seine and surrounding a school of bass, and safely landing and going off in a heavy surf. This boat is good also for wrecking purposes, and as this description of boat is one which Captain Snow and all his neighbors are accustomed to manage, it is the kind of boat they would vote for if called upon to decide on what is a good surf-boat. The Provincetown boat, at the time she

was built (about twenty-two or three years ago), was considered by Eben S. Smith, of that town, a good boat for the locality, and on two memorable occasions she has performed good work. Once, in the year 1856, she went to the schooner Clarendon, on shore in the surf, when the sea was very rough and the weather very cold, and brought ashore several of the crew—all who survived; and in April last the same boat, under the leadership of Mayo, saved several persons from the S. J. Fort. Notwithstanding these good services, I never considered her a first-rate surf-boat. She is long and low in the water, and more nearly resembles a whale-boat than any other of the boats of the Humane Society, and at this day is not considered a good model by her builder, W. W. Smith, of Provincetown, in comparison with others built by him more recently which are pronounced good surf-boats. Now, if we find so great a divergence of opinion as to what is a good surf-boat between Orleans and Provincetown, we cannot be much surprised at finding still greater difference between Florida and Maine, the Great Lakes and California.

“The splendid boats of the Royal National Life-Boat Institution, though very well adapted to very rough work, where coast-guard men, trained life-boat men, steam-tugs, large funds, and an army of ready volunteers are always at hand, would not do on our rough and sparsely-inhabited beaches, where even horses are rare. The life-boat, as we all know, is insubmersible, self-righting, and self-bailing, and weighs from two to four tons. No boat can be considered as having any pretensions to be called a life-boat which cannot support her crew sufficiently to enable them to pull ahead against a rough sea if stove.

“According to my experience, extending over a period of nearly forty years in this country, to say nothing of considerable experience in surf on the west coast of America, surfmen prefer to go off in the machines with which they are accustomed. On some parts of the coast of South America the balsa, a mere float inflated and made of the skin of animals, is used when no whale-boat can safely land; on the other side of the continent we find the catamaran, made of logs of very light, pithy wood; in the Pacific Islands we find the canoe and surf-board, with which the natives, before they were civilized, performed wonderful feats; and on the northwest coast we have various types of craft, in which the natives go into very rough waters. None of these would suit the hardy surfmen of our coasts.

“While it is well to consult the men who are to go with them, it is also well to instruct them in regard to improvements at home and abroad, so that they may some time be coaxed out of the somewhat narrow groove in which they have been running all their days. This requires much time and much patience. During many years the seamen of Nantucket, who had been brought up in whale-ships, could not be persuaded to fit the surf-boats of the Humane Society to pull short double-bank oars; they would use nothing but long oars, putting five in a boat of 23 feet by 6 or 7 beam. On the other side of Boston Bay, where many of the

young men are brought up in dories, the double-bank surf-boat obtained favor, and no one could be persuaded to use long oars in a surf. Being myself quite confident that the double-bank boat was best, I went to Nantucket and tried a new model double-bank boat of about the general capacity of their surf-boats. My boat pulled eight short oars and beat the other so decidedly that all the witnesses were astonished. I attributed the speed of my boat partly to her model, which enabled her to row dry, while the other was wet, and partly to the short oars. The agent at the island caused their boat to be fitted to pull six oars, double bank. The result of another trial was that my boat beat the other less than before, but still had some advantage, which I attributed principally to the model; but my boat being considerably heavier than the other was not thought so well of for launching in a rough time. The surfmen at Nantucket are very fond of very light boats, because they can transport them rapidly to the scene of the wreck, and that is the best reason for having light surf-boats. But the very light boat cannot have sufficient buoyancy to enable her to go on her mission if stoven, or even enough to enable her crew to come safely to land.

"I think that in the majority of cases the surfmen of Massachusetts, whom I know best, prefer to go in a mere shell, without end-tanks, and without side-floats of rubber or cork. Their argument is to this effect: the end tanks add to the weight, and, being in the extreme ends, impair the sea-going qualities, and the side-floats hold considerable wind, and in rough water impede progress, and in the event of being capsized, while the end-tanks assist in righting the boat, the side-floats tend to keep her from righting.

"As to the operation of launching a heavy boat in a surf, if there is help enough at hand so that the men can take their seats and, awaiting a good chance, be shoved off, the only objection to weight is in gathering headway; in a well-drilled crew a tolerable heavy boat can be started by oars quick enough. Great speed is not essential in a life-boat, and weight has its advantages, inasmuch as a heavy boat once started maintains her momentum and is not thrown back by a moderate sea.

"Taking all things into consideration, including the cost of heavy boats and the necessity for large crews or horses to transport them, and, last but not least, the prejudices of surfmen, it still remains an open question whether or not the mere shell weighing not over 800 pounds will or will not, *in the long run*, save more lives, at smaller cost in lives and money, than boats having some pretensions as life-boats. I am inclined to think they will. Money being a very important element, and Congress being unwilling to appropriate enough for increased crews or horses, and better pay in order to obtain better men, we must seek to bring about the best results at the least expense.

"If light boats without extra buoyancy be adopted, we can have more stations, without much increase in the number of employés. If, on the

other hand, it should be decided to have boats of the Jersey model, said to weigh from 650 to 1,000 pounds,* more men are indispensable, or a supply of horses, and the stations should be nearer together, so that re-enforcements can be more prompt. It may be said that it is wrong to endanger men in boats having no extra buoyancy; but if the crews are provided with cork life-belts and be made to wear them whenever they go afloat, and are willing to risk their lives in them in preference to heavier boats, by all means let them have light boats. The arguments in favor of them are that they cost much less; they are transported much more speedily and more easily; they can often be got off the beach when a heavy boat cannot be; and, as I have before suggested, they may in the long run save more lives than life-boats. But in localities such as Scituate Harbor, Rockport, Deer Isle, and many others, where the boat can be launched and manned in smooth water, the heavier boat having some pretensions to being called a life-boat will be best.

"If wrecks would come on shore just where we want them, near to the stations, means could easily be provided for launching by the help of warps permanently fastened to buoys, but ships will not be likely to come on shore near the stations until the charts show their positions by more conspicuous marks than they now do; and, again, the cost of suitable arrangements would be considerable. Still, it is a matter for consideration whether permanent moorings ought not to be planted, and whether surf-boats or rafts launched by such means could not go by sail and oars to a wreck sooner by water than by land and the men arrive there less exhausted. There are, doubtless, localities where moorings might be shifted and where the hauling-lines would be fouled by kelp and sea-weed; but if the lines be buoyed up, and perhaps consist of steel wire, no serious obstruction would ensue. If the stations should be on an average not over 6 miles apart, within signal distance of each other, a wreck coming on shore half-way between the two, the boat might get to her by sea quicker than by the land and the men be less fatigued. Another good argument in favor of having moorings may be found in the fact that in general the stations are, or ought to be, located at points where there is a cove or some good reason for more safely getting afloat than in the vicinity of the wreck. If it be settled that there must be at every station a boat of large capacity weighing about 1,000 pounds, there ought to be also a small surf-boat for occasional use. Such a boat could often get off and plant a small anchor to assist in launching the other, and could sometimes get near the wreck (by land) and establish communication when the larger boats could not. I understand that on the occasion of the loss of the S. J. Fort in April last, the men, after dragging the mortar and the surf-boat over rough ground against a very strong breeze, were exhausted and were wholly unfit to launch the

* The Jersey model does not necessarily involve great weight. The boats recently built by the service on this model are very light, capable of being lifted bodily by two men. Some of the earlier boats were quite heavy.

heavy boat successfully; so that the rescue made, as I may say, by an old condemned boat does not appear very extraordinary, manned as she was by a fresh and selected crew.

"As to the question of pay and of the quality of men, it may be said that while the pay of \$40 per month and finding their own supplies seems inadequate to furnish a choice of men, it appears large for eight months compared to the salary of \$400 for the keepers for the whole year, as they are obliged to visit and care for the property.

"In offering these remarks I do not wish to be considered as desiring to dictate to any one, but I offer them in the hope that they may be productive of some good results by inducing Congress to be more liberal in making appropriations, without which the Life-Saving Service can never be completely satisfactory.

"In regard to the boat built by my order, and intended to be an enlarged dory, much lighter than the boat belonging to No. 7 lately wrecked, I can only say that as she weighs, without any air-cases or oars, over 1,100 pounds, she must be considered a failure in carrying out the design; all I hope for is that she may answer to replace the wrecked boat. The transporting wheels and axles, which require but a few minutes to ship and unship, work satisfactorily; the only question in my mind is whether or not the whole weight of the boat and oars coming on two bearings instead of four will sink too deep on the beach, which, as we all know, is soft in places. This mode of transportation is particularly applicable to localities where creeks render it impossible to cross them with the usual four-wheel carriage. In coming to a creek, my arrangements admit of carrying the wheels and crew across by the boat, so that she may be called amphibious. For the lighter boats contemplated I can confidently recommend the arrangement.

"I have to present to the Inspector of life-saving stations, Captain Merryman, a model mounted on wheels which shows the mode of transportation, and to the other members present a new model, on a scale of one inch to the foot, of a boat which I shall designate as a compromise between a dory and a surf-boat; she has beam enough to pull double-bank, and up to a certain size, I think, will prove to pull well, and to be stiff enough and not too much on top of the water, as was the case with the new boat left at Provincetown by me.

"I beg leave to present a surf-boat on a scale of $\frac{3}{4}$ inch to 1 foot, making her 28 feet long by 8 feet beam, or, if the scale is called 1 inch to the foot, she would be 21 feet by 6. She is perhaps a little too sharp for the latter dimensions, and if made 21 feet would have a slightly different arrangement of thwarts. I also present for discussion the model of my new "dory-boat," which seems right for a small boat; but a boat $25\frac{1}{2}$ feet long would be too large on this model. I also submit the model of the boat alluded to as having beaten the Nantucket surf-boat, but that boat had only end tanks, and no means like this for the delivery of water shipped. A boat on this model, differing only in having

more space for the legs of rowers, was built for the Humane Society and tried at Nantucket, where she proved herself to be a good surf-boat; but, owing to some of the wooden air-cases not proving tight after two or three months' exposure to hot weather, water to the extent of 500 or 600 pounds had got into them and then they swelled tight, so that, in addition to her original weight, which was 1,650 pounds, she weighed about a ton when carted over from Nantucket Town to South Beach, near No. 15. She made a bad impression on landing after her trial, when the crew and spectators neglected the usual precaution of running her up immediately on landing, or when the next sea came to assist in so doing. Instead of this the crew pitched their oars up the steep beach and followed them; the inevitable result was that the first sea slued her broadside to the surf, choking the outlet, and she heeled seaward and was filled by the next roller; so that it required twenty men to slue her back, empty out the water, and haul her up out of the way of the sea. The standing committee of the Humane Society, of which I was the chairman, were present and witnessed this *faux pas*, and before they could interfere or even realize the situation she was full of water. While the crew were to blame for doing with my boat what they never thought of doing with a boat of their own, I was, in fact, the party who should have seen that she was hauled up immediately on touching the beach. The result was that the only real life-boat ever built for the society, which had cost \$600, was not thought of sufficient importance to amend by putting in copper air-cases, so the delivery was filled up, the wooden air-cases were condemned, and she remains a monument of the folly of trusting to wooden air-cases and incompetent surfmen."

Following this address there was further discussion, which resulted in the adoption of a resolution by the board that such boats as were hereafter needed in the several districts should be in general accordance with the expressed preference of the best surfmen of the respective localities. As twelve new boats were needed at as many stations on Cape Cod, they were ordered by the General Superintendent to be supplied upon a type and model approved by the superintendent of that district and by every station-keeper upon the Cape. In accordance with the same conditions, six new boats were also furnished to that number of stations in District No. 3, and six to as many stations in District No. 4.

SELF-RIGHTING SURF-BOAT.

Among the models submitted to the board, the most important appeared to be one of a self-righting surf-boat devised by Capt. D. P. Dobbins, the superintendent of the Ninth Life-Saving District. It was claimed by him that such a boat was specially adapted to the peculiar conditions of service in the Lake waters, which differ in the character of both their seas and shores from those of the Atlantic coast, and that it had also the advantage of combining the quality of self-righting with

a weight but little more than that of the ordinary surf-boat. After discussion by the board, it was resolved that, although the boat was apparently not suitable for service upon the Atlantic beaches, it was possible that upon the Lakes it might prove of much value, this possibility being confirmed by the strong indorsement it had received from certain Lake authorities, and it was recommended that a boat of this type should be authorized by the General Superintendent to be built, under the direction of Superintendent Dobbins, in accordance with his plans and specifications, for experimental trial.

The recommendation was accordingly carried into effect, and the boat has been completed. Judging by the informal reports which have been received, it has proved entirely successful, having, as stated, the quality of righting when capsized, with the crew sitting on the thwarts. If it possesses this merit, with the additional advantage of having hardly more weight than the surf-boat now in use, and if other and indispensable requisites, such as stability, for instance, have not been sacrificed, it cannot but prove a desirable addition to the resources of the service. It awaits, however, the official trial of the board, by which its claims will be severely tested, and which will decide the question of its adaptability to the requirements of the service upon the Lake waters.*

LIFE-RAFTS.

Earnest attention was given by the board to several models of life-rafts presented by different agencies for use at the stations, but up to this time no conclusion has been reached respecting them. The usefulness of these rafts in the operations of the Life-Saving Service is a matter for considerable inquiry, and, however valuable they may be as a means of escape on shipboard, the superiority which is claimed for them in effecting rescues from the shore, has not yet been established.

WRECK-ORDNANCE.

Since the date of the last report the Lyle gun has been supplied to every station. The services of Lieutenant Lyle in the production of this piece of ordnance, which has given unqualified satisfaction at the stations, and which it is thought must come into general use in the life-saving operations of other countries, have already been warmly acknowledged. During the past year he has continued his efforts for the improvement of sundry of the life-saving appliances, notably with the result of producing an anchor-shot adapted to the caliber of the 2½-inch Lyle gun in use. The invention of a shot which shall also have the character of a grapnel has long been a desideratum in our operations. In many cases a vessel, when stranded, sends shoreward a line attached to

* Since the above was written, this boat in going to the wreck of the schooner Carlingford, which had stranded on Horse-Shoe Reef, Lake Erie, in a furious storm, capsized in the breakers, but immediately righted itself with the men in their places, and proceeded to the wreck, from which they safely brought ashore all on board.

a spar or cask, by which communication with the land could be readily established but for the frequent presence of the singular lateral current, often referred to in the reports of the service, running nearly parallel with the beach, which intercepts the floating messenger, carrying it along in its own stream and preventing it from reaching its destination. Hence, a line will often remain stretched in an oblique direction from a vessel, its end, buoyed by a cask or spar, hopelessly kept by the current from getting nearer to the land. If, now, there could be fired across this line a shot having also the character of a grappling-iron, and with a line from the shore attached thereto, the line sent out from the ship could be seized and drawn through the opposing current to the beach, and line communication with the vessel thus be readily established. Lieutenant Lyle's anchor-shot proposes to effect this end. It consists of a line-carrying cylindrical shot, from which, as it leaves the gun, tough steel flukes fly out and become fixed immovably. Hauled upon from the land, this grapnel seizes the line floating in the current, and holds it by the flukes while it is drawn ashore. The shot thus devised will in due time be thoroughly tested, and, if found satisfactory in its operation, will be adopted.

BEACH-APPARATUS DRILL.

A valuable improvement in the methods of the service has been arranged during the past year by Lieut. C. H. McLellan, assistant inspector of District No. 3. It consists, in one branch, of a re-arrangement of the mortar and beach apparatus drill of the life-saving crews, by which greater celerity is attained in the operations with these appliances at scenes of shipwreck; and, in another, of a certain systematic mode of loading the mortar-cart with these appliances for transportation to the point of operations, this adjustment being contrived, first, with reference to an equal distribution of the burden, so as to facilitate the work of hauling, and, secondly, with a view to the articles being placed in the cart in the order in which they are to be drawn forth for employment. The work to be done upon occasions of shipwreck cannot but be greatly expedited and facilitated by the method devised by Lieutenant McLellan, which has been adopted throughout the service.

TELEPHONES.

The telephones referred to in the last annual report as placed by the Chief Signal-Officer of the Army at the several stations between Cape Henry and Kitty Hawk, in connection with the telegraph line of the Signal Service upon that coast, have proved, as was anticipated, of great advantage to this service, and their usefulness as an appliance completely demonstrated. The Chief Signal-Officer has recently established a telegraph-line along the coast from Cape Henlopen to Cape Charles, in the Fifth District, for the uses of his office, and it is gratifying to state that he contemplates extending the benefits of the telephone to the several life-saving stations upon that coast.

AWARDS OF MEDALS.

During the past year several medals have been awarded for heroism shown in saving life.

The first case was that of Timothy C. Murphy, a young man of twenty-one years of age, who was proved to have rescued no less than twelve persons from drowning during the seven years anterior to the date of the award. The scene of these rescues was the Thames River at Norwich, Conn., where this fearless youth resides. They were effected sometimes by putting out in a skiff from the shore, and sometimes by boldly plunging overboard after the imperiled person, often in the darkness and when the river was full of floating ice. In one instance the persons saved were a father and his two sons. Only one other lad appears in the record, the rest being grown men. For one of the latter, who it appears was quite unable to swim, Murphy is shown to have been obliged to remain in the water nearly an hour before he could succeed in landing him. In another instance, where a man was struggling to sustain himself in a stream of broken ice, the exigency of the case forced the young life-saver to push out from the shore in a boat destitute of oars, which he did, using the seats of the boat for paddles. In recognition of such deeds, to which his youth gives a peculiar interest and value, a silver medal was awarded him.

After some delay in securing for file in the records of the department the formal evidence necessary in all such cases, a gold medal, similar to that bestowed upon Ensign Lucien Young of the Navy for his gallant service in saving four lives at the wreck of the United States steamer Huron, on November 24, 1877, was awarded to his brave and faithful ally in that service, the seaman Antoine Williams.

The evidence in the case shows that after the vessel had been five hours aground in the darkness, a total wreck, with the sea breaking over her, these two men undertook the desperate enterprise of carrying a line from her to the shore on a small india-rubber raft, or balsa, for the purpose of saving the lives of their surviving comrades. For twenty minutes the sailor and the officer worked together to clear the balsa, which was entangled in a mass of spars under the starboard bow. Succeeding, they launched themselves upon it, were swept aft, and trying to paddle forward were capsized and nearly drowned. Getting hold of the balsa again, they swam, pushing it before them, and in this position were hurled with the balsa, end over end, by a tremendous roller. The officer was flung upon his back and the sailor several feet distant. With unshaken self-possession, they recovered their hold upon the balsa and again swam, propelling it toward the shore. The line it carried proved too short to reach from the wreck to the land and the balsa was capsized a third, and again a fourth time, but the men still clung to it until, by good fortune, they reached the shallows of the surf. Here, before they were clear of the water themselves, spent, bruised, half-suffocated by the breakers through which they had fought their way, they turned, risking their

lives in the strong suction of the undertow, to haul out two struggling shipmates. The balsa, of which they had let go when they got ashore; happened to wash up, and was now tossing in the foam. They ran and seized it in the hope of using it as a life-car for the rescue of their comrades on the wreck, if they could get a line. Clear again of the sea, they saw two men from the vessel struggling for life in the breakers, and running back, once more daring the peril, they locked hands and dragged them both ashore. Then, there being no other lives near by to save, Williams devoted himself to the assistance of the weak and exhausted men he had helped to rescue, while Ensign Young set off in the endeavor to procure the means of establishing some mode of escape for those upon the wreck. In addition to these heroic labors on shore, it cannot be forgotten that these two men abandoned, for the sake of others, whatever chances of life a foothold upon the wreck offered when they committed themselves to the sea.

A silver medal was awarded to Capt. William Burke, of the schooner *Andrew Jackson*, of Chicago, in testimony of the good seamanship and noble humanity shown by him upon the occasion of the wreck of the schooner *Jo. Vilas*, on Lake Michigan, October 9, 1876, when he contrived, at considerable hazard and damage to his vessel and pecuniary loss to himself, to save the lives of six persons. The affidavits of the master and mate of the *Jo. Vilas*, together with other evidence, set forth that the schooner, which was laden with lumber, capsized between Kenosha and Racine during a terrific gale and in a heavy sea, and that her crew of six men hung on to her hull for four hours, or until it went to pieces, leaving them clinging to fragments of the wreck in momentary expectation of death. At length, about eleven o'clock in the forenoon, as they tossed up and down upon the sea, they caught sight of the masts of a vessel, which proved to be the schooner *Andrew Jackson*, and shortly after, as the vessel hove into full view, they saw that her crew were trying to add a close-reefed mainsail to the foresail under which she was running, in order to get close to them, and also saw Captain Burke on the topgallant fore-castle lustily giving them cheer by signs, while he shouted at the top of his voice, "Never fear, boys! Keep up your spirits! I'll get you!" Meanwhile, they had continually to struggle for their lives, the violent convulsions of the sea several times throwing them from the pieces of wreck to which they were clinging and which it cost them desperate effort to regain. To reach them the schooner had to haul for a while close to the wind, standing to the westward, till the time came to wear around and bear down to the struggling men. As the hazardous last part of this maneuver was executed, the violent slue made by the schooner in wearing carried away the fore-sheet shackle and nearly unstepped the foremast, but she came down all right, save this damage, and reached a man named Frank Folger, who was holding on to a fragment of deck. A line was thrown to him, which he got and made fast to the fragment, but in doing so maimed his hand and became powerless.

He was exhausted and ready to sink, when Captain Burke seized the peak-halyards and hove them so dexterously that the bight encircled his body and the poor sailor was swiftly hauled on board. This fisher of men then recommenced to maneuver his vessel, and after great difficulties succeeded in getting down to a lump of wreck, on which were grouped four of the crew. Lines with bowlines on their ends were flung to them, by which Fritz Sleif and William Cook were hauled on board. Fresh maneuvering brought the schooner near Herman Klein, who was also pulled up on deck from the sea. After some time the schooner got near Richard Johnson, the master, who was in turn fished in. There remained only one man, the mate, John Minning, who was far away to leeward, nearly out of sight, on a piece of deck. The schooner at last got to him, and he caught the line thrown from her, but as he was being hauled along he fell off the piece of deck and was swept astern and sucked down under the bottom of the vessel. He reappeared, however, but had hold of the line with only one hand, when Captain Burke skillfully threw him another line, which he caught with the other hand, and was drawn on board.

Thus all six of the crew of the *Jo. Vilas* were saved from a position of extreme peril and suffering. The work of rescue occupied fully five hours, and was only accomplished by extraordinary pains and masterly seamanship on the part of Captain Burke. His vessel necessarily incurred great jeopardy in maneuvering as it did in such a heavy gale and sea among masses of the *débris* of the wrecked schooner. She also suffered about \$150 damage in these operations. In addition, the hours spent in the rescue cost her the time due to a trip. To all this risk, loss, and damage, her stout and gallant captain expressed himself wholly indifferent, seeing, as he said, that he had saved the men.

Gold medals were awarded to Capt. Patrick Langan, master of the schooner *Chandler J. Wells*, and to Frank McGuirk, his second mate, and a sailor named William McGee, for singular and extreme daring in effecting the rescue of the first mate of the vessel, the captain's brother, Maurice Langan, who was swept overboard at night on the 6th of October, 1876, during a howling gale on Lake Erie. The schooner, laden with coal, was bound from Buffalo to Chicago; and when about 70 miles up the lake, the weather being rainy and squally and the wind blowing hard, the captain gave orders to get ready to anchor, the stress of the storm making it necessary to run in under Rondeau Point for shelter. It was then after midnight, and very dark, and while the men were clearing away the anchors from the lee side of the topgallant forecastle, a heavy sea boarded the vessel and washed overboard the sailor McGee and the mate Maurice Langan. McGee came on board again instantly, lifted by another wave, but the mate was swept astern. Instantly Captain Langan, who was standing near the man at the wheel, caught the wooden cover of the steering gear and flung it through the darkness toward Maurice, yelling to know whether he had

it. Fortunately he had, and he cried back, "Ay!" The captain shouted to him to hold on to it and he would save him. This ready self-possession on the part of the captain in throwing over the wooden cover saved his brother's life, as without this support the latter never could have sustained himself in that turbulent midnight sea. A moment after the captain had the helm hard down, the schooner lying to the wind, and the stern-boat cleared away. The mate, Frank McGuirk, jumped down into the boat and unhooked the stern-tackle, and the captain, springing after him, unhooked the bow. "Who'll follow me?" cried the captain. "I will," answered McGee. He leaped down into the boat as he spoke, the captain catching him in his arms. No other volunteers offered, and the boat was at once cast off and fell away into the darkness astern. As it left, the captain sang out to the men on board to take care of the vessel and to follow him. Presently the schooner was invisible, and the little boat, with the captain at the steering oar and the other men rowing, was tossing on the stormy sea, keeping as near as possible in the wake left by the vessel, her bows headed toward the quarter where the captain's brother had disappeared, while the three on board incessantly shouted the latter's name. After some time spent in rowing and calling in the tempestuous solitude, their hearts were gladdened by an answering hail from the water. They could not see the mate, but rowed on, still shouting. Finally, they saw him clinging to the wooden cover. A few powerful oar-strokes brought the boat to his side, and his brother and the second mate clutched him and dragged him in.

An attempt was now made to regain the vessel, but in the darkness she could not be found. The four men were therefore forced to resign themselves to their dangerous situation, exposed in an open boat to the tempest, and liable to be overwhelmed at any moment by the surges upon which they sank and rose. Nearly all the remainder of the night was spent in keeping the boat's head to the sea to prevent her destruction and in bailing out the water, which, despite their efforts, continually filled her. Weary of this toil, they at length, an hour before dawn, turned the boat and ran before the wind and sea until daylight came, disclosing the Canadian shore before them, and their vessel ten or twelve miles distant, tossing on the stormy lake. They headed the boat for a sand beach they saw near Port Talbot, and landed, the boat being capsized in the surf in the effort, and McGuirk and McGee thrown under her, the former receiving an injury to his leg by a blow from the gunwale. They were dragged out by Captain Langan, and the boat drawn up on the beach, where the four men sat for a little while to rest; then, after pulling off and emptying their boots, which were full of water, and putting them on again, they walked up to a house on a hill, the residence of a Mr. Saunders and his three sisters. The ladies were at home alone, and received the poor men with the greatest kindness and hospitality, providing them at once with a comfortable room,

warmed by a blazing fire, at which they could dry their clothes, and serving them with a cordial meal and hot tea. Clothing was also furnished them by these generous women, and in the afternoon a neighboring farmer took them in his wagon to the house of a railroad superintendent, who gave them a free pass to Buffalo. Their terrible night of heroism and peril had this happy ending. At Buffalo they found their vessel, which had put back to port after they left her and reported them lost.

A youth of twenty years of age, named Garret J. Benson, of Albany, N. Y., was awarded a silver medal upon evidence which showed that during the seven preceding years he had saved twelve persons from drowning in the Hudson River. The curiosities of coincidence are herein illustrated—Timothy C. Murphy, a young man of about the same age, having this year, as previously stated, been awarded a silver medal for similar rescues in the Thames River at Norwich, Conn., the number of persons saved being also twelve, and the time involved seven years. Several of the rescues effected by young Benson were of grown men when he was a mere boy.

A gold medal was awarded to Capt. James C. Sandsbury, and silver medals to Henry C. Coffin, Marcus W. Dunham, John B. Dunham, Andrew Brooks, Edwin R. Smith and George E. Coffin, of Nantucket, Mass., for life-saving efforts of marked nobility made by them upon the occasion of the great gale of March 31 and April 1, 1879.

The disasters to shipping during this storm were of extreme severity. On the morning of April 1 the lifting fog revealed no less than sixty-eight vessels, more or less disabled, in the waters around Nantucket. It was on this morning that Captain Sandsbury, hearing that a number of vessels were in distress near Tuckernuck Island, west of Nantucket, collected as a crew the men above named, hired a team, and drove over with a dory to Eel Point, which is distant six miles from the town. Here the dory was launched, and he and his men rowed out three miles through a heavy sea to Tuckernuck. At that place, a whale-boat was manned with double-banked oars, and rowed to the schooner John W. Hall, of Philadelphia, the crew of which was taken from the rigging and landed on the island. The schooner Emma was next visited, and her crew found to be in no immediate peril. Captain Sandsbury and his men then rowed out four miles to the schooner Emma J. Edwards, of Camden, N. J. The condition of this vessel was dreadful. She was capsized and full of water. Enormous seas continually poured over her, and at each one she would roll, thrashing the water with her topmasts, which would rise again fifteen or twenty feet, and flail the water anew, so that it was almost impossible to get near her. A man, feebly motioning with his hand, was lashed to the upper horns of the cross-trees. Underneath him were two dead bodies lashed to the rigging. After some maneuvering, Captain Sandsbury, aware that his boat was in momentary danger of being smashed to pieces by a blow

from the lifting and falling masts, contrived to get into a position to enable one of his men, George E. Coffin, to jump from the boat on to the cross-trees, a line being fast to him for his security. Once on the cross-trees, George Coffin cast loose the living man and lowered him by the line into the sea, whence he was hauled into the boat; after some time, got the dead bodies free and lowered them also to the care of his companions; then jumped into the sea and was himself taken in. The sea and wind were so heavy that it was found the boat could not live if pulled against them, and at the first fair chance it was quickly got before the wind, and rowed for Nantucket, eleven miles distant, where it arrived with its burden by noon. A whale-boat was then procured at that place, teamed to Eel Point, and launched and rowed to Muskegit Island, which, like Tuckernuck, is west of Nantucket. The pull was long and hard, the brave crew only arriving by midnight. Sea and land were then wrapped in intense darkness, and the men drew up their boat and waited on Muskegit beach until break of day, or four o'clock. A launch was then made and two vessels were visited in succession, neither proving to require assistance. The boat next visited the schooner Emma, and took off her crew, proceeded to Tuckernuck and received on board the crew of the schooner J. W. Hall, and then headed for Nantucket, where she arrived with the rescued men about three o'clock in the afternoon. The entire effort occupied thirty-two consecutive hours. It is needless to remark that it shows throughout, in both the active and passive form, the traits of a generous heroism. Disinterestedness, active compassion, endurance of hardship, cool bravery in the jaws of danger, persistence to the last measure of the need, are all there.

A gold medal was awarded to Capt. Frederick Kendrick, master of the government harbor tug at Ludington, Mich., in recognition of an act of magnificent gallantry, resulting in the saving of forty-four persons from the large grain barge, J. H. Rutter, on the 1st of November, 1878.

The barge was a four-masted vessel of 1,224 tons, laden with 46,000 bushels of corn and 19,000 bushels of rye; and the day previous, as narrated in the account of the services rendered by life-saving crews further on, the men of Station No. 6, Eleventh District (Grand Point au Sable), had discovered her in a water-logged condition and labored incessantly for her relief, finally assisting the steam-tug De Pere to tow her to an anchorage a mile north of Ludington, and rowing the captain ashore, where he at once procured the aid of a gang of thirty-six trimmers to arrange the cargo, which had shifted and listed the vessel over on her side. The sea was so rough that the tug which brought the trimmers could not remain, and steamed back, leaving the men on board.

After about six hours hard work, just as the vessel was got into navigable condition, a heavy southwest gale blew up, again shifted the cargo, careened the barge upon her side, and drove her upon the harbor bar, with the sea rushing completely over her. Daybreak disclosed her sunk in 18 feet of water, the waves tumbling and whirling all over her

hull, and her crew, together with the trimmers, forty-four persons in all, clinging to her rigging, where they had been since about midnight, exposed to the wintry wind and flying spray. The alarm was given, and it would hardly be exaggeration to say that in a short time the whole city had assembled within view of the spectacle, terrible to all, and agonizing to the relatives and friends of the unfortunate laborers who constituted the larger part of those on board. As soon as possible the life-saving crew of Station No. 6 hurried to the spot with the wreck gun and lines, and fired seven shots in the effort to cast a line over the vessel, but found her beyond range. Desperate endeavors, which lasted several hours, were then made by the crew to reach the imperiled men with the surf-boat, but the violent wind and overwhelming sea drove the boat back, despite the exertions of the rowers. The action of the water was so frightful, that the steam-tugs present in the harbor, though staunch and large vessels, could not be induced to venture to tow out the surf-boat, which was the only possible means by which she could reach the wreck, and the unhappy swarm of half-frozen men in the rigging seemed doomed.

It was at this juncture that Capt. Frederick Kendrick came forward as a volunteer. His tug was smaller and weaker than any in the harbor, and the chances were all against his being able to tow the surf-boat in such a sea. The plan chosen was to put a scow in tow, manned by volunteers, with the surf-boat behind the scow. The tug accordingly steamed out of the harbor with the two boats in file behind her. Just as soon as she got outside the piers, all hope seemed over. The tug, the scow, and the surf-boat were thrown furiously about from side to side. At times the three boats entirely disappeared between the seas. For more than an hour this fearful scene continued. At length the tug made sufficient headway to the wreck to enable the surf-boat to cut loose, plow up alongside, and take off eight men, with whom her crew succeeded in reaching the land, though the boat filled to her gunwales, while the tug made its way back into the harbor with the scow.

After an abortive effort of the surf-boat to reach the wreck again by launching from the harbor, Captain Kendrick took the boat in tow once more and for hours the terrible scene was repeated of the tug wading and floundering convulsively through the watery avalanches with the surf-boat in her rear. Finally the surf-boat was taken far enough from shore to hold her own against the sea, and, cutting loose from the tug, got sufficiently near to the wreck to cast a line to her, which was caught by the men in the rigging and made fast. The surf-boat then carried the other end of the line to the shore, the calculation being to set it up and fetch the sufferers to land by the breeches-buoy. But the horror of the situation was now increased by the consciousness that the day was waning and that the endeavor for rescue by the means at last arranged must be protracted into the darkness, and involved unknown contingencies of disaster. In this exigency, Captain Kendrick formed

the daring resolution of attempting to reach the wreck with the tug, an enterprise which involved the very extreme of peril to his vessel and to all on board. The sea had now increased in volume and fury, and the vast multitude which lined the piers and beaches hardly breathed as they beheld the sturdy little tug plunging and staggering in her unequal fight with the cataracts which incessantly broke upon her, sometimes flung widely aside in her course, but ever recovering and holding stubbornly and slowly forward straight for the stranded vessel. The breathless suspense continued as the tug gained the lee of the wreck, and boldly made fast alongside. Slowly, one by one, the men were seen leaving the shrouds. At last a shrill, short whistle broke from the tug, and instantly the vast concourse on shore burst into a tempest of cheering. The signal of success was understood, and it was known that the men were saved. The shouts and tumult continued as the little tug heavily floundered back to the piers, and just before twilight began to darken, the thirty-six poor fellows were landed upon the dock amidst a storm of frantic exultation, and hurried away to warm rooms, dry clothing, food, cordials, attendance—everything they needed. In the evening all Ludington went into mass meeting at the largest public hall to assist the sufferers. That, after all their many hours' torture from cold and hunger, the drench of the sea, and the anticipations of doom, the final agony of a miserable death was spared them, is due to the noble audacity of Captain Kendrick. The law provides no higher tribute than the gold medal of the Life-Saving Service, which can, however, confer but a small degree of honor upon a man whose brave deed has honored him infinitely more.

A silver medal was awarded to William Cousins, a gallant fireman on board the revenue steamer J. F. Hartley. In February, 1878, he saved from drowning a boy seven years of age, named Harry Clinton, by diving from the deck of that vessel in the harbor of San Francisco and swimming under a wharf, whither the child had been swept by a strong ebb tide, and where he had been sucked down by an eddy; a circumstance which compelled the rescuer to dive once more to find him. In the following November, Cousins went over the side of the vessel again in the same harbor, at five o'clock in the morning, while it was still dark, and there were no persons yet stirring, and saved an intoxicated German seaman, who had tumbled overboard from the whaling bark Eliza, lying near by, and whose name is not known, owing to the fact that the modest life-saver kept the incident from the knowledge of his commanding officer, who learned it indirectly some months later. On a third occasion, in February, 1879, he was startled out of his sleep near midnight by cries for help from the water, and, rushing up on deck, sprang upon the dock in front of the office of the United States shipping commissioners at San Francisco, leaped into the water, and saved from drowning a man named John Sawyer, who had fallen overboard from the wharf. The alert and energetic character of these rescues is as noticeable as commendable.

A young French Canadian, named Alex. Labre, serving as a deck-hand on a Greenpoint ferry-boat in the East River, New York, was awarded a gold medal, specially in recognition of two rescues effected by him in the year 1875. The first was of a young bridal couple, Germans, named Edward and Emilie Malter. In attempting to step on board a ferry-boat as it was leaving the pier the pair went overboard. Labre was in another part of the boat, but, upon hearing the alarm, ran forward and leaped into the river. The young wife had already sunk once, but upon rising again Labre seized her by the back of her dress, at the same time clutching her husband by the arm, and treading water vigorously, he managed to sustain the struggling and half-drowned couple and get them to the edge of the pier, where ropes were thrown them, and they were hauled out. In the other instance, at equal hazard to himself, Labre plunged into the river from the dock and saved a young woman named Margaret Crawford. She had sunk once, when he came up, seized, and swam with her to a raft of logs. After getting her upon them, she slipped and fell in again. It was only by great exertion and the ruin of a new suit of clothes (it being Sunday), spoiled by the grease, acid, and other stuff always floating around the New York slips, that Labre contrived to get the almost inert young woman up on the raft again. In addition to these two rescues, Labre was shown to have saved at various times, anterior to the operation of the law, eleven other persons by plunging into the water after them, and, there is reason to believe, about as many more by going out to them in boats.

A silver medal was awarded to Mr. John H. Rapp, a wood and coal dealer at the foot of Rivington street, New York City, in recognition of two rescues lying within the purview of the law. One was in August, 1877, when a boy fell into the East River exactly where the street sewer disgorges, and although the water was in a very filthy condition, Mr. Rapp, who was sitting in his office near by, ran and plunged in, without hesitation, bringing the youth safely to land. The other case was in September, 1878, and involved the rescue, by another courageous plunge, of an aged woman who fell into the river from an ash-barge, and whom Mr. Rapp saved only after a hard struggle, finally swimming with her to a coal-boat, into which she was pulled in a very exhausted condition. To these generous feats, the only ones within the action of the medal law, Mr. Rapp can add the record of nineteen years, during which period it is stated he has saved twenty-four lives.

Among the distinguished surfmen attached to the Life-Saving Service, one of the very foremost is Capt. J. O. Doyle, the keeper of Station No. 4, Ninth District, Charlotte, Lake Ontario. His efficiency upon occasions of shipwreck is always at the acme; but during the past year he achieved, in two signal instances, rescues so splendid as to amply deserve the commemoration of the gold medal of the service, which was conferred upon him. The first instance was at the wreck of the schooner E. P. Dorr, of Chicago, which was discovered on the 11th of September,

1878, at half-past nine o'clock in the evening, stranded about 1,200 yards from the beach, a mile west of Captain Doyle's station. The night was dark and rainy, and the vessel was only seen by the flare of a strong torch on board, across the spread of stormy water which was rolling in tremendous breakers from the northeast. The keeper at once ordered out the surf-boat, which was dragged a mile up the beach, abreast of the schooner, slid down the bank 20 feet high, and launched. By eleven o'clock the vessel was reached. She was found in the worst possible position for the operations of the crew of the surf-boat, her bows being directly headed to the sea, so that the water was rushing along her sides like a mill-race, converging at her stern, where it tumbled in great confusion. The breakwater which a vessel affords for boat service when she lies broadside on to the sea was, therefore, here wanting, and the life-saving crew had to get up alongside as best they could, held to the schooner by a line they threw on board, and maintaining their dangerous position with all the more difficulty on account of a strong westerling current, which compelled constant maneuvering to keep the boat in the neighborhood of the vessel. These efforts, which were extremely laborious to the keeper and crew, were protracted, and steersman and oarsmen subjected to great fatigue, by the delay occasioned by a piece of stubborn good-heartedness on the part of the sailors on board, who had taken it into their heads that the cook, a woman, could not be lowered into the surf-boat, and were determined not to abandon her. On the other hand, Captain Doyle and his men were resolute not to leave them in their plight, and a discussion ensued under the last possible circumstances one would think favorable for purposes of debate. The matter ended at last by the sailors consenting to risk getting the cook into the boat. At the word of command the surf-boat darted alongside the hull, and as it rose upon the great swell, the woman, dropped over the side by the sailors, was caught by the strong arms of the surfmen, and the boat fell away. Another run up alongside, and the mate jumped for the boat, fell partly overboard, and was hauled in. Just then a terrible sea swept the boat fifty feet astern, snapping the line which held her to the schooner, and throwing her up on the stern in an almost perpendicular position, nearly pitching her end over end. This situation, in the thick darkness, revealed only by the uncertain gleams from the torch on board the vessel as it flickered in the wind, may be faintly imagined. To add to its terrors, the same blow that flung the boat up on her stern broke out the starboard scull-hole in which the steering oar lay, at a moment, too, when her safety from overthrow depended upon keeping her bows to the sea. It was all the affair of a moment, but in that moment the stout-hearted Doyle had the coolness and intrepidity to instantly change his oar from the broken scull-hole to the scull-hole in mid-stern, where he lashed it securely, the boat's head being kept meanwhile to the sea. The boat was now down in her normal position, steady in the line of the rushing undulations. At the same time, by good fortune, the vessel

swung around broadside on to the sea, which gave the boat's crew the desired lee for operations, and enabled them to dash up alongside and quickly take off the five men on board.

Despite the late hour, the storm, and the darkness, a large crowd of men and women had gathered on the beach, and the greatest excitement prevailed. They now saw the boat, with the six men and the woman saved on board, drive swiftly toward the beach under the steady oar of the keeper, with the great seas at every other moment sweeping over her, and every yard of her course beset with difficulty and danger. At length her bows grated on the sand, and all was safely over. The rescued woman had kept her senses through all that had happened until then. The moment her feet touched the firm beach she swooned away.

The other case of rescue in which Captain Doyle showed signal equality to the exigency was involved in the wreck of the schooner *Star*, of Millpoint, Ontario, on October 23, 1878. This vessel, during a fierce northwest gale, made an effort to gain the harbor at Charlotte, but, missing the entrance between the harbor piers, was driven eastward therefrom to a distance of about a thousand feet, when she dropped her anchors to ride out the storm. She was no sooner fast than the sea mounted her bulwarks and swept all over her, and her crew of seven persons had to climb to her cross-trees for safety. This was at 6 o'clock in the evening. The night was very dark, and the rain fell in deluge. The piers were completely overflowed by the sea, which ran so high that it dashed in the windows of the lower light-house, and perpetually leaped over the tower, so that the lamp could not be lighted. On the beach where Captain Doyle and his men were assembled opposite the wreck, which was 300 yards distant, the vast drift was sweeping in from the northwest in huge rolling breakers, changing under the action of the wind, then shifting to the northeast, into a furious cross sea. To launch a boat was simply impossible. It was equally impossible, principally owing to the darkness in which the vessel was hidden, to reach the wreck with a shot-line. All that the keeper could do was to wait until the wind had fully set to the northeast and somewhat beaten down the waves. The large beach-lantern of the station was lighted and planted in the sand, and signals were continuously made from the beach and pier to encourage the sailors upon the wreck, which was invisible. Under the orders of the keeper, a lantern squad constantly marched the beach, scanning the surf, ready to aid any men that might be washed ashore from the vessel.

At length, about eleven o'clock, it was determined to risk the launch. The sea was then terrible. Although the cross action had ceased, owing to the settling of the wind, the water was rushing with tremendous volume, breaking as it reached the beach with an incessant roar. Over all was the sightless gloom, filled with the streaming rain. To the little group around their boat, abruptly lit by the beach-light and the glimmer of their boat-lanterns, no sign of the vessel was manifest. A few mo-

ments of wary and daring effort, the launch was made, and the boat, dizzily lifting and falling, was cleaving its way with a strong roll of oars into the obscurity on the search for the vessel. The hunt was blind, and it was some time before the skeleton masts and rigging were seen dimly looming above the sunken hull in the darkness. The seven men were still up in the cross-trees of the foremast, nearly exhausted, where they had been for over four hours. They were got down with toil and hazard into the boat, and at ten minutes after midnight were landed on the beach. The vessel went to pieces, and but for the noble keeper her crew would have been lost. No medal was ever more worthily conferred than upon him.

Gold medals were awarded severally to John Tully, William Devan, and John Gillooly, three boatmen on the Ohio River, who, it appears by the affidavits from eminent citizens which accompanied the application made for them, have saved from drowning since 1875 no less than forty-five persons. The scene of their exploits was the falls of the Ohio at Louisville, Ky. These falls, in connection with the dam or break-water at that place, are, at certain stages of the water, extremely dangerous, and have occasioned the loss of many lives, as boats attempting to cross the river, if caught in the suck of the rapids, are almost inevitably swept over and their occupants destroyed. The large number of persons saved from this fate, as stated, within the past four years, owe existence to the intimate knowledge of the river possessed by this heroic triad of boatmen, and to the skill, courage, and humanity in the exercise of which these rescues were effected. It was shown that in some instances the dauntless three put out from shore under circumstances so dangerous as to call forth the passionate entreaties of their kinsfolk and friends, urging them not to go. The spirit that moved them to resist these supplications and to dare jeopardy for the sake of fellow-creatures menaced with a dreadful doom, is shown also in cases where they stripped themselves of their clothing to protect the drenched and shivering beings they had saved. The tokens of recognition and honor officially bestowed upon them become as nothing to the tribute everyone must render in the knowledge of deeds so truly manly as theirs.

A worthy close to the testimonials of the year for extreme and heroic daring in saving human life from the perils of the sea in our waters, was made by the award of a gold medal to Capt. Isaac F. Mayo, of Provincetown, Mass., in remembrance of his hardy gallantry at the wreck of the Sarah J. Fort on Cape Cod, on February 26, 1879. The story of the service he rendered has been told in the preceding pages, and justifies the fullest substantial appreciation it was in the power of the establishment to accord him.

RECOMMENDATIONS.

The crew of a life-saving station is at present composed of seven persons, a force which is simply adequate to the manning of six oars and the oar of the steersman. To a great extent the beaches are barren out-

lying strips of sand, separated from the mainland by intervening bays, and absolutely destitute of other inhabitants than the groups of seven surfmen, several miles apart, in the solitary stations, rendering it impossible to obtain outside assistance for any of the operations of the service, or for any suddenly created need. The conditions are such that in each case two more persons could be usefully employed, but at least one additional man at each station is considered indispensable. In the state of the surf which exists in stormy weather, the time when a life-saving crew is likely to be called upon to put off to a wreck, it is of great importance that some one should be upon the beach to assist in launching the boat, and, what is still more important, to receive her upon her return, thus aiding in both instances to prevent her from capsizing or broaching to. An extra man at each station would also materially lighten the labor of patrol, by adding a relief to the crew and enabling the men to be successively spared from a watch. Enough has been said elsewhere, perhaps, to afford an adequate comprehension of the hardships involved in the protracted marches of the patrolmen by night upon our winter beaches. It is no little matter, as everyone will concede, for these solitary men to be compelled to plod and grope for miles over the rough levels of the seaside in the icy darkness, watching meanwhile the obscure offing for endangered ships, while all the world lies comfortably in bed. No man among these crews ever gets a whole night's sleep during the eight months of station duty. From sunset to dawn, the beach must be patrolled, and for the space of at least four hours, each member must perform this duty. It hardly needs to be said how wearing such a life is to the crews. The addition of another member to the station *personnel* would obviously afford a considerable relief by allowing each man to be off patrol duty for an uninterrupted night's rest once a week. Another advantage would arise from the extra help thus made available in hauling the apparatus on severe occasions, in setting it up and working it at wrecks, or in sending back to the station for an implement or article that may be wanting to replace one broken or expended, when the present complement of men are fully needed for operations upon the scene of disaster. The addition would also, on all ordinary occasions, enable a man to be left at the station to guard its property, which the absence of the crew at a wreck, under existing circumstances, now leaves without a custodian. Still further, and more important, it would give a chance for the preparation, in advance, of the necessary culinary and hospital arrangements at the station, which usually succeed a rescue. At present a crew frequently returns to the house, after the racking labors of a whole day or night, faint with hunger, cold, drenched through and through, cut or bruised, and spent with fatigue. They bear with them a terrible group of the rescued, sometimes with women and children in the number, livid, ragged, half naked, hurt, famished, wet, and frozen. The station fire is out or burnt low; no food is prepared; nothing is ready; everything has to be begun. With an extra man at

the station the miserable assembly would enter an interior fully prepared for their reception.

Under the circumstances, and for the reasons given, the proposed addition is plainly essential. To enable this to be made, an increased appropriation is necessary, and such an increase is contemplated in the estimates submitted for the ensuing year.

Another urgent requirement for the promotion of efficiency is the provision of horses. The lightest burden of apparatus or life-saving appliances needed at a wreck is at least a thousand pounds, and at present, in most instances, this has to be drawn by the men. It is probable that to fully realize the heavy task involved it would be necessary to actually see with the eye the group of seven surfmen harnessed to the loaded hand-cart, violently tugging in oblique positions, almost inclined to the ground under the strain of the burden, as they toil forward to the scene of the shipwreck. It must be borne in mind that their load has often to be dragged through a slough of wet sand, against the stress of a winter gale, and that the journey will generally vary from one to three or four miles from the station. Hence they must arrive seriously fatigued at the point where the severe labors of the direct operations at the wreck are to begin, and where they need their freshest energies. Equally bad, owing to the circumstance of their necessarily plodding progress with their grievous load, is the delay involved in reaching the wreck, a speedy arrival at which is so obvious a necessity that every one could wish that the rescuing party might come tearing along the beach at a gallop, with the speed of an engine racing to a fire.

In order that the life-saving apparatus may be conveyed with the utmost possible dispatch to the spot, and the operations of rescue commenced promptly, and also that the crew may come to the work with undrained strength and vitality, it is necessary that draught horses should be provided, and it is hoped that the appropriations may be augmented sufficiently to attain this very desirable end. The expenditure involved would not be large. Proper inquiries have been made, and it is found that in numerous instances horses can be obtained for the cost of their keeping and shelter only. At certain points their purchase would be necessary. The appropriations have heretofore enabled the officers in charge of the service to authorize the employment of horses at only a few localities, and upon particular occasions, under circumstances where the transportation of the apparatus would have been literally impossible without them; but it is highly desirable, and even indispensable, if efficient service be required where responsibility is already laid, that these animals should be at all the stations. No station could be considered fully equipped without two good draught horses, but it is hoped that allowance may be at least made for one.

The subject of the low compensation received by the superintendents of the several life-saving districts is one deserving of serious consideration. The pay of these trusty and able men, all of them proficient and

all enthusiasts in the business of life-saving, is, with two exceptions, only \$1,000 per annum. These exceptions are the compensation of the superintendents of the Third and Fourth Districts, which is in each instance \$1,500 per annum, a sum fixed before the inauguration of the present system, and which is very little, considering that one district embraces thirty-eight stations, and the other forty, and that they are under bonds of \$25,000 and \$30,000, respectively. No allowance is made to any of the district superintendents for clerk-hire, and they are all heavily bonded and charged with the keeping of their own accounts and all their correspondence. They are responsible for the efficiency of their districts, and their task necessarily occupies their whole time. During the active season they have frequently to personally visit and inspect every station on their respective coasts, and see that all the implements and apparatus are in order, making requisition for whatever is lacking, and being charged with a considerable part of the purchases of needed supplies and fitments. They are intrusted with the selection of the keepers of the several stations, a duty requiring much knowledge, judgment, and probity, and with the payment of them and their crews, upon their quarterly visits to the stations. They have, in a word, the direct and immediate government of these important districts.

It is plain that for duties so arduous and responsible, and ever increasing in seriousness and magnitude, suitable compensation should be accorded, and that less than the pay of a clerk of the lowest grade, which is what eight out of ten of these officers receive, is far from being suitable, while the pay of the other two, burdened with heavier duties, equally merits increase; and the recommendation is earnestly made that the annual compensation of all the district superintendents be raised to an amount justified by their professional ability, their high character, and their laborious and responsible positions.

It is highly desirable that life-saving crews, who have been subjected to the drill and discipline of the service, and by this, and actual experience in managing the apparatus upon occasions of shipwreck, acquired a proficiency similar to that of a trained soldier or man-of-war's man, should be retained at the stations in preference to new recruits who bring to their duties nothing but the fisherman's or wrecker's skill in managing boats, and have to be instructed in the special operations of life-saving, particularly those which relate to wreck-gunnery, setting up and working hawsers and hauling lines, and delivering persons by the breeches-buoy or life-car. The endeavor has been made to continue this class of men from year to year at the stations, as far as possible; but with a view of securing a surer tenure, it is recommended that authority be given to enroll them for a term of three years, with the condition, of course, that they may be discharged at any time by the government. It is also recommended that the benefits of the pension laws be extended to such of them as may become disabled in the discharge of duty, and to the

widows and orphans of those who may perish in attempts at rescue. This recommendation was made in a former report, and formally supported by reasons, as propriety seemed to require. It is now simply renewed, for surely no further argument is necessary to show that the benefit of pension is as much due to men who are maimed or killed in the effort to save life in the service of the country, as to those who suffer the like injury or loss when the interests of the country demand that life should be destroyed. In the instance of the loss of the United States steamer *Huron*, in 1877, the government made liberal pecuniary allowance to the immediate relatives of the persons who perished in the endeavor to render assistance, and in addition placed them, on a generous scale, upon the pension rolls. Yet the year before, seven brave men, the whole crew of a station-boat, went out in the night in a desperate effort to save life from the Italian bark *Nuova Ottavia*, on the coast of North Carolina, and were every one drowned; and to this day, with the exception of a small gratuity bestowed by an Italian society, nothing has been done for the relief of their widows and orphans, although it is understood they are all in penury.

The necessity for the establishment of additional life-saving stations at a number of points upon the coast has in several instances been brought to the attention of the officers in charge of the service by the occurrence, within the past few years, of frequent marine disasters in those localities, accompanied by great loss of life and property. Numerous petitions of masters and owners of vessels and others interested in shipping have also been presented for stations at other points, and have led to such examinations as are necessary to proper conclusions in the premises, great care being always taken to recommend only such stations as it is certain their utility would justify.

A sad disaster which occurred on November 3 last, at Cape Elizabeth, Maine, and which led to the loss of several lives, although the vessel drifted so near the land that her crew could converse with people on shore and ask that a life-boat be sent them (which could not be done, no boat being available), caused a large petition to be presented for the establishment of a station at some locality near the entrance of Portland Harbor. A list of total losses of vessels in the vicinity within ten years was also furnished—numbering 22 and involving the loss of many lives. The establishment of a station is recommended near the harbor, which with Casco Bay is largely sought for refuge by coasters during storms.

A large petition has also been received from citizens of Portsmouth, N. H., and Kittery, Me., asking for the establishment of a station on Gerish's Island, a dangerous locality at the eastern entrance of Portsmouth Harbor. There have been numerous severe disasters in this vicinity, and due examination has made apparent the duty of recommending a station here.

A station is also required at a point at some distance north of Scitu-

ate Harbor, Mass. The station heretofore authorized for Scituate was placed several miles below the harbor, but the one now recommended seems to be nearly or quite as necessary as that established.

The neighborhood of Peaked Hill bars and Provincetown, Cape Cod, the dangers of which are not exceeded by those of any other locality, is in urgent need of further protection. Disasters here are extremely frequent and calamitous. Two additional stations in this vicinity are necessary, one, at least, imperatively so. A very extensive petition has been received setting forth this need, which had become already apparent to the officers of the service.

Nantucket, with its neighboring islands and shoals, is an exceedingly dangerous locality, and the single life-saving station here and the life-boat house of the Massachusetts Humane Society are insufficient to afford adequate protection to mariners. The disasters in these waters are very numerous. After a single storm last spring, no less than 68 vessels more or less disabled were in sight from the town, 11 of them being ashore. Urgent representations in this relation have been made to this office, with solicitations for appropriate relief. There should be at least two additional stations in this vicinity.

The establishment of a station is highly desirable at Lewes, Del. The breakwater at this place forms a harbor of refuge, making which many vessels suffer disaster. In a single gale in the spring of 1877, six vessels sank at their moorings in this dangerous locality. The nearest life-saving station at present is five miles distant, and often it would be impossible for the crew to get their boat around the cape to the assistance of any vessel in distress, which aid from a station at the point indicated could reach readily.

On the same coast, between Cape Henlopen and Cape Charles, five additional stations are necessary at such intermediate points between existing stations as will enable the beach to be thoroughly patrolled. At present, the distances between most of the stations in this district (the Fifth) are inordinate, being in two instances about 20 miles, and in another 25. The beach is very rough and is frequently intersected by inlets, which make much wading necessary on the part of the patrol, whose journey the peculiarities of the track, no less than the number of miles to be traveled, render extremely toilsome and difficult. The distances mentioned as separating the stations also make the speedy recurrence of the patrolmen upon their respective beats quite impossible, a circumstance unfavorable to the prompt discovery of stranded or otherwise distressed vessels, whose number upon this harsh coast is considerable annually.

Two additional stations are required upon the North Carolina coast; one between Stations Nos. 17 and 18, about 2 miles south of New Inlet, and the other between Nos. 21 and 22, a little north of the extreme point of Cape Hatteras. New Inlet is one of the most dangerous points upon this coast, as the remains of numerous wrecks in the vicinity

testify; and the distance between the two stations nearest to it is about 9 miles. The beach is low and flat, and very frequently, in consequence of the high tides that prevail during easterly storms, it is impossible for the patrolmen to cover their beats. In the event of a wreck occurring upon the south side of the inlet, the difficulties to be overcome, and the time consumed in transporting the apparatus to the scene, would materially lessen the chances of rendering effective assistance, or prevent it altogether. The distance between Stations Nos. 21 and 22 is about 11 miles, following the line of the coast. The reasons mentioned in the foregoing instance apply almost as well to this case. Besides, there are dangerous shoals near the point of Cape Hatteras, upon which numerous vessels have been sunk. At such times prompt assistance is required in the rescue of the imperiled crews. Station No. 22, which is the nearest to these shoals, is too remote to permit the life-saving crew to keep a proper watch over them, particularly in thick or hazy weather.

The distances between the stations on the Florida coast are generally about 30 miles. It is felt to be a duty to recommend the establishment of six stations at points intermediate between those now existing. As these stations are not provided with crews, being houses of refuge each in the charge of a custodian only, and provisioned and furnished for the succor of seafarers cast away upon the coast, their maintenance is not expensive, and the cost is amply counterbalanced by the fact that they have proved useful in preventing many persons who have escaped shipwreck from perishing of hunger and thirst in that barren and uninhabited region.

The details of a particularly distressing disaster at Pentwater, Lake Michigan, have just been received. It appears that on the evening of the 20th instant, during a fierce gale and snow-storm, the keeper of the station at Ludington, who had just been appointed, received a telegram stating that the schooner Mercury was ashore near Pentwater, which was 15 miles distant, and that her crew of seven men must certainly perish before morning, all attempts to reach them having proved unavailing, and one brave man having lost his life in the effort. The station at Ludington was not yet fitted for service, but the equipments had arrived, and the keeper hastily mustered a crew of volunteers, and having with great difficulty, owing to the dangerous state of the sea, procured the services of a tug, started at once in the life-boat for the wreck, which was reached near midnight. The vessel was found covered with ice, and the people on board were taken off by the life-boat men almost frozen and in a pitiable condition. This disaster, with a number of others that have taken place at and near Pentwater, shows the necessity for the establishment of a station at this place, at which there is considerable shipping, and which presents the usual hazards and difficulties to be encountered by vessels when attempting to effect an entrance in bad weather between the piers by which the harbors of the lake cities and towns are formed.

Under the caption of Awards of Medals, reference has been made to the rescue by three brave boatmen, since 1875, of 45 persons from drowning in the rapids commonly known as the falls of the Ohio, opposite the city of Louisville, Ky. Accompanying the evidence of the heroism of these boatmen were petitions for the establishment of a life-saving station at that point, indorsed by the supervising inspector of steam vessels of that district, captains of vessels, and others familiar with the danger of these rapids, which is greatest at low water, and consists mainly of a strong chute which rushes between ledges of rocks projecting from either shore, and is called the suck. Boats attempting to cross the river are liable to be caught in this suck or in currents trending towards it, which are extremely insidious, and, despite the most strenuous exertions of the rowers, to be drawn down the chute, where they are almost sure to be whirled over, and their occupants drowned. Besides the persons saved in this locality by the boatmen above referred to, who, it seems, by their position as employes on a coal-wharf on the banks of the river, have been enabled to be constantly on the watch for persons imperiled in the chute, and to put out promptly to the rescue, it appears that a considerable number, unperceived or unassisted by them or others, have, at various times, been drawn into the fatal trap of these rapids, and lost their lives. The establishment of a life-saving station at this point is therefore recommended as highly desirable. Such a station would differ considerably in its equipments and organization from stations on the coast, but could easily be furnished with proper boats and other appliances adapted to the conditions.

CONCLUDING REMARKS.

The Life-Saving Establishment has now had a year's operation under the beneficial action of the law of June 18, 1878, and the results of this legislation, predicted in the preceding report of the service, have been abundantly verified. The main feature of the law was the definite organization of the service into a national establishment, and this has obviously conferred upon it a public prestige and resultant power which it could not otherwise have gained. Accompanying this act of institution was the creation of new stations, which filled many dangerous gaps upon the coast with such efficacy as might flow from the erection of fortresses upon a hitherto unguarded frontier, and also the extension of the domain of the service into regions before barren of life-saving aid to wrecked seafarers, but henceforth fruitful of every form of aid and succor which human care can devise for such distresses, and manly courage render.

The consequences anticipated from the provision of the act which increased the compensation of the keepers of the stations have also been realized. The anxiety with which the officers in charge of the service, and burdened with its responsibilities, saw slowly dropping from its rolls, or retained by the most uncertain tenure, the names of the trustiest

and bravest beachmen has been relieved, and under the sustenance and incentive of a living remuneration, the best coast genius and daring have become largely available, embodied in the persons of keepers worthy of their positions. Their deeds already speak for them. The year shows a record of life rescued and property saved from destruction which no life-saving establishment in the world can excel, and the instances of baffled effort, either by fault or inability, are scant and few. Under the incentive afforded by the law, not alone of proper pecuniary reward, but of public recognition for their labors, and public honor for their successes, aided by the growing consciousness of belonging to a service steadily augmenting in importance as in use, the masters of beach-craft, the best of those accustomed to triumph in boats over surf and sea, the best also of our coast citizens have been, or are being, drawn to the keeperships of the establishment, and they attract around them in turn, by skilled selection, crews of the truest metal for the patient duties of patrol or the perilous service of wrecks. The amplest results may be expected from the entrance into life-saving duty of men like these. They bring their surfing and wrecking knowledge and experience as the foundation for accomplishment in the methods of rescue imparted by the drill and discipline of the service; and here, as in the discharge of the new functions conferred upon them by the law as custodians of stranded property, their professional efficiency will be supplemented by the invaluable quality of manly character.

In providing for the detail of Revenue Marine officers as inspectors of the stations, the law authorized and gave due extension to a measure which the necessities of the service had previously begun. The experience of these officers happily adapt them for their duties in the supervision of the stations, and under their care a marked advance has been made in the order and efficiency of the districts. They are peculiarly fitted for training the crews in the manual of operations with the apparatus in use at wrecks, an improved method in which has been devised, as elsewhere stated, by one of their number.

The prolongation of the term of station service, so as to cover in for life-saving activity, the season from the earliest autumn storms to the latest of spring, was an important feature of the law, and has proved of marked beneficence, rendered effectual, as it was, by larger appropriations. It is certain that but for this provision many lives and much property would have perished, the tempests of last fall, a season when heretofore the stations were not enabled to be opened, having been of singular severity. Reference to that part of this report which records briefly the services of the crews will show how actively they were engaged at periods when they were formerly not employed, and how many lives were saved which but for the stations being open would have been lost. The record in this respect extends also to the prevention of unknowable marine loss at these periods by aid of every description afforded by the crews to vessels in positions of distress or peril, and

made possible only by their being on duty. It will be seen that, although their services thicken, becoming also more arduous and important, at dates when the deepening inclemency of the season multiplies the number, as it also aggravates the character of marine disasters upon the coasts, their record in the milder periods which the law covers is by no means inconsiderable, and quite justifies the legislation referred to.

In no particular has the law worked more felicitously than in its provision for the proper organization of the life-boat service upon the Lakes. A previous report of the establishment has referred to the paralysis which threatened life-boat effort in that region owing to the lack of power to compensate the crews, no matter what hardship or danger they incurred in attempts at rescue, unless they actually and indisputably saved life. All this has been averted. The provisions of the law authorizing the payment of crews for every occasion of actual service at shipwreck, and enabling them to be remunerated for days spent in the drill and exercise necessary to their proficiency in life-saving operations, and appropriations permitting the constant employment of crews at certain of these stations, have called into being an unrivaled corps of able and daring men, zealous and eager to the last extremity, and who have shown themselves equal to almost every emergency. What they have succeeded in doing is shown in the statement of services of crews previously indicated. A telling record of their efficiency in seasons of exigency, which those who know the fury of the Lake waters at times of tempest can best realize, is afforded by the fact that of all the lives imperiled on those portions of the Lake coasts protected by stations during the last fiscal year only six escaped their aid and were lost. Going beyond the annals of the year; a still more striking exhibit of this newly-organized efficiency upon the Lakes in the field of life-saving operations is afforded by the circumstance that of the 545 persons on board 69 vessels suffering disaster, since the 30th of June last up to the present date (November 27), only a single one has been lost—the instance being a woman, the cook of the vessel, who was asleep below at the moment of stranding, and was drowned in her bed, the captain having strangely failed to notify her of her danger.

The efficiency of the service upon the Lakes and all other coasts is due to men like these referred to, as well as to the legislation which affords the opportunities to call them into action. The success of every service depends upon the character of its agents, and by their actions must every service stand or fall. To obtain the proper men is the indispensable requisite, and nowhere more so than in the stations of the Life-Saving Service. Aided by the law, the officers in charge of the establishment have bent their best efforts to this end. They have considered that in the composition of the station crews—deliverance to persons imperiled upon wrecks being the object, and no question of governmental policy, nor the interest of any creed being concerned—all political and sectarian considerations must be ignored, and the best men obtainable rigorously selected, with sole regard to their manly character and professional

ability. To be possessed of the consummate skill and heroism which enables a crew to cope with the perilous breakers for the rescue of fellow-beings must here be the one only qualification, and to fit men for the sacred duty of saving human life it is not necessary that they should be professing church-members or staunch allies of the administration. In this view the officers of the service have invariably had the cordial support of superior official authority. The service has for years been administered in this spirit, and whatever success has attended its efforts is largely due to the fact.

With stations filled by crews selected on this principle, aided by improved appliances and supported by adequate means, it is difficult to assign a limit to the efficacy of the service. It is certainly possible to make our coasts measurably safe to the shipwrecked—to reduce loss of life to a figure extremely low. On those parts of the coast where the service is at its best estate the showing in this respect is already extraordinary. Previous to the act of June 20, 1874, there was no law authorizing statistics of marine disasters to be gathered, as they regularly are now through the collectors of customs, the results appearing annually in compilations accompanying the reports of this service. The following table referring to disasters upon the Lakes, embracing a period from the year when these compilations are such as to admit of a full comparison with other years up to the present time, strikingly exemplifies the relation which the Life-Saving Service bears to coast mortality.

Fiscal year.	Number of casualties.	Number of persons on board.	Number of lives lost.	Ratio of lives lost to number on board.	Ratio of lives lost to number of casualties.
1875-'76	515	4, 723	87	As 1 to 54.28	As 1 to 5.91
1876-'77	295	2, 954	49	As 1 to 60.28	As 1 to 6.02
1877-'78	470	4, 309	42	As 1 to 102.59	As 1 to 11.19
1878-'79	408	4, 110	19	As 1 to 216.31	As 1 to 21.47

It will be observed from the above tabular statement that in the year first mentioned, ending June 30, 1876, when there were no stations, 87 lives were lost, being one out of every 54 on board, or one out of a fraction less than every six disasters. There were 11 stations established in the earlier part of the next fiscal year and 16 in the latter part, and the loss of life has descended to 49, being one out of every 60 persons on board, or one out of a fraction over every 6 casualties. The year following, with the same number of stations, but the men being, of course, more proficient in the methods, the loss of life is reduced to 42, being one out of every 102 persons on board, or one out of every 11 casualties. All this time the station operations were seriously crippled by the insufficiency of the means provided for the proper maintenance of the crews. The next year this was remedied by the act of June 18, 1878, and the loss of life has sunk to 19, being one out of every 216 persons on board, or one out of every 21 casualties. No words could add point to this telling exhibit of the power exercised by life-saving stations over mortality by shipwreck.

SERVICES OF LIFE-SAVING CREWS

DURING

FISCAL YEAR ENDING JUNE 30, 1879.

SERVICES OF LIFE-SAVING CREWS DURING FISCAL YEAR ENDING JUNE 30, 1879.

July 7, 1878.—The crew of Station No. 40, Fourth District, New Jersey, boarded the schooner *Electa Bailey*, of Philadelphia, which stranded at 6.30 a. m., and rendered assistance in getting her off.

July 25.—The same crew pulled out and landed the crew of three men and their effects from the wreck of the schooner *Peerless*, of Port Jefferson, New York, which struck and sunk on Crow's Shoal.

July 26.—The crew of Station No. 39, Fourth District, New Jersey, went out in their boat in a heavy sea, and succeeded, with great difficulty, in taking off four men from the schooner *Imogene Diverty*, of Camden, New Jersey, which stranded in a gale at 3 a. m., and finally sunk on South Bar, Cold Spring Inlet.

July 28.—The crew of Station No. 9, Ninth District, Marblehead, Lake Erie, rescued two boys, in a rough sea, from the bottom of a capsized boat to which they had been clinging for twenty minutes.

August 5.—A portion of the crews of Stations Nos. 8, 9, and 10, Third District, Long Island, went out and rendered some assistance in floating off the steamer *Blackstone*, of Baltimore, which had stranded at half-ebb tide in the fog about 300 yards from the shore.

August 12.—The sloop *Belle*, of Oswego, lost her rudder five miles from Big Sandy Creek, Lake Ontario, in a heavy sea. The crew of Station No. 1, Ninth District, pulled out to her in the life-boat, towed her into port by her line, and put her in order. Three men were on board.

August 14.—The keeper of Station No. 1 (Narragansett Pier), Third District, Rhode Island, discovered the schooner *Armenia*, of Tuckerton, New Jersey, on Whale Rock, West Bay. She had dragged her anchors in a heavy sea, and struck upon the rock at midnight. The concussion threw down the captain, breaking his arm below the elbow and injuring his hand severely. The keeper of the station got together his crew, and succeeded, after much labor, in saving the six men on board, together with their clothing. The vessel was lost.

August 14.—A small boat containing five men capsized through careless management a mile and a half from Station No. 2, Ninth District, Lake Ontario. The men clung to the boat, and in half an hour were taken from the water by the life-boat crew.

August 14.—Two men, the mate and the chief engineer of the tug *Burnside*, were capsized at 10.30 a. m., in a sail-boat, in Ottawa Bay, half a mile to leeward of the keeper of Station No. 4, Tenth District, who happened to be returning from East Tawas in the station supply-boat, and instantly ran down to them in a freshening wind, and took them from the bottom of their boat, to which they were clinging, with the sea breaking over them.

August 17.—The keeper of Station No. 5, First District, Maine, discovered the schooner *D. M. French*, of Barnstable, Massachusetts, stranded during a fog on Brown's Ledge, near the station. Signaling for his crew, he obtained five men, who rowed out to her, kedged her off through the ledges, and ran her into Seal Harbor on to some flats, where her damage

could be ascertained at low water, thus delivering her with her crew of five men from a perilous position.

September 1.—The crew of Station No. 5, Third District, Rhode Island, went to the assistance of the schooner *Rebecca W. Huddell*, of Philadelphia, which had stranded, at 10.30 p. m., in a thick fog, on the western side of Block Island. There were seven persons on board. The vessel was got off the next day.

September 2-3.—The crews of Stations Nos. 8 and 9, and a portion of the crew of Station No. 10, Third District, Long Island, worked the best part of these two days in getting afloat the schooner *Hattie V. Kelsey*, of New Haven, Connecticut, which had run upon the bar in a thick fog near Station No. 7. They first conveyed the captain's wife and family and their effects on shore, then returned and engaged in the heavy labors of working the vessel off into deep water, sticking by until successful. There were eleven persons on board.

September 3.—The crew of Station No. 5, Tenth District, went out to the relief of the schooner *Vampire*, of Ashtabula, Ohio, which had been struck by a heavy squall, thrown upon her beam-ends, and when she righted had 5½ feet of water in her hold, in which condition she anchored and showed signals of distress. They reached her at 10 o'clock a. m., fell to work at the pumps, and at seven o'clock in the evening got her clear of water, and started her under sail, in good condition, for her destination. Six men composed her crew.

September 4.—The crew of Station No. 23, Fourth District, New Jersey, went to the schooner *Ann S. Cannon*, of Philadelphia, which had run upon a shoal at noon, and, after over three hours' difficult and perilous effort, succeeded in taking from her five men and a woman, the sea being very rough, and the vessel, which was slowly sinking, lying in an unfavorable position—that is, with her stern to the sea—which compelled the crew to take the rescued persons down over the bow.

September 7.—The brig *Alexander Nickels*, of New York, stranded and went to pieces in a violent tempest a mile and a half south of New River. Of the six men on board at the time, one was lost. The remaining five were found by the keeper of House of Refuge No. 5, Seventh District, Florida. Loss of life being involved, the particulars of this wreck will be found under that caption on page 18 of this report.

September 10.—The yacht *Silver Cloud*, of Oswego, while engaged in a regatta, capsized with seven persons on board a mile from that place. The keeper of Station No. 3, Ninth District, at once mustered a crew, launched the life-boat, and rescued these men, who were clinging to the sides and bottom of the capsized vessel.

September 11.—The French brig *Sèvre* stranded and went to pieces in a gale, sixteen miles north of House of Refuge No. 1, Seventh District. There were ten persons on board. One was lost. Of the other nine, eight were found on the shore by a colored man named Peter Wright and conducted to Titusville. The remaining man was found by the keeper nearly gone with hunger and thirst, carried to the station, and kept for ten days before he was able to travel. (See page 19.)

September 11.—A gallant rescue of six men and a woman was effected from the schooner *E. P. Dorr*, of Oswego, by the crew of Station No. 4, Charlotte, Lake Ontario, Ninth District. The schooner was seen at half past nine in the evening stranded about 1,200 yards from the beach, a mile west of the station, with a torch burning. The night was dark and rainy, and a tremendous sea was rolling in from the northeast. Hurriedly getting the surf-boat upon its carriage, the crew dragged it a mile by hand, abreast of the vessel, and getting it down an embankment twenty

feet, launched it and reached the wreck at about eleven o'clock. The vessel was in a bad position for effort, lying head to the heavy sea, which was racing along her sides and tumbling in around her stern. There was no shelter, therefore, for the boat, and a strong current running to the westward made constant maneuvering necessary to maintain the boat in position. To add to the difficulty, there was delay, involving much fatigue to the life-saving crew, owing to the unwillingness of the sailors to leave the vessel, because they thought the woman on board, the cook, could not be lowered into the surf-boat. They were finally persuaded to try it, and the cook was dropped safely into the arms of the surf-boat men. The mate followed, fell partly overboard, and was hauled in. At that moment a heavy sea swept the boat fifty feet astern, breaking the line by which she was held to the schooner, splitting out a piece of the boat at the starboard scull-hole, and lifting the boat almost upright upon its stern, a position favorable to its being tossed end over end. It was with much difficulty that the boat was kept head to the sea, while the gallant keeper changed his oar from the starboard scull-hole to the central or midship stern scull-hole, and lashed it securely. Meanwhile the vessel had broached to, giving a better lee to the boat for its operations, and enabling the crew to swiftly run up and take off the five men on board. Landing was then effected, though with danger and difficulty from the heavy seas sweeping over the boat. Immediately upon reaching shore the rescued woman fainted away upon the beach, and was carried to a cottage near by and cared for. (See page 69, under caption Awards of Medals.)

September 13.—The crew of Station No. 7, Fairport, Lake Erie, Ninth District, devoted two hours and a half to the rescue, accomplished with the surf-boat, of six persons from the steamer *Pearl*, of Detroit. (For particulars, see page 19.)

September 14.—A patrolman of Station No. 5, First District, Maine, saw, at 6.30 a. m., through a lift in the fog, the schooner *George B. Ferguson*, of Belfast, Maine, at anchor in the breakers near Red Ledge, Wheeler's Bay. She had struck upon the ledge, but came over and dropped anchor. The sea was rough, and the crew of the station who pulled out to her had to constantly watch and dodge the seas which threatened to engulf them. After a great deal of hard work, which lasted till noon, and with the aid of a small fishing-steamer, not powerful enough to tow the schooner, but which held her to windward with a line, the station crew ran her out of her dangerous position in the breakers, got her into deep water, and left her standing out to sea under full sail. She had five men on board.

September 14.—An hour later, the same crew saw the schooner *David Faust*, of Ellsworth, Maine, making signals of distress through the fog, and pulled out to her. They found her with 60 fathoms of chain out, and her crew unable to heave up the anchors, the chain slipping and the windlass giving with every plunge of the vessel under the action of the wind and sea. The life-saving crew put tackles on the chain to relieve the strain on the windlass, and after a couple of hours' labor the anchors were hove up and the vessel got under way.

September 14.—The life-saving crew of Station No. 25, Third District, Long Island, at one o'clock in the afternoon, saw the yacht *Foam*, of Babylon, New York, with two men on board, capsize and come ashore through the breakers on Fire Island, in a heavy sea. They immediately went to the assistance of the men, who were somewhat injured by being struck on the head by the boom when in the water, cared for them, and, after four hours' work, got the yacht off and anchored her in the inlet.

September 15.—The schooner *William A. Low*, of Perth Amboy, New Jersey, stranded on the southeast point of Cobb's Island, at 8 a. m. The crew of Station No. 10, Fifth District, Virginia rowed out to the vessel immediately, and the next day, the tides favoring, ran out her anchors and hove her off without damage. There were four men on board.

September 25.—Twelve men were rescued from the schooner *Erastus Corning*, of Buffalo. The vessel having lost her canvas and some of her spars, anchored in a southeast gale and rough sea at 9 a. m. four miles southeast of Station No. 17, Two Rivers, Wisconsin, Eleventh District, and put up signals of distress. A tug attempted to go to her assistance, but could not get out of the harbor on account of the force of the sea. After two efforts the life-boat crew of Station No. 17 succeeded in reaching her and took off the men on board; after which the keeper procured a tug from Manitowoc to tow her away.

September 27.—The schooner *Water Lily* of Dennis, Massachusetts, stranded at 5 p. m. near Station No. 6, Second District, Massachusetts, running so well up on the beach that the two men on board were able to jump ashore, with no other damage than getting wet. The vessel was seen by the patrolman when coming on to the beach, and the life-saving crew hastened to the spot. The men were taken to the station, given dry clothes, and sheltered for two days, when the keeper obtained free passes for them on the Old Colony Railroad. The vessel went to pieces, but not before the life-saving crew had secured her sails, anchors, and rigging.

September 27.—The crew of Station No. 40, Fourth District, New Jersey, rowed out to render assistance to the schooner *Brutus*, of Grovesville, New Jersey, which had stranded, with seven men on board, on the south end of Crowell's Shoal; at low tide, and hove her off at the flood.

October 1.—The crew of Station No. 16, Eleventh District, rendered considerable assistance to the schooner *J. M. Forest*, of Chicago, which had come to anchor in a southeast gale and very high sea near the harbor of Sheboygan, Wisconsin, having run entirely out of provisions and stores, and being unable to show signals at night for want of oil, thus putting her safety to extra risk. The crew lowered a boat and endeavored to make a landing for the purpose of replenishing the vessel, but failed, owing to the violence of the sea. In this strait they were observed by the life-boat men of Station No. 16, who went out to them in a tug, brought the captain of the schooner ashore, and took him again on board with his stores and supplies, laying by till the gale moderated.

October 3.—The crew of Station No. 5, Tenth District, took off five men from the scow *E. K. Kane*, of Toledo, Ohio, which dragged her anchors and went ashore at five o'clock in the morning in a southeast gale and heavy sea, six rods from the beach, at a point four miles south of the station. When the sea went down the crew helped to unload the vessel and got her afloat and ready for repairing the damages she had received.

October 8.—On the morning of the 8th of October the crew of the sloop *Teaser*, of Swampscott, Massachusetts, consisting of three men, came to Station No. 4, Second District, Massachusetts, reporting that their vessel had become disabled the night before in passing Gurnet Point, and that they were obliged to anchor in Saquish Cove, not being able to proceed further. The keeper and crew of the station went on board of her, repaired her damages and piloted her out beyond the point, enabling her to proceed home.

October 9.—The schooner *W. W. Grant*, of Port Hope, Ontario, with six men on board, stranded in a northwest gale and heavy sea, at

noon, near the east pier at Oswego, Lake Ontario. The crew of Station No. 3, Ninth District, went out to her relief, and by the use of heavy hawsers got her afloat.

October 10.—The keeper and two members of the crew of Station No. 5, First District, Maine, saw the schooner *Commodore*, of Bath, Maine, at 10 a. m., dragging her anchors and drifting toward the rocks in a westerly gale and rough sea, off Seal Harbor, three-quarters of a mile from the station. Without waiting to gain the station and alarm the rest of the crew, the three men launched a small boat, and in twenty minutes gained the vessel. There were but two men on board, both in great perplexity and alarm, and unable to get her anchors up without assistance. The other members of the life saving crew soon arrived, and in two hours they got up the anchors, beat the vessel into harbor to a safe berth, cleared the fouled anchors, moored, and left her safe.

October 11.—The schooner *Alice M. Bears*, of Chicago, stranded at half-past four in the morning, in a northwest gale and high sea, fifty yards north of the north pier at Grand Haven. The keeper of Station No. 9, Eleventh District, went out to her with his crew in a tug and took off the seven men on board. Then, to save her from being broken up, his crew scuttled and sunk her, and when the sea went down pumped her out and hove her off.

October 11.—The barge *C. O. D.*, of Grand Haven, Michigan, with a crew of four, having sprung a leak and become water-logged, received assistance on the same date from the same keeper and crew, who took off her deck-load, pumped her out, and towed her into port.

October 13.—The crew of Station No. 13, Second District, Massachusetts, launched their boat at 10 a. m. in a northeast gale and rough sea and pulled out to the schooner *Tunis de Pew*, of Hyannis, Massachusetts, which was found sunk on Common Flats, none of her crew being in the rigging. It appeared subsequently that they had left the vessel in their own boat, and taken refuge on a stranded vessel near by, the *T. & C. Hawes*. The vessel was lost.

October 13.—After leaving the *Tunis de Pew*, the station crew boarded the schooner *T. & C. Hawes*, of Chatham, which had stranded in the night in a northeast gale and rough sea, having dragged her anchors until she grounded. They found upon her the men of the *Tunis de Pew*, four in number. Her own crew, ten in number, had left her anchored the day before, and were in Chatham, the four refugees finding no one upon her when they boarded her. With their aid and that of four men who came off from the shore, the life-saving crew got her afloat, carried her into deep water, and anchored her where she was safe.

October 13.—The crew of Station No. 14, Second District, Massachusetts, saw, at 8 a. m., the schooner *Joseph Story*, of Gloucester, Massachusetts, scudding before the gale, with one man lashed to the rigging, and a signal of distress flying. This man had been left on board as keeper, the captain and crew having gone ashore, and the vessel meanwhile had parted her chains and gone adrift. She presently struck heavily on the outer bar, with the sea breaking over her, and the life-saving crew pulled out at once, rescued the man, who was quite exhausted, took him to the station, gave him hot drinks, and put him to bed.

October 13.—The crew of Station No. 15 (Nantucket), Second District Massachusetts, discovered through the rain, mist, and drifting sand, at about 6 a. m., the schooner *Clara Jane*, of Lubec, Maine, at anchor about a mile from the shore, with both masts cut away. The gale was so violent that the station men in transporting the surf-boat had difficulty to prevent it being blown off its carriage. After a strenuous effort to row to

the wreck, with the wind and sea against them, the keeper concluded to land and proceed to the boat-house of the Massachusetts Humane Society, which was nearer the vessel, intending to use the boat there. Upon arriving, he found a party of wreckers already assembled, with whom his crew united and proceeded to the wreck, which was found anchored in 6 fathoms of water, in good condition, with the exception of her masts being cut away.

October 17.—The crew of Station No. 5, First District, Maine, while occupied in mortar drill upon the beach, at noon, caught sight through the fog of the schooner *Lucy Jane*, of Rockland, Maine, anchored in great danger among the breakers of Brown's Ledges. The vessel had got among the ledges in the fog, endeavored to get out, but, seeing the breakers, dropped anchor, thus increasing the peril of her position. Her crew were four in number, and there were two passengers. In twenty minutes the life-saving crew had boarded her, and in the course of an hour got up her anchors and worked her safely through the ledges into Seal Harbor.

October 17.—The crew of Station No. 36, Third District, Long Island, pulled out and took off five men from the wreck of the schooner *Greenbury Willey*, of Seaford, Delaware, which had parted her cable, become unmanageable, and finally stranded in a heavy sea, at 2 o'clock in the afternoon, on the south side of Main Inlet. The wreck was total.

October 18.—The schooner *Peter Ritter*, of Middletown, Connecticut, struck the beach at 2.30 a. m., one mile west of Station No. 38 (Eaton's Neck), Third District, Long Island. The sea being smooth, the schooner needed no assistance at that time, but by daylight the wind hauled to the west-northwest, raising the sea considerably, and the position of the vessel became dangerous. The station crew boarded her, ran out anchors, and by the 22d of October succeeded in getting her afloat.

October 19.—The schooner *Julia*, of Kingston, Ontario, with six persons on board, in attempting to make the harbor at Charlotte, Lake Ontario, fell off, dropped, and then dragged her anchors, and finally stranded 200 yards from shore, and 500 yards east of the pier. It was then four o'clock in the morning, and a northwest gale was prevailing, with a heavy surf and sea. The keeper of Station No. 4, Ninth District, summoned his crew, hauled the surf-boat up the beach, launched it, and brought the six persons on board, one of whom was a woman, safely ashore. The station crew then went to work with anchors and hawsers, and after much exertion, in which they were assisted by a steam-tug, finally succeeded by two o'clock in the afternoon in heaving the vessel off, and brought her safely into port.

October 20.—The crew of Station No. 5, First District, Maine, saw the schooner *Mary E. Pearson*, of Islesboro', Maine, which had been injured by collision with another vessel, anchor at flood-tide in a northwest gale and rough sea on Burnt Island Ledge, where she would have grounded at low water. Seeing her danger, they launched the surf-boat, boarded her, and got her into deep water to leeward of the ledge, where they anchored her, and set to work to repair her split sails. There were but two able-bodied men in her crew, the others being an old man of seventy and a boy. She was left that night with instructions to her master to keep a light burning, and if new danger developed to show his red signal lantern to the shore. The patrol watched her sharply through the night. The next morning another vessel's crew was obtained to beat her into harbor, the life-saving crew being obliged to go to the wreck of the schooner *Wreath*.

October 21.—The schooner *Wreath*, of Ellsworth, Maine, with four men

on board, had stranded at six o'clock in the morning, on Long Point, Spruce Head Island, in a strong northwest wind and rough sea. The work done by the life-saving crew upon reaching her, which was about half past eight, consisted in shifting her deck-load to ease her and running out lines. She was got off by a steam-tug which had been sent for.

October 21.—The crew of Station No. 33, assisted by the crew of Station No. 34, Third District, Long Island, went to the rescue of two men capsized in the sloop *Cora*, of Bay Ridge, at 9 a. m., one mile east of Hog Island Inlet. They afterward pumped out the vessel, stripped her, launched her in the surf, towed her into the inlet, and rigged her.

October 22.—The schooner *Samuel Carlton*, of Bridgeton, New Jersey, with four men on board coming in for harbor, and not able to work ahead on account of the heavy gale and rough sea, anchored, dragged her anchors, and stranded on the north side of Barnegat Inlet at 7.30 a. m., with two feet of water in her hold. The crew of Station No. 17, Fourth District, New Jersey, went out to her, and, by running out anchors and heaving with every high tide, succeeded, after four days' labor, in getting her off.

October 23.—The sloop *Mary A. Mott*, of Tuckerton, New Jersey, parted her moorings in the stress of the gale, and drove up on to a meadow one mile north of Station No. 17, Fourth District, at 5 a. m., high tide. Shovels were procured from Tuckerton, and the station crew dug her down to low-water mark, and, after two days' labor, succeeded in heaving her off. There were eight men on board.

October 23.—The gale of October 23, it will be remembered, was extraordinary, and the sea was terrible. At Station No. 36, Fourth District New Jersey, its ravages were felt peculiarly. The sea at five o'clock in the morning rushed in, wrenched the house from its foundations, and burst in at the windows, flooding the interior. The station crew, in danger of their lives, were compelled to row out of the building in the surf-boat, and took refuge in the light-house, half a mile distant. At half past eight, the water having somewhat abated, the crew returned to the station and discovered the schooner *H. F. Potter*, of Middletown, Connecticut, stranded one mile south of Hereford Shoals. The sea was at that time running fearfully, but the surf-boat was launched, and an attempt made to reach the vessel, which lay 800 yards from the beach. The boat got out through the surf with difficulty and danger about 400 yards, when it filled nearly to the thwarts and was forced back to the shore. Another attempt was made shortly afterward, but was baffled by the heavy sea and the floating wreckage. At the third effort the wreck was reached, and four men out of the crew of six were safely landed. The two others had been washed from the rigging and drowned. (See page 23.)

October 23.—The schooner *Sarah Clark*, of Greenport, New York, was laboring in the same gale, with the seas continually sweeping her deck, when, at 5 a. m., the fore-hatch covers were washed off and the water began to pour in. An attempt was made to put the vessel before the wind in order to batten down the hatch, when the deck-load broke adrift, and the crew fled aft for safety. The water soon filled the schooner through the open hatches, she became water-logged and unmanageable, rolled down upon her beam-ends, during which position the mate was washed overboard and lost, and a seaman was struck dead by a floating timber, which also knocked him overboard. In a short time the masts broke off and the vessel righted. Land was seen soon after, and at half-past seven the vessel stranded one mile east of Station No. 31, Fourth District, New Jersey, where she was discovered by the patrol, and the

surf-boat went to the rescue, bringing in, after a perilous effort, the four survivors. (See page 24.)

October 23.—The schooner *William Collyer*, of Providence, Rhode Island, stranded, at 9.45 a. m., half a mile north of Station No. 19, Fourth District New Jersey, and was lost. The life-saving crew were on hand with their apparatus when the schooner struck. A line with a buoy attached thrown from the schooner was caught by one of the surfmen, who was held by a cord as he went into the surf up to his waist for it. A hawser was fastened to it, drawn aboard, made fast, and hauled taut, and the five men composing the crew of the schooner slid down into the arms of the station men and were passed on shore. The work of deliverance occupied one hour. The report at first made that a man was lost at this wreck was erroneous.

October 23.—The sloop *Sarah B.*, of Tuckerton, New Jersey, went ashore with two men on board, and on the next day was dug out and got off by the crew of Station No. 24, Fourth District, New Jersey.

October 23.—The crew of Station No. 23, Fourth District, New Jersey, brought ashore a man, his wife, and little girl from the sloop *Adrienne*, of Tom's River, New Jersey, which stranded in the same storm on Short Beach, and subsequently got off the sloop without damage.

October 23.—The Spanish bark *Virgin de las Nieves*, of Havana, Cuba, was wrecked at 3 o'clock a. m., in a heavy northwest gale, about two and a half miles south of House of Refuge No. 3, Seventh District, coast of Florida. The captain and cook were washed overboard and drowned while the vessel was at sea, and the remaining eleven members of the ship's company, having reached the shore after the wrecking of the vessel, were found by the keeper of House of Refuge No. 3, and conducted to the station, where they were succored for three days, at the expiration of which time the Spanish cutter *Caibarien* happened to pass, and took them to Havana.

October 23.—The ship *A. S. Davis*, bound from Callao to Hampton Roads, Virginia, with twenty men on board, went ashore in the great hurricane of this date, at 2 o'clock a. m., and immediately went to pieces. One only of the crew of twenty survived. A full account of this terrible disaster will be found on page 19.

October 23.—The keeper and crew of Station No. 4, Ninth District, effected a dangerous and gallant rescue on October 23, from the schooner *Star*, of Millpoint, Ontario, which, after a desperate effort to gain the harbor at Charlotte, during a furious northwest gale, was driven eastward from the pier, at a distance of 1,400 feet from which, and 1,200 feet from the shore, she dropped her anchors in order to ride out the storm. The moment this was done the sea mounted her bulwarks and swept her decks on every side, and the crew of seven persons had to take to the cross-trees for safety. This was at six o'clock in the evening. It was dark and the rain fell in torrents. The sea ran so high that it swept the piers and dashed in the windows of the lower light-house, over the top of which it was leaping, and in which, consequently, the lamp could not be lighted. On the beach, where the life-boat crew had assembled, it was rolling in from the northwest in tremendous breakers, while the shifting wind drove the water from the northeast, making a terrific cross sea. Under these circumstances it was impossible to effect a launch, while the darkness of the night and the violence of the wind made it equally impossible to reach the vessel with a shot-line. As the wind was changing, the only course was to wait for the abatement of the sea. The station beach-light was lit and kept burning to let the crew of the vessel know that their situation was understood. A lan-

tern squad was dispersed up and down the beach in case any of the men should be washed ashore, and signals were made from the pier to encourage them. Finally, at half past eleven, the sea having somewhat lessened, the hazardous effort was made to reach the vessel. The darkness was so great that she could not be seen, and it was with some difficulty that she was found. Finally the life-boat reached her. Her seven men were nearly exhausted in the cross-trees of the foremast, where they had been for over four hours. At ten minutes past midnight they were landed safely on the beach. The vessel went to pieces. (See page 71.)

October 23.—The scow *E. K. Kane* broke the castings of her steering-gear so as to become unmanageable, and went ashore at one o'clock in the morning $3\frac{1}{2}$ miles southeast of Station No. 1, Tenth District, and about three-eighths of a mile from the beach, in an easterly gale and heavy sea. The crew of Station No. 1 went out to her in the surf-boat and safely landed her crew of five men within an hour and a half after her discovery. The vessel went to pieces.

October 24.—At 1 a. m. the schooner *Anna Frye*, of Pembroke, Maine, stranded in an easterly gale and rough sea near Wood Island Harbor, where she pounded to her injury, knocking off her shoe, breaking rudder-post, and losing rudder. The crew of Station No. 6, First District, Maine, boarded her, hove up her anchors, got her off at flood-tide, steered her by her sails into Biddeford Pool, and hauled her to the wharf. Five men were on board.

October 27.—The steam-propeller *St. Mary*, of Marquette, Michigan, stranded in a thick snow-storm, so high upon the beach that her crew of four and her thirty passengers were able to walk ashore. This happened at 6 p. m., $8\frac{1}{2}$ miles west of Station No. 12, Tenth District, the keeper of which, having seen her pass at four o'clock in the previous afternoon, and knowing that she had not gone back in the night, gave the patrol instructions to look after her. He found her ashore, as stated, but the assistance of the station crew was unnecessary.

October 28.—The schooner *Presto*, of Grand Haven, Michigan, at eight o'clock in the evening, stranded in a southwest gale and heavy sea fifty yards north of the pier at Grand Haven, and the crew of Station No. 9, Eleventh District, got a line to her, worked her on to the pier, took off her crew of seven men and a passenger, and scuttled the vessel to save her.

Later in the same night they went to the relief of the schooner *Persia*, of Chicago, stranded half a mile south of the pier, but found that her crew of five men had got ashore.

October 29.—The same crew went out to the schooner *George W. Westcott*, of Kenosha, Wisconsin, which had stranded with seven persons on board, at seven o'clock in the evening, in a southwest gale and heavy sea, not far from the pier, and saved vessel, crew, and cargo by getting the vessel off and towing her into harbor.

October 29.—In the evening the schooner *H. B. Moore*, of South Haven, Michigan, stranded half a mile from the pier at nine o'clock, in a baffled attempt to make the harbor of Grand Haven, and her crew of eight men undertook to come ashore in their own boat, the sea being very heavy and the wind blowing hard. The crew of Station No. 9 were on hand, and, not having time to use the boat or apparatus, rushed into the surf with lines, and got the imperiled men safely on shore.

October 30.—Good service was rendered by the keeper of Life-boat Station No. 5, Ninth District, at the wreck of the schooner *F. C. Lighth-ton*, of Bay City, Michigan, which stranded in a strong gale at 10

p. m. on Point Abino, a rocky promontory on the Canadian shore, twelve miles above Buffalo. The surf-boat with a volunteer crew of six men went out to the wreck in tow of a tug, which was one of two that had been engaged to get the vessel off, neither of which was able to get near her on account of the sea. The surf-boat, however, leaving the tug about half a mile to windward, contrived to get alongside of the schooner about half past two o'clock in the morning, though not without great trouble and danger, having broached to once in the heavy surf and lost three oars. The tugs having left, the surf-boat was hoisted up on the lee side of the vessel to save the boat from being stove to pieces, and the crew stuck by the schooner till morning, when they landed the eight men on board at Point Abino, not without peril, the surf being very heavy and breaking upon the rocky shore.

October 30.—The schooner *Empress*, of Bangor, Maine, bound from Philadelphia to Bangor with a cargo of coal, having on board nine passengers and a crew of nine persons, while endeavoring, during a storm, to make harbor at Biddeford Pool, Maine, was observed by the keeper of Station No. 6, First District, Maine, to be taking a dangerous passage, thus incurring liability to wreck. The boat was manned at once, and the keeper boarding the schooner piloted her safely into the harbor. The master expressed gratitude for the assistance rendered, and on his arrival at Bangor published in the local papers a letter of thanks to the life-saving crew for their timely help.

October 31.—At 7.30 a. m., the schooner *J. H. Rutter*, of Toledo, Ohio, was seen by the keeper of Station No. 6 (Grand Point au Sable), Eleventh District, lying on her beam-ends with a signal of distress flying. The heavy surf prevented the surf-boat from getting out to her until the third effort. It was snowing hard and freezing. A few minutes after the boat reached her two tugs came to her assistance, and the life-saving crew staid by until evening, running out lines and carrying messages between her and the tugs. The schooner was finally anchored a mile north of Ludington, and the life-saving crew rowed the captain ashore to procure a gang of laborers to work on the vessel. The next morning (November 1) the news came that the vessel was going to pieces and that the crew of eight men and the laborers, thirty-six in number, were in danger of being drowned. The life-saving crew went to her assistance with the mortar and lines, fired seven shots, but could not reach her; tried twice to get to her in the surf-boat, which filled each time; were finally towed out to her by the tug *Col. Graham*; took off eight men, whom they safely brought ashore, although their boat was filled again. On the next trip the boat was swamped and driven ashore. On the succeeding trial the crew reached the wreck, and ran lines from her to the shore, in order to bring in the men with the breeches-buoy, when the tug contrived to run up alongside and took them all off. The surf-boat suffered considerably in these labors, six holes being made in the bottom, and the boat otherwise damaged. (See page 66.)

November 1.—The crews of Stations Nos. 17 and 18, Fourth District, New Jersey, went out to the schooner *Lady Ellen*, of Providence, Rhode Island, which had gone ashore in an easy sea, on the south point of Barnegat Shoals, pumped her out, there being four feet of water in her hold, and got her afloat at flood-tide. Her crew was composed of five men.

November 1.—The crew of Station No. 9, Eleventh District, rendered extraordinary service, giving aid and succor to no less than five wrecks on this day. At eleven o'clock in the morning, the district superintendent at Grand Haven received a telegram stating that the bark *L. C. Woodruff*, of Cleveland, Ohio, was ashore at White Lake Harbor, 42

miles distant, sunk in 13 feet of water, with the crew all in the rigging. Keeper Connell, of Station No. 5, started at 12 m. by special train to the rescue, with the life-car and apparatus and four of his men, the other four remaining for service at Grand Haven, and arrived abreast of the wreck in two hours, having to change cars once and transfer the crew and apparatus again from the cars to a tug-boat, which carried him six miles farther by inland water to the scene of the wreck. The vessel lay 150 yards from the shore with the sea making a clean breach over her, two of her masts gone, her crew of ten men in the fore-rigging, and hundreds of excited spectators looking on. Seven of the crew were saved, but three were unfortunately lost. The result of the investigation in this case, made in accordance with the uniform practice of the service where loss of life is involved, including a circumstantial account of the disaster, will be found on page 26.

November 1.—During the preparations for the departure of part of the crew for the wreck of the *Woodruff*, the schooner *Australia*, of Muskegon, Michigan, in attempting to make an entrance between the piers, which is about 400 feet wide, was swept aside by the heavy sea and strong current, and struck the end of the north pier, staving in her starboard bow. One man jumped from her upon the pier, and another, in attempting to do so, was carried overboard by the heavy seas that now swept her decks and was lost. The vessel continued to thump the pier, but finally worked nearly alongside and grounded, when the life-saving men threw their heaving stick and line to her, and getting her lines made them fast, thus preventing her from swinging broadside to the beach and becoming a total wreck. The remainder of her crew, six in number, were then taken off and brought to the station. (See page 29.)

November 1.—The remnant of the volunteer life-saving crew was now in charge of Surfman John De Young, the keeper having gone with the others to the *L. C. Woodruff*. Anticipating disaster from the heavy weather, Surfman De Young had the surf-boat hauled down to the beach. Soon after, about twelve o'clock, the schooner *America*, of Chicago, went ashore north of the piers, and he and his men launched the life-boat, and after a hard pull reached the vessel and brought her crew of eight men safely ashore.

November 1.—At three o'clock the schooner *Elvina*, of Oswego, New York, came ashore between the north pier and the *America*, her stern swinging against the latter's bow. The life-boat crew waded out into the breakers as far as they could, and succeeded in getting a line from her, which they made fast to the pier, thereby preventing the vessel from beating against the other schooner. They went out in the surf-boat and brought the captain ashore at his request.

November 1.—Shortly afterward, the schooner *Montpelier*, of Detroit, in attempting to run into harbor, struck the outer bar, fell off to leeward, and grounded on the wreck of the steamer *Orion*, knocking a hole in her bottom and filling immediately. The seas at once swept over her, and her men took to the rigging. The life-saving crew immediately launched the surf-boat, and with great toil and difficulty succeeded in reaching the vessel, from which they rescued seven men and a woman.

The exploits of the life-saving crew at Grand Haven in effecting these rescues in the heavy sea that was that day running were the theme of general commendation in that region.

November 2.—The crew of Station No. 24, Fourth District, New Jersey, went to the assistance of the schooner *Dick Williams*, of Philadel-

phia, which had stranded on Little Egg Harbor Bar, with seven persons on board, got her off, and carried her into Egg Harbor Inlet.

November 4.—The crew of Station No. 1, First District, Maine, rescued a man from a capsized sailboat in Quoddy Bay. When found, the man was lying insensible, with his arms across the gunwale of the boat, just about to drop off, and it took two hours' active treatment with hot rocks, blankets, and brandy to restore him to consciousness, when brought to the station.

November 5.—The crews of Stations Nos. 29 and 31, Third District, Long Island, boarded the schooner *Gazelle*, of Patchogue, New York, which had stranded one and a half miles from the latter station, with three men on board, whom they rescued. Before the vessel broke up, they succeeded in stripping her of her sails and rigging and saving a portion of her furniture.

November 5.—The crew of Station No. 17 (Two Rivers, Wisconsin), Eleventh District, went out in a heavy sea at three o'clock in the morning to the relief of a schooner without name, belonging at Manitowoc, Wisconsin, which had stranded about one mile north of the station. The sea was so heavy that the wrecking-tug stationed at that place was unable to get out to her assistance, and the surf-boat could not help the vessel to get into port, but rescued the three men on board, being filled in the effort, and compelled, by having to keep head to the sea, to land one mile north of the harbor.

November 7.—The schooner *Wacousta*, of Port Hope, Ontario, stranded at 7.30 p. m. one and a half miles from the pier at Charlotte, Lake Ontario, and a mile from shore. A northwest gale was prevailing, with a heavy sea and a snow-storm of such density as to obscure the vessel's lights. News of her stranding having arrived through another vessel which came in, the keeper of Station No. 4, Ninth District, went out to her in the surf-boat, reaching her at eight o'clock, and returning with her crew of six men by nine. The remainder of the night was spent by the keeper and his men in searching for a vessel erroneously reported to be stranded eight miles to the westward.

November 8.—The schooner *Speedwell*, of Picton, Ontario, with seven men on board, went ashore about 200 yards from the beach, at 5 a. m., four miles west of Oswego. Keeper Blackburn, of Station No. 3, Ninth District, hearing a rumor of the disaster, started up the beach alone, and after a long tramp arrived upon the scene. It was snowing and there was a strong north wind and a heavy sea. A crew was immediately formed under Keeper Blackburn's direction to man the schooner's yawl-boat, which had come ashore. Meanwhile, the sailors on board sent a line ashore with the water-barrel, by which means a larger line was drawn between the vessel and the shore, and by its aid the seven men were taken off with the yawl under the keeper's direction.

November 9.—The next morning five of the crew of the *Speedwell* returned to their vessel, the storm having moderated. Later, however, it increased to a gale, and the vessel thumped so hard that it seemed likely to go to pieces. The crew being again in danger, Keeper Blackburn mustered his men and hastened to the scene. The line that had been run the day before between the vessel and the land had not been removed, and by its means a 3½-inch hawser was set up. As the crew could not be made to understand where the hawser should be fastened, one of the surfmen, clad in a Merriman life-suit, worked himself out to the vessel, secured the hawser to the mast, and superintended sending the five men ashore, one by one, by the breeches-buoy, himself coming from the vessel last.

November 9.—The crew of Station No. 33, Fourth District, New Jersey, found the sloop *Jordan*, of Patchogue, New York, ashore on Corson's Inlet Bar, at 10 p. m., reached her in the surf-boat at midnight, ran out her anchor into deeper water, and hove her off at flood-tide. There were three persons on board.

November 10.—The crew of Station No. 38, Fourth District, New Jersey, went on board the schooner *Barnett Jones*, of New York, which had stranded at Cold Spring Inlet at 7.30 a. m., with six persons on board, and worked her off.

November 10.—Later in the day, at 3.30 p. m., the same vessel again stranded, this time on Evil Presence Shoal, a mile and a half from land, and was boarded by the crew of Station No. 40, who aided to get her afloat.

November 10.—The steamer *St. Albans*, of Cleveland, Ohio, with 25 persons on board, stranded on the rocks at three o'clock in the morning, in thick and foggy weather and a rough sea, nine miles from Milwaukee. The crew of Station No. 15, Eleventh District, went immediately to her assistance with the surf-boat, which involved a long pull through a heavy northeast swell, and, in conjunction with three tugs, got the vessel off, which was thereby saved from destruction.

November 17.—The Swedish bark *Franklin* was reported ashore six miles from Station No. 5, Sixth District, North Carolina. The station crew launched the surf-boat, cleared the breakers with difficulty, there being a heavy surf, and rowed out, through a thick fog, to the vessel, which they found not ashore, but at anchor in shoal water, the captain having made some miscalculation. The keeper gave him instructions as to his position and how to escape from it, landed, and kept a watch from the beach upon the vessel until she got under way the next morning.

November 18.—The schooner *Arianna*, of St. John, New Brunswick, stranded at 11 a. m. in an easterly storm and heavy sea, on Burnt Island Ledge, Seal Harbor, and was promptly boarded by the crew of Station No. 5, First District, Maine, who got her off with the loss of her forefoot and part of her keel, and took her to a safe anchorage. She had a crew of seven men.

November 19.—The Norwegian brig *Fram*, of Christiansand, bound from Stockholm to Boston with a cargo of iron, was caught in a gale off the coast of Massachusetts, lost her sails, and stranded about a mile and a half northwest of Station No. 8, Second District, Massachusetts. At about half past five in the morning her situation was discovered by the patrolman of the Life-Saving Service, who at once burned a Coston light to give notice to the crew of coming help, and then reported at the station. The state of the tide and the position of the vessel rendered it imperative that assistance should be given at once, and therefore, instead of sending the life-saving apparatus in the usual way, three men were dispatched at once to the brig with heaving sticks and lines to serve any of the crew who might attempt to land before the arrival of more efficient help. The keeper then procured horses and took the apparatus to the wreck by an inland road, and arrived at the scene in a much shorter time than would have been possible by the beach road in the heavy surf and in the teeth of the gale. The men first sent, with three other men from a neighboring hamlet, had assisted the crew to land, and the heavier apparatus was not used.

November 22.—The crew of Station No. 1, First District, Maine, boarded the schooner *Guiding Star*, of St. John, New Brunswick, which had stranded, with three men on board, in an easterly gale and heavy sea,

in Quoddy Bay, rehung her rudder, which had become detached, made sail at high tide, and floated her off into deep water.

November 22.—At 4.30 a. m. the schooner *Caroline Knight*, of Rockland, Maine, stranded on Straw's Point, a quarter of a mile east of Station No. 7, First District, New Hampshire, and was seen by the patrol within ten minutes afterward. The surf-boat pulled out to her against a strong east wind, and rescued her crew of five men.

November 22.—At 7 a. m., the schooner *Sea Queen*, of Franklin, Maine, with four men on board, stranded one mile east of the same station, and as a heavy storm was approaching, and she was anchored in among the ledges where she had already struck three times, she would soon have gone to pieces. The life-saving crew boarded her, slipped her cables, and ran her into Rye Harbor, thus saving her with slight damage.

November 22.—The schooner *William H. Hopkins*, of Mystic, Connecticut, with seven men on board, stranded at five o'clock in the morning, half a mile west of Station No. 34, Third District, Long Island, in an easterly storm and high sea. The station men went out in the surf-boat and brought the crew safely ashore. The men from Station No. 32 arrived later and rendered assistance at the wreck.

November 23.—The crew of Station No. 5, First District, Maine, found the schooner *Mary A. Rowland*, of Bangor, Maine, on the rocks, full of water, at Rackliff Island, in a northeast gale and rain-storm and heavy sea, and took off her three men by boat. Afterward they worked for several days to get her off, succeeded, and grounded her safely on the flats.

November 23.—The same crew kedged the schooner *Polly*, of Rockland, Maine, off the rocks, made sail, and took her to a sheltered part of the harbor where they anchored and left her. Two men were on board.

November 23.—At 7.30 a. m., the crew of Station No. 25, Third District, Long Island, discovered the sloop *Alert*, of Patchogue, New York, stranded a mile east of Fire Island light, in an easterly gale and high sea. They pulled out immediately, and found no one on board the sloop, which had evidently dragged her anchors from some distant point. The station crew threw over her ballast, at high water hove her off, put her in safe anchorage, and notified the collector of the port by telegraph of the occurrence.

November 23.—The schooner *Ida B. Silsbee*, of Patchogue, New York, stranded on Fire Island Bar, in a westerly gale and heavy sea, with three men on board. The crews of Stations Nos. 25 and 26, Third District, Long Island, boarded her, took off her crew, and threw overboard her deck-load of brick to ease her, hoping to get her afloat at high water, but she pounded her bottom out before the tide swelled.

November 23.—The crew of Station No. 1, Fourth District, New Jersey, assisted in getting afloat the sloop *Star*, of New York, which stranded, with three men on board, 100 yards north of the government dock at Sandy Hook, New Jersey.

November 24.—At midnight, the schooner *Marietta Steelman*, of Somers Point, New Jersey, with seven men on board, was run into off Chatham, Cape Cod, by an unknown vessel, and had her starboard main chain-plates, rigging, and maintop-mast carried away and the top of her house stove in. The crew of Station No. 13, Second District, Massachusetts, went out to her at seven o'clock the next morning, repaired these damages as far as possible, and got the vessel on her way by two o'clock in the afternoon.

November 24.—The crew of Station No. 17, Fourth District, New Jer-

sey, boarded, with the surf-boat, the sloop *S. E. Dunn*, of Camden, New Jersey, which had stranded, with three men on board, three-fourths of a mile east from the station, and, after several hours' labor, got her afloat.

November 25.—The crew of Station No. 2, Second District, Massachusetts, boarded the schooner *Sparta*, of Winterport, Maine, which had stranded on Ipswich Bar, five miles from the station, found the vessel filling with water, and aided the crew in heaving off her deck-load and getting her afloat and in tow for Ipswich, where they hauled her alongside the wharf and made her fast.

November 26.—The crew of Station No. 40, Fourth District, New Jersey, rendered some assistance to the schooner *J. Ricardo Jova*, of Philadelphia, which had struck on a shoal three-fourths of a mile from the shore, at low tide.

November 28.—The crew of Station No. 1, Second District, Massachusetts, boarded the schooner *William Carroll*, which had stranded at North Island in a heavy surf four miles from the station. Their laborious row was fruitless, as they found that the schooner's crew had already been taken off by others before they could reach her.

November 28.—The schooner *Franconia*, of Ellsworth, Maine, bound from Port Johnson to Salem with coal, lost her main-boom in a heavy storm about twelve miles from Cape Cod. The crew of Station No. 12, Second District, Massachusetts, went to her assistance, helped repair the boom, and she proceeded safely on her voyage, with but small damage to either cargo or vessel.

November 29.—At Oswego, the schooner *Sweet Home*, of Kingston, Ontario, with four men and a woman cook on board, parted the line when in tow, struck the pier and fell away and stranded in a heavy sea 300 feet east of the harbor, where she went to pieces. The four men jumped upon the pier when she first struck, leaving the woman on board. The life-saving crew of Station No. 3, Ninth District, went out in the surf-boat and took the woman off.

December 1.—The schooner *Peerless*, of Baltimore, ran ashore at two o'clock in the morning, in a smooth sea, five miles west-southwest of Station No. 11, Fifth District, Virginia. The keeper and crew of the station boarded her at eight o'clock, but the captain refused to leave his vessel, and the station boat returned. The wind meanwhile increased and became a gale, and the life-saving crew again came abreast of the vessel at noon, but were unable to get out to her on account of the violence of the sea. Another attempt was made, which was successful, although the sea was tremendous. Three successive efforts to get alongside the vessel were baffled; and, just before the feat was accomplished, her masts fell and the bottom of her hull came up. Her eight men meanwhile clung to her, with the sea breaking entirely over them, and were rescued with much danger and difficulty and brought to the station. The vessel went to pieces.

December 3.—The ship *Owego*, of New York, stranded at midnight in Quoddy Bay, coast of Maine, at some distance from Station No. 1, First District. She had sprung a bad leak in the gale of December 2 and 3, and was compelled to make for the shore to prevent foundering at sea. The life-saving crew rowed out to her across the bay through a very heavy sea and strong wind, a southeasterly gale prevailing, and took off the captain, mate, and six seamen. Seven others had landed on Campobello Island in the ship's boat. The ship became a total wreck.

December 4.—The bark *Wilhelmina*, of Quebec, Canada, with fourteen persons on board, ran ashore, at 4.30 a. m., upon Egg Harbor Bar, New Jersey, opposite Station No. 24, Fourth District. The station crew im-

mediately went to her assistance, reaching her about sunrise, their arrival being delayed by the rough sea and the distance of the vessel from the shore, which was over a mile. The crew of Station No. 23 also came out to the rescue, and between them the crew of the vessel were brought ashore, excepting the second mate and five men, who landed in the ship's long boat, with the assistance of the life-saving men. Subsequently the life-saving crews went out to the vessel and brought ashore some of the baggage. The crew of Station No. 25 also came out to the wreck ready for service. The shipwrecked men were sheltered at No. 24 for three days. The vessel broke up and went to pieces.

December 6.—The schooner *Asenath A. Shaw*, of Forked River, New Jersey, stranded in the morning at high water in a northwest wind and rough sea, three miles from shore. The life-saving crew of Station No. 25, Fourth District, New Jersey, reached her in the surf-boat at eight o'clock, and returned to shore at eight o'clock the next morning, having spent the time in helping to throw the cargo overboard to lighten the vessel, and in heaving her off by anchor and hawser. Her crew were eight in number.

December 7.—The sloop *General Scott*, of New York, bound from that city to Sandy Hook pier, laden with lumber, sprung a leak when opposite the north point of the hook, and to save her from foundering her captain ran her ashore on West Beach at 6.30 p. m. The patrol of Station No. 1, Fourth District, New Jersey, saw her when she came on, and brought the crew of four men to the station, they coming ashore in their own boat. They were sheltered and fed at the station for six days, during which time, with the aid of the life-saving crew, they were endeavoring to save the vessel. She became, however, a total wreck. Her cargo was washed ashore; the sails, anchors, chains, and rigging were saved. All the captain was worth was in his vessel.

December 8.—The schooner *Menawa*, of New York, stranded at 4 p. m., on the bar three-fourths of a mile east of Station No. 13, Second District, Cape Cod. The life-saving crew at once went out to her, and, with the assistance of a wrecking company from Chatham, succeeded in heaving her off.

December 10.—The schooner *Minnie Still*, of Patchogue, New York, stranded at 6 a. m., in a strong south wind and heavy sea, a mile and a half north of Station No. 35, Fourth District, New Jersey. The life-saving crew rowed out to her, and took off her crew of four men, who were sheltered at the station for four days. The vessel was saved.

December 17.—An open sloop with two men and two women on board, laden with fish, ran upon Guptill's Ledge, Quoddy Bay, Maine, at 10 a. m., and would have fared hardly but for the prompt appearance of the life-saving crew of Station No. 1, First District, who boarded her, took off the persons on board, removed her cargo, ran out an anchor, hove her off at high water, restored her cargo and the people taken from her, and saw her safely on her way. The sloop had no boat to enable her people to get ashore, and would soon have careened and filled with water had she remained upon the ledge.

December 18.—The schooner *Rosina*, of Machias, Maine, stranded at 6.30 a. m., in a northwest wind and smooth sea, two and a half miles north-east of Station No. 13, Second District, Massachusetts. The life saving crew boarded her, but no assistance was required of them, the captain of the vessel contracting with a wrecking crew to float off the vessel.

December 19.—The crew of Station No. 5, Third District, Long Island, found a sloop, without name, 25 feet long, stranded two and one-quarter miles north of the station, at seven o'clock in the evening. They stripped

her of her sails, rigging, and all moveable property, which they stored at the station, procured three yoke of oxen and hauled her up on the beach for safety, and wrote notifying her owner, whose address was found on board. The boat had gone adrift at Watch Hill, Rhode Island.

December 19.—The schooner *Eliza A. Hooper*, of Camden, New Jersey, stranded, with five men on board, at one o'clock in the morning, south of Station No. 31, Third District, Long Island. The life-saving men boarded her soon after, and brought the crew ashore to the station.

December 19.—The schooner *S. T. Dennis*, of Berlin, Maryland, with five men on board, ran ashore at 3.30 a. m., clear weather, on Cold Spring Bar, near Station No. 39, Fourth District, New Jersey. The station crew boarded her, assisted in pumping her out, hoisting sails, and trimming cargo, and succeeded in getting her afloat at high water.

December 20.—The schooner *J. B. Van Deusen*, of Philadelphia, struck, at half past six o'clock in the morning, on Brigantine Shoals, three miles from shore. The life-saving crew of Station No. 25, Fourth District, New Jersey, pulled out to her, making the distance in an hour, ran out an anchor, and by two o'clock in the afternoon succeeded in heaving her off. Five men were on board.

December 21.—The schooner *S. H. Pool*, of Wiscasset, Maine, dragged her anchors and went ashore at seven o'clock in the evening in a south-east snow-storm, on Stage Island, Maine, near the entrance to Saco River. The schooner was endeavoring to enter the river under sail, but the tide set her on to the island. She was boarded shortly after stranding by the crew of Station No. 6, Biddeford Pool, who found her full of water. The four men on board were taken ashore and sheltered at the station for two days. The vessel broke in two and became a total wreck.

December 21.—The crew of Station No. 27, Third District, prevented an unknown vessel from going ashore. Her lights were seen by the patrolman, at 9 p. m., so close to the beach that it was evident that she was on the point of stranding. The patrolman gave the alarm, and the crew hurried to the spot, burned Coston lights and sent up star rockets, which warned the vessel off.

December 21.—The schooner *Flora Curtis*, of Squan, New Jersey, went ashore upon Williams's Shoal, three miles from Station No. 7, Fifth District, Virginia, and three-quarters of a mile from land, at about 8 a. m., during a strong south east gale, the weather being thick and the sea heavy. After a severe struggle, the life-saving crew succeeded in reaching the vessel, which was found lying broadside to, pounding heavily, with the sea breaking over her; ran out the kedge anchor, and by four o'clock hove her off, thus preventing her from becoming a total wreck. There were six men on board. The wind and sea were so heavy that the life-saving crew after leaving the vessel were unable to effect a landing at the station and had to put in at an inlet, two miles to the southward.

December 22.—The three-masted schooner, *James A. Potter*, of Thomaston, Maine, came on shore about four o'clock in the morning, three-quarters of a mile east of Station No. 10, Third District, Long Island. The weather was clear, but there was a southwest gale and heavy sea, and the beach was flooded with water as far as the sand hills, and pouring through openings between them. The patrolmen, who were out from two o'clock until dawn, found it impossible to get back to the station by the way of the beach on account of the water, and were obliged to return by detour back of the sand hills. It was owing to this circumstance that the vessel was not discovered until about six o'clock in the morning, when it was seen from the station by the morning watch, King,

who at once called all hands and started for the wreck, which had also been seen by a patrolman, Bennet, then out on the eastern beat, who also went for it, but, when within half a mile of it, came to a sluice-way of water running out from the beach hills, which he was unable to ford, and was obliged to go a mile around back of the beach to enable him to come abreast of the vessel. The two patrolmen, King and Bennet, arrived before the wreck at about the same time, found the sea breaking over her, and the crew of seven persons (the eighth having been washed overboard and lost when the vessel first struck) up in the rigging for safety, and made them understand that help was coming. By seven o'clock the remainder of the life saving crew arrived with the wreck ordnance, which they had found great difficulty in hauling to the spot, on account of the flooded condition of the beach and the frequent presence of quicksand. They were several times surrounded with water while engaged in establishing communication with the vessel. The shot-line reached the wreck at the first fire, falling over the topmast stays, between the fore and main topmast. The seven men on board were soon safely landed by the breeches-buoy, and at once carried to the station. They were all badly bruised, and one man was cut in the face. The life-saving men washed the blood from their faces, put plasters upon their wounds, and gave them brandy and coffee. As there was not room at the station to properly accommodate them in their forlorn condition, the humane keeper took them to his house, where they were kept for four days. A dead body, subsequently found upon the beach by the crew of No. 7, was supposed to be that of the man swept overboard from this vessel when she first struck, and was buried. (See page 29.)

December 23.—The schooner *Sarah Quinn*, of New York, stranded at nearly ten o'clock in the evening, 200 yards south of Station No. 11, Fourth District, New Jersey. The weather was hazy and the surf high. The life-saving crew went out immediately, and brought off the five men on board, who were sheltered for seven days at the station. The vessel was subsequently got off.

December 23.—The schooner *Emma G. Edwards*, of Camden, New Jersey, stranded, with eight men on board, upon Turner's Shoal, two miles south of Station No. 7, Fifth District, Virginia, at 1 o'clock p. m. The wind was blowing a gale from the west-southwest, the sea was moderate, and the tide low. The surfboat was launched half an hour after the vessel struck, and after a hard pull the station crew reached the vessel, which was pounding heavily, with the seas breaking over her. Being old, and in danger of going to pieces, the keeper advised the captain to lighten her by throwing over the deck-load of lumber, which was done, the life-saving crew lending a hand, and by 4.30 p. m., the tide having risen, the vessel floated off into deep water, made sail, and went off safely. The keeper and crew remained on board until the schooner was out of danger. Their prompt assistance on this occasion prevented the total destruction of the vessel and probable loss of the crew.

December 24.—The schooner *Lucy Robinson*, of Deer Isle, Maine, stranded at 6, a. m., in a rough sea, on the southern point of Burnt Island, Seal Harbor, Maine, and was discovered by the patrolman. The keeper and four of the crew of Station No. 5, First District, went out to her in a small boat, and found her broadside to and hard on among the rocks, and rolling heavily. The sea was so rough that a boat could not lay alongside. An attempt made by the captain to force the vessel past the point by crowding on sail, against which the keeper remonstrated, drove her harder upon the rocks. The keeper then

pulled away to Seal Harbor, and got the schooner *Union*, of Eastport, to drop down and anchor to windward of the wreck. A line was then run by the life-saving crew from the wreck to the anchored vessel, worked by the windlass, and by noon the schooner was got afloat, and being half full of water, was taken under short sail across the channel to a wharf on Hewitt's Island. Her crew consisted of four men.

December 24.—The schooner *C. & C. Brooks*, of New York, ran ashore at one o'clock in the morning, three-quarters of a mile from Station No. 25, Fourth District, New Jersey. The sea was very heavy, and upon reaching the schooner the life-saving crew found her sunk, and her crew of five men in the rigging. They were taken into the boat and brought ashore in safety. The vessel became a total wreck. The crew were sheltered for several days at the station.

December 25.—The schooner *Mary Ann Grier*, of New York, went ashore on Middle Ground, Fire Island Inlet, with a pilot on board. The drift-ice drove her still further aground, where she pounded until she sprang a leak. The life-saving crew of Station No. 25, Third District, Long Island, went out to her assistance, hove her off and took her to a safe anchorage.

December 25.—The crews of Stations Nos. 17 and 18, Fourth District, New Jersey, hove off the schooner *Stephen D. Barnes*, of New York, which had stranded with six men on board at 8 p. m., half a mile east of Station No. 17.

December 28.—The schooner *James D. Godfrey*, of Philadelphia, dragged ashore in the ice at four o'clock in the morning, a quarter of a mile east of Station No. 40, Fourth District, New Jersey. The life-saving crew reached her by wading, and ran out an anchor preliminary to heaving her off when opportunity favored.

December 28.—The crew of Station No. 1, Sixth District, North Carolina, rowed out to the steamer *Tunis*, of London, which had run ashore a mile south of the station at two o'clock in the morning, on account of her officers mistaking the beach for the sea, it being covered with snow, which the reflection of Cape Henry light caused to look like water. The captain of the steamer made no response to the signals of the life-saving crew, who afterwards repeatedly went alongside and offered assistance, but received hardly any notice. Finally, the captain came ashore in his own boat to the signal office and procured the aid of the Coast Wrecking Company, who got off the vessel by December 31.

December 31.—During the night the crew of Station No. 8, Fifth District, Virginia, observed a schooner standing inside of Point of Shoals, and warned her of the danger of running ashore by burning a red Coston light, which caused her immediately to haul by the wind and tack several times until she cleared the point, when she took her course southward.

January 3, 1879.—The schooner *Eliza A. Hooper*, of Camden, New Jersey, which had stranded in December, near Jones Inlet, Long Island, and been got off by a wrecking company, again ran ashore in a north-west gale and heavy sea, about ten o'clock in the morning, two miles north of Station No. 5, Third District, Block Island, being then on her way to New York in charge of eight wreckers. The life-saving crew at once hurried to the scene with the apparatus, and upon arriving found that three of the men on board had landed in the schooner's boat. The other five were brought ashore by the life-saving crew. The vessel was subsequently saved.

January 4.—An extraordinary and difficult rescue was effected by the life-saving crew of Station No. 20, Third District, Long Island, aided by the crews of Stations Nos. 19 and 21. The case was that of

the steamer *Vindicator* of New York. The steamer was bound from Fall River to Philadelphia. On the 3d instant the mercury fell to zero, and at night the wind hauled to the northwest and blew a hurricane. According to the statement of the captain and mate, a hundred tons of ice accumulated upon the bow of the steamer, so loading the vessel down by the head that her propeller and rudder were lifted to the surface of the water, and she became unmanageable, and drifted in this condition to Long Island Beach, where she stranded on January 4, at half past four o'clock in the morning, one mile west of Station No. 20 (Smith's Point), and 302 yards from the shore, by actual measurement. She was immediately discovered by Patrolman Hawkins, who fired his red Coston light, and rushed to the station. Keeper Joseph H. Bell and his crew at once hurried to the spot with the mortar apparatus. The ice was piled up in great blocks upon the beach from four to six feet high, and the water was full of ice in floating cakes, reaching to within 40 feet of the vessel, and grinding and crunching along shore with the strong easterly wind and current. Under these circumstances, the use of the boat was impossible. The steamer lay head on to the beach, presenting but a small mark for the shot-line, and her top-gallant forecastle was a great hump or dome of smooth ice, formed by the accumulations of the spray and seas. To allow for the action of the wind in deflecting the shot-line from its course it was necessary to place the mortar somewhat east of the vessel, thus increasing the distance. Under these conditions the first shot fired reached the steamer but struck upon the smooth mass of ice which domed the top-gallant forecastle, and necessarily glanced off, there being no bowsprit nor stay upon which it might catch, and fell into the sea. The line attached to the shot was cut by the jagged ice while the life-saving crew were hauling it back, and was lost. The second and third shots fell short. A fourth shot threw the line against the vessel, but an effort on board to catch it failed. At the next shot the line parted. The sixth shot fell over the spring stay between the fore and main masts, and was secured by the crew of the steamer.

During these operations the life-saving crews of Stations Nos. 19 (Sidney Smith, keeper), and 21 (Silas B. Rogers, keeper), appeared upon the scene, and it was the line of the latter station which had been successfully carried to the steamer by the last shot.

An untoward incident now occurred. While the lines were being got on board three men committed the frequent and dangerous error of attempting to land independently of the assistance of the life-saving crew. They got from the steamer into a boat, which narrowly escaped swamping at the outset, and was then swept along the edge of the broad mass of floating ice by the strong lateral current, over a mile east of the station and two miles from the ship, without getting any nearer the shore. Knowing the peril which these rash sailors had exposed themselves to, some of the life-saving men followed them in their course along the shore; Finally they reached a small open space of water, and making for the land, their boat was immediately capsized. It was by a great and hazardous effort that the life-saving men succeeded in dragging them from the icy water. They were badly frost-bitten, and were quickly carried to the station and cared for.

So many men had followed to engage in this rescue that operations at the ship were delayed until their return, when the hawser and hauling lines were set up. A new lot of difficulties now arose. The ropes were stretched from the shore to the steamer, for the great distance of 302 yards, and as the weather was bitterly cold it was absolutely necessary not to let them sag into the water, as in this case they would become clogged with

ice and the hauling lines prevented from running through the sheaves of the pulley-blocks. Fortunately, a number of persons had come across the frozen bay in sleighs from the mainland, and with their aid the almost impossible task was performed of keeping the ropes so taut that they could not dip into the water. The strain was so great that the bushing in the pulley-blocks became loosened, and the friction set the blocks on fire. This new danger, which menaced the ropes and threatened to frustrate the rescue, was met with judgment. The captain of the steamer kept the ignited block upon the vessel quenched, using strong brine instead of water, which would have frozen. These sustained efforts resulted, by 2 p. m., in the first man being safely drawn ashore in the breeches-buoy along the hawser. The captain, who was the last man to leave the ship, came to land by the same means at four o'clock. Thus, one by one, the fifteen persons on board were delivered, making, in addition to the three from the capsized boat, eighteen persons saved. The great distance of the steamer from the shore; her bad position, lying head on, as a mark for the wreck ordnance; her having neither bowsprit nor yards, and being encased with slippery ice, thus adding to the difficulty of getting a line over her; the repeated loss of shots and the severing of shot-lines by the jagged floes; the spread of impassable leaping ice between the beach and the vessel; the galling interruption to effort, in the beginning of long-delayed success, caused by the necessity of rescuing the three men in the boat; the imperative need and the difficulty of keeping the ropes stretched for over 300 yards clear of the water; the unexpected ignition of the pulley-blocks; the protraction of the severe labor; the intense cold of the weather; all formed a series of conditions and impediments such as are rarely encountered; yet for twelve hours the brave surfmen stuck to their work with unfaltering determination, patiently meeting every successive exigency, and never resting till they had saved the last man. They suffered much with the cold, and by night were so completely exhausted that they could only perform partial patrol.

January 8.—The keeper and crew of Station No. 23, Fourth District, New Jersey, assisted by the crew of Station No. 22, rendered noble and laborious service to the sloop *William H. Mills*, of Tuckerton, New Jersey, by cutting her out of the ice in Little Egg Harbor, thus saving her from drifting out to sea, locked up in an ice floe, and being destroyed. The sloop lay at Anchorage Island, wedged fast in the ice, which had made the waters of the whole vicinity solid for the first time, it is said, in a hundred years, the cold being terrible. As a storm was approaching, the captain of the sloop was deeply troubled, knowing the danger of his position. He was a poor man, with a large family, all he was worth being in his vessel, which was leaking badly and in no condition for being driven to sea, while the ice prevented her getting to harbor. In this strait the united crews of the two stations came over the ice to his assistance with their axes and an old iron boat, and at eight o'clock in the morning commenced the great undertaking of breaking up the ice so that the sloop could float, and cutting a road for her to a safe harbor. This gallant labor continued all day and until nine o'clock in the evening, by which time the exhausted life-savers had the satisfaction of leaving the sloop, freed from her perilous position, and moored in Sheepshead Thoroughfare. Her deliverance was fortunate, for the next day the wind blew hard, with a heavy fog from the southeast, and the ice broke up and rushed seaward. Under these circumstances, the wreck of the vessel would have been certain had she not been got through the ice to a place of safety. The last words of her captain to the life-

saving crews upon their leaving him were that he would never forget their kindness in sticking by him, and that he would never forget the Life-Saving Service.

January 15.—The Norwegian bark *Success*, with ten persons on board, was run ashore by her master to save her from foundering, directly opposite Station No. 15, Sixth District, North Carolina. The stranding took place at 5.30 a. m., and the vessel was immediately discovered by the patrolman, who burned his red Coston light. The signal was seen by the crew of the vessel while they were making preparations to land in their own boats, but was not understood, the men not knowing that there were life-saving stations on the coast, and the landing was soon after effected. The life-saving crews of three stations, Nos. 14, 15, and 16, soon assembled at the wreck, and the boat of No. 15 was launched and put out to the wreck, returning with the personal effects of the master and the sailors, together with some provisions. The vessel broke in two and became a total wreck.

January 16.—The bark *Italia*, of Spezzia, Italy, struck inside the bar at half-past three o'clock in the morning, during a blinding snow-storm about half a mile north of Life-Saving Station No. 6, Deal's Beach, Fourth District, New Jersey. The crew of the station boarded her, but could not persuade the captain to leave the vessel. By 9 o'clock, however, he discovered that the vessel had eight or nine feet of water in her hold, and made signals of distress. An attempt to reach her again in the boat failed on account of the condition of the sea, but a line having been fortunately brought ashore by the life-saving crew on their first trip, connecting the vessel with the beach, the hawser and hauling-lines were drawn on board, and the fourteen men composing the vessel's crew were brought to land by the breeches-buoy. The service was laborious and difficult. The ship rolled so much that it was impossible to keep the hawser taut, and the men, as they neared the shore, were necessarily immersed in the breakers by the slackening of the rope to which the breeches-buoy was suspended. The life-saving crew subsequently boarded the vessel at low water, and secured the clothing and baggage of the sailors. The vessel became a total wreck.

January 16.—The schooner *Cuba*, of St. John, New Brunswick, was discovered ashore at 6.20 a. m., three-fourths of a mile from Station No. 20, Fourth District, New Jersey, the keeper and crew of which at once went to her assistance, conveying the captain and his five men on shore, and afterwards their baggage and the sails and running rigging of the vessel. The men were fed and lodged at the station for three days. The vessel was a total wreck.

January 19.—The schooner *Lucy May*, of Haverhill, Massachusetts, stranded at half-past three o'clock in the morning at Townsend's Inlet, and was subsequently got off by a wrecking company. The crew of Station No. 34, Fourth District, New Jersey, rendered good service during the operation by extending the hospitalities of the station to those engaged, and by facilitating communication between the vessel and the shore with the surf-boat.

January 23.—The schooner *General Scott*, of Provincetown, Massachusetts, was seen by Patrolmen Rand and Hill of Station No. 7, Second District, Massachusetts, just as she struck upon a bar a mile east-northeast of the station. It was then about five o'clock in the morning, the weather cloudy, with a heavy sea. The surf-boat was immediately launched by the station crew, who, upon arriving alongside, found the vessel in a very hazardous position, lying broadside to upon the bar, with hawser and kedge anchor ahead. The keeper at once stationed men at

the hawser, with directions to cast off at the word of command, and ordered up the foresail. This caused the schooner to swing around head to the sea, when the hawser was let go, and the vessel floated off the bar. The hawser and kedge were then taken on board by the station crew, and the schooner sailed away. But for the prompt assistance of the life-saving men she would have become a total wreck, as the wind had changed, and the heavy sea which began to run on the bar would have broken her to pieces. There were fourteen persons on board.

January 23.—A patrolman, belonging to Station No. 3, Fifth District, Delaware, saw a schooner at 9 p. m. driving in so near the beach that she had almost reached the outer breaker, when he fired his red Coston light, thereby warning her of her danger, and enabling her to change her course and stand out to sea.

January 24.—The schooner *Scud*, of Eastport, Maine, ran aground at 8 p. m. one mile south of Station No. 12, Second District, Massachusetts. The life-saving crew boarded the vessel and endeavored, with the aid of her crew, to get her afloat. They succeeded so far as to turn her around, head off shore, but the tide falling and the weather growing very threatening, by two o'clock in the morning they landed the five men on board and took them to the station with their baggage. The next tide she filled with water and became a total wreck.

January 26.—The schooner *America*, of Rockland, Maine, was seen at about three o'clock in the morning by the keeper of Station No. 4, Second District, approaching the Gurnet under short sail, and being apparently in danger of running too near, was signaled to by him to keep off. The keeper then went out in a dory with two surfmen, boarded the vessel, and found her anchored but unable to get down her sails, the crew being nearly exhausted with cold and hunger. They had not eaten anything since supper the night before, and had been without sleep since the night before that. The vessel was so covered with ice as to be unmanageable, and another night's accumulation would have sunk her. She had considerable water in her hold, which was steadily gaining. The captain had made up his mind to run the vessel ashore rather than remain another night outside, the cold being so intense that another night without food or sleep could not have been borne. The three life-saving men staid on board about two hours, helping to get down the sails, then returned to shore, got out the surf-boat, and came back to the vessel with a full crew. They then took charge of the vessel, sent the captain and crew below to get their supper and go to bed, and having brought shovels and a crowbar from the station, went to work beating the ice off the schooner and ridding her of this load. They also manned the pumps, which had to be worked almost constantly. At 6.30 in the morning they went on shore for breakfast, returned to the vessel, patched her mainsail and hoisted it, beat the ice from her foresail, which they also got up, thawed out the windlass, hove up the anchor, took the vessel out clear of danger, and saw her safely on her way to Boston, returning to the station by noon. Some of the life-saving men were slightly frost-bitten in this enterprise. But for their exertions the vessel would have been lost.

January 26.—The schooner *Snow Bird* ran ashore in a north-northwest wind and rough sea at two o'clock in the morning, two and a half miles northeast of Station No. 13, Second District, Massachusetts. The severity of the gale made it impossible to get the surf-boat out to her from the station, and the keeper and crew went to the town of Chatham with the view of starting thence in a boat. Upon arriving they saw two boats, which had gone out from the town, returning with the schooner's crew

of five. Three of them were taken to the station and succored for three days, when free passes were obtained for them to Boston. The life-saving crew the day after the rescue went out in the surf-boat and saved the crew's clothing. The vessel was lost.

January 26.—The crew of Station No. 23, Fourth District, New Jersey, rendered important service to the schooner *Emma*, of Patchogue, Long Island, New York. The vessel had her main-mast head carried away below the standing rigging on the 25th of January, when off Brigantine Shoals, so that nothing could be carried but the foresail and jib, with which canvas the captain made an effort to sail to New York, but the wind and sea were against him, and he was compelled to make for Little Egg Harbor, where he succeeded in anchoring. The life-saving crew boarded the vessel, and by putting a spring-stay from the stump of the mainmast to the foremast head, and rigging up some straps and blocks, enabled the captain to hoist his mainsail, and bear away on the following day for New York without the aid of a tug, which otherwise he would have had to procure. The schooner had four men on board.

January 28.—The brigantine *Water Witch*, of Baltimore, Maryland, stranded at 10.30 p. m. four and a half miles northeast of Station No. 11, Fifth District, Virginia. The life-saving crew took off the eight men on board and brought them to the station. The vessel was subsequently got off by a wrecking company.

January 30.—The patrolman of Station No. 5, First District, Maine, saw the schooner *Emma*, of St. John, New Brunswick, miss stays and run aground at ten o'clock in the evening on Hog Island Ledge. The station crew reached her in their boat in forty minutes afterward, and found her lying easily on smooth rocks. The top of her house had taken fire soon after she struck, and the life-saving men assisted in extinguishing the fire, and then occupied themselves in keeping her pumped out until the tide rose and floated her off the ledge, which took place at two o'clock in the morning. The life-saving crew then took her into the harbor, anchored her, helped to furl her sails, and at four o'clock in the morning returned to the station. The schooner had six men on board.

February 1.—A schooner was probably saved from destruction near Station No. 6, Fifth District, Maryland. She was standing in toward the shore, and would have presently stranded, when the patrolman of the station fired his red Coston light, causing her to immediately tack and bear away.

February 2.—The schooner *Sarah Wood*, of Philadelphia, anchored two miles out, abreast of Station No. 13, Sixth District, North Carolina, and the next morning showed signals of distress. A heavy surf was then rolling in, but the keeper of the station launched his boat and made for the vessel. On the outer bar the boat took a heavy sea which filled it. The boat was backed astern, baled out, and at the second effort reached the schooner, which was found to be in want of provisions and oil. The steamer Virginia was then bearing down upon the schooner, and the keeper took the steward of the distressed vessel in his boat to the steamer, obtained the requisite supplies, and conveyed them to the schooner.

February 8.—An unknown schooner was prevented from running on shore by the patrolman of Station No. 8, Fifth District, Virginia, firing his red Coston light, thus causing the vessel to tack and escape the danger. The keeper of the station reports that this is the sixth vessel this season which has been saved from running upon shoals by the action of his patrolmen.

February 16.—The sloop *John Clark*, of Somer's Point, New Jersey, ran

ashore at about seven o'clock in the morning on Damson Shoal, half a mile southeast of Station No. 8, Fifth District, Virginia. The station crew boarded her, ran out her anchors, and by eleven o'clock hove her off and anchored her in deep water, awaiting a fair wind. There were three men on board.

February 18.—The crew of Station No. 4, Fourth District, New Jersey, rendered extraordinary service at the wreck of the Norwegian ship *Hanna*, which ran ashore in a heavy northeast snow-storm and high sea at five o'clock in the morning, one mile and a half from Station No. 4, Fourth District, New Jersey. The wreck was seen by Patrolman Lockwood, of Station No. 4, who signaled to her, received an answer, left his lantern in sight of the ship, and hastened to the station. A team, which the keeper had engaged in anticipation of disaster, at once dragged the apparatus abreast of the vessel, and a shot, carrying a line, was sent between the fore and main masts. Trouble was caused for the life-saving crew by the captain of the vessel disregarding the instructions sent out to him on the tally-board, and fastening the whip-line so low down on the mast that the men were obliged to stand up to their waists in the surf to get hold of the sailors as they were drawn ashore in the breeches-buoy. In one hour and a half after the vessel struck the seventeen men on board were safely landed. The captain of the ship, who had been wrecked three times, said that this was the speediest deliverance known to his experience.

February 19.—The bark *Sadie*, of Boston, stranded at about five o'clock in the morning, during a snow-storm, about three-fourths of a mile from Station No. 10, Fourth District, New Jersey, and came so near to the beach that the crew of the station were able to throw a line on board with the loaded heaving stick. The hawser and hauling-lines were then set up, and six of the crew of ten were brought safely on shore by the breeches-buoy. The operation was difficult as the vessel lay broadside to the beach and rolled so heavily that the hawser could not be drawn taut, and required two men to haul and slack upon it in time to the motions of the vessel so as to keep the breeches-buoy as much as possible out of the water. By this time the tide had fallen, leaving the vessel high and dry, so that the remainder of the crew were able to leap ashore.

February 19.—The brig *Moses Day*, of Philadelphia, stranded about 350 yards from the shore, two and three-fourth miles from Station No. 5, Fifth District, Maryland, having on board a crew of ten, and three passengers. A northeast wind was prevailing and it was thick weather, with occasional snow-squalls. The wreck was discovered by the patrolman, and the station crew set out with the surf-boat on its carriage, which they hauled for a thousand yards, and finding it impossible to proceed further against the stress of the wind, the keeper sent a man on ahead to signal to the people on the wreck that help was at hand, and dispatched another for a yoke of oxen, by which the boat was hauled to the wreck. A bright fire, composed of the brig's mattresses, was burning on her quarter. The surf proved too high to launch the boat, and the wreck-ordnance was brought into requisition. The first shot did not reach the vessel, and the keeper, seeing that the people on board had grown impatient and were about to commit the fatal error of attempting to land in their own boat, signaled them to forbear, and again attempted to launch the surf-boat. After two efforts the life-saving crew succeeded in getting the boat through the surf, came alongside of the brig, and took off a part of the people, among them two women and a child, all of whom were safely landed. They then got through the surf again and brought ashore the others. The crew were succored at the

station until the 24th of February. The keeper and his men meanwhile were engaged in saving the sails and running rigging. A part of the cargo, which was of sugar and molasses, was saved in a damaged condition. The vessel proved a total loss.

February 20.—The schooner *Torpedo*, of Lubec, Maine, ran ashore at about half-past two o'clock in the afternoon in a heavy northeast snow-storm on Rye Ledge, a mile and a half from Station No. 7, First District, New Hampshire, and became a total wreck. The keeper got a cart and arrived abreast of the wreck with the apparatus within half an hour after the patrol brought the news to the station, the life-saving crew aiding the horse in the toilsome pulling and hauling. A small boat was immediately launched, the vessel boarded, and the crew of four men brought ashore and sheltered at the station, they being very destitute. Five trips were made with the boat, the vessel's sails got down and tied up, the personal effects of the sailors brought to land, and the next day the sails and rigging saved.

February 20.—The sloop *America*, of Greenport, Long Island, with four men on board, ran aground about two o'clock in the afternoon, in a snow-storm and high sea at Point Creek, and was boarded by the life-saving crew of Station No. 23, Fourth District, New Jersey, who succeeded in getting her off without damage.

February 23.—The schooner *C. B. Paine*, of Eastport, Maine, lost her reckoning and stranded 200 yards from shore at half past two o'clock in the morning, two and three-fourths miles east of Station No. 19, Third District, Long Island. There were seven men on board, three of whom were sick with fever. The life-saving men were promptly alongside, but the sea being rough they were unable to get the sick men safely into the boat, and were obliged to resort to the wreck-ordnance. A line was soon thrown over the schooner by the Lyle gun, the breeches-buoy was put in operation, and in an hour and a half the whole crew were landed. The rescue would have been effected in less time but for the illness of the men, and was somewhat hindered by the vessel rolling, which made it difficult to keep the hawser taut. The sick men got wet in their transit to the shore and upon landing were very weak and unable to walk. A team was procured and they were conveyed to the station, where every attention was bestowed upon them. They remained at the station under care for three days, and one of them for eleven days.

February 25.—The schooners *Rival* and *Northern Star*, both of Gloucester, Massachusetts, came ashore in a thick snow-storm at seven o'clock in the evening on Rye Beach, New Hampshire. The life-saving crew of Station No. 7, First District, were upon the scene with their boat within half an hour, but found that the crews of both vessels had landed safely in their own boats, being fishermen, a few minutes after stranding. The men, nineteen in number, were taken to the station and cared for.

February 25.—The schooner *Persis Hinckley*, of New York, stranded at about seven o'clock in the evening in a southeast gale and thick snow-storm over a mile west of Station No. 7, Second District, Massachusetts. She was at once discovered by the patrol, and the keeper of the station ordered the surf-boat launched. The night was very dark and stormy and the surf heavy upon the beach. In passing through the breakers the boat shipped a sea which filled it nearly to the thwarts, but the crew succeeded in getting to the schooner, which they found lying head on about fifty yards from the beach, and boarded her. The captain requested the keeper to take charge of the vessel and do the best he could to save her. The keeper took command and ordered the jibs and topsails to be

set, the wind having hauled to the south-southeast, blowing off shore, and as the tide flowed the brig began to thump and roll very heavily. With the aid of the headsails she gradually swung off from the beach, and worked on until she came over the bar into twenty feet of water. The keeper then kept her along the bar and ordered more sail set. The captain wished him to remain on board until the vessel was safely anchored, but the night being stormy, the keeper told him he could not be absent from the station, but would leave one of his crew on board, who by nine o'clock the next morning got the vessel into safe anchorage in Provincetown Harbor. But for the prompt and skillful assistance rendered by the station crew the brig and cargo would have been lost, and probably the eight persons on board.

February 26.—The schooner *Frances*, of St. John, New Brunswick, with seven men on board, ran ashore in a southeast snow-storm and heavy sea at midnight, on the southwest point of Fisherman's Island, Maine. She was discovered by the patrolman of Station No. 3, First District, Maine, at eight o'clock in the morning, and half an hour afterward the surf-boat came alongside and landed her crew of seven men on Fisherman's Island, where there is a house of refuge for fishermen. The vessel was saved.

February 26.—The schooner *David H. Tolck*, of New York, stranded at three o'clock in the morning, half a mile north of Station No. 19, Fourth District, New Jersey. The efforts of the life-saving crew resulted in the saving of six persons, including little Genevra Sawyer, while five were lost. The particulars of this disaster, which was the subject of investigation, will be found on page 30.

March 2.—The Norwegian bark *Admiral* stranded at midnight about one mile south of Station No. 5, Sixth District, North Carolina. She was promptly discovered by the patrolman, but on the arrival soon after of the life-saving men, the crew of the vessel, fourteen in number, came ashore in their own boats, the sea being smooth, but subsequently returned to the vessel. At ten o'clock in the morning the keeper boarded the vessel and advised the crew to come on shore, as the sea was rising; they refused, and the keeper and his men regained the beach where they remained ready to render assistance. At 4.30 p. m. the crew of the vessel signaled for a boat, and the life-saving crew again went off and brought them ashore. The vessel became a total wreck.

March 3.—The brigantine *E. A. Barnard*, of St. Andrew's, New Brunswick, stranded, with eight men on board, a little before 1 a. m., three and a half miles north of Station No. 4, Fifth District, Maryland. The weather was thick and spitting snow, the wind northeast, and the surf rather high. The wreck was promptly discovered by the patrol, who, after making the usual signals, hastened to the station; and the life-saving crew, procuring an ox-team from a place near by, hitched on the boat and its carriage, and the wreck-ordnance in the station cart, and started for the scene. The load soon proved too much for the team through the soft sand, and the boat had to be left behind. Upon arrival at the wreck the usual preparations were made, and connection was effected by the first shot, and the hawser and hauling-lines were set up for the use of the breeches buoy. When this was done, the mate of the vessel and three men, instead of availing themselves of the means of transit thus offered, launched a boat and started for the shore, using the whip-line as a ferry-rope. The danger of the boat capsizing as it neared the beach compelled the life-saving crew to go into the surf and haul the boat on shore. The remainder of the men on board, together with all their effects and a box of silver plate, were then hauled to land by the breeches-

buoy, and the rescued were taken to the station, where they received the best attention. The captain of the vessel was an old man, and was much exhausted and suffering from cramps. He was given a bath, had his limbs well rubbed, and was put to bed. The cargo being dutiable, the keeper, in his capacity as inspector of customs, had a guard set over it until relieved by other customs officials. The crew of the vessel were entertained at the station for two days, when they left for Philadelphia.

March 6.—The schooner *Mary Helena*, of Atlantic City, New Jersey, was run ashore by her captain at five o'clock in the morning, nearly two miles north of Station No. 13, Fourth District, New Jersey, in a strong east-southeast wind and heavy surf. The vessel was leaking badly, and her captain drove her on the beach to save her crew. She was seen at once by the patrolman, who ran to the station, and the life-saving crew came promptly to the wreck with the surf-boat; but the vessel had been run so high up on the beach, that her crew of two men and her one passenger had landed by swinging themselves with a line from the end of the jib-boom. They were taken to the station by the life-saving crew, and succored for a day and a half. The station men returned that morning to the wreck, and stripped it of sails, rigging, anchors, and chains for the benefit of the owners.

March 7.—The schooner *Addie Sawyer*, of Calais, Maine, anchored at five o'clock in the morning near Duck Ledge, Quoddy Bay, during a boisterous snow-storm, in a position of great danger. Her peril being reported to the keeper of Station No. 1, First District, Maine, by a patrolman, he and his crew at once started out the surf-boat, hauled it across to the bay side, launched, and after a hard pull of two hours reached the schooner. The captain gave his men leave to quit the vessel in the surf-boat, but himself refused to go. This steadfastness touched the keeper, and made him form the resolution of attempting to save the vessel as well as the crew; a task which the circumstances rendered rather desperate, on account of the violence of the wind and sea. Getting his crew on board, the keeper made sail, unshackled the anchors, and steered for the north over Crowell's Ledge Bar. If the vessel should strike in crossing the bar, or one of her sails blow away, her destruction was assured. Fortunately she crossed the bar without striking, and kept along clear of the lee shore until smoother water was gained, when the keeper clapped on more sail and drove her to a good anchorage. These skillful maneuvers, aided by good fortune, saved a vessel and cargo worth \$7,000, together with the lives of her crew of seven men. In her original position the vessel would have been beaten to pieces at ebb-tide.

March 11.—The sloop *Hattie Mary*, of Chincoteague, Virginia, grounded at 4 p. m. on New Inlet Bar, two and a half miles from Station No. 7, Fifth District, Virginia, and half a mile from land. She was seen immediately from the station, and the surf boat was at once launched and rowed out to her. She was found lying broadside to the sea, pounding somewhat, and the water breaking over her. The life-saving crew lightened her of her deck-load, and forced her with oars and poles, aided by the rising tide, over the bar inside, where it was safe. The keeper staid on board some time and instructed the captain how to steer so as to clear the dangerous shoals in that vicinity.

March 17.—The crew of Station No. 9, Ninth District, Lake Erie, who were not then on duty, discovered the barge *Bay City* in the ice six miles northwest of the station, and at 2 p. m. put out in the surf-boat, and after over two hours' hard pulling, were brought up by the ice, which extended some ten or 12 rods around the barge. They got out on the ice, walked to the barge, and found her abandoned, without anchors or sails. They then

went back to the station to get an anchor and line for use in the attempt to save the barge, to which they returned by eight o'clock in the evening, but found the ice so broken around her that they could not get near her. The next day she was still in the ice, but had passed the station some six miles to the eastward. An attempt was made by the life-saving men to get a tug from Sandusky to tow her, but none could be found fitted out. The day following they saw her again about a quarter of a mile from Marblehead light, went out in their boat and tried to tow her in, but the barge having already taken in water, and being without pumps and leaking, could not be kept afloat, and at last sunk in six feet of water, and became a total wreck.

March 19.—The schooner *Eva L. Leonard*, of Boston, with five men on board, stranded at about two o'clock in the morning, in clear weather and a low sea, on a bar a mile and a half from Station No. 31, Third District, Long Island. She was seen by the patrolmen of Stations 31 and 32, but was supposed to be a vessel lying at anchor, until daybreak disclosed the fact that she was ashore. The crew of Station No. 31 launched the surf-boat at five o'clock in the morning, boarded the schooner, and brought the captain ashore, the crew being ordered by him to remain on board. At four o'clock in the afternoon the life-saving crew made a second trip to the vessel, tied up her sails, and brought off all hands and their luggage. The men were entertained at the station that night, and were returned to the schooner the next day by the life-saving crew. The day following the schooner was hauled off by the Coast Wrecking Company.

March 20.—The schooner *Leonard B. Snow*, of Provincetown, Massachusetts, stranded through carelessness, at 4.30 in the morning, on the bar half a mile west from Station No. 7, Second District, Massachusetts. She was promptly discovered by the patrolman and boarded by the station crew, who winged out her sails, and as the tide rose worked her off over the bar into deep water. There were twelve men on board.

March 21.—The bark *Homeward Bound* stranded in thick weather, at 4 a. m., a mile north of Station No. 8, Fourth District, New Jersey. The station crew boarded her in the surf-boat, found her strained and leaking badly, and took her crew of twelve men on shore, with their effects. The vessel became a total wreck.

March 27.—The bark *Champion*, of Yarmouth, Nova Scotia, with a crew of thirteen, including the stewardess, stranded in a strong gale and high surf six or seven miles below Station No. 4, Fifth District, Maryland, at about 4.30 in the morning. The news was brought to the station by 8.30 a. m., and the keeper at once procured oxen and horses and hauled the surf-boat and wreck-ordnance to the scene of action, where they arrived by noon. At the first shot the Lyle gun threw a line over the vessel, the hawser and hauling-lines were set up, and the captain was brought ashore in the life-car. The vessel had meanwhile worked well up toward the beach and lay quite easy. The mate was brought ashore, and after consultation it was decided safe to leave the crew on board. The mate then returned to the vessel by the car, and the stewardess was brought ashore. A line was stretched between the vessel and the shore, and the life-saving crew returned to the station. The bark was subsequently got off and towed to Philadelphia.

March 31.—Patrolman Meservey, of Station No. 5, First District, Maine, was out on day watch, and a few minutes before five p. m. saw a small sail-boat containing one man suddenly struck by a heavy squall and capsize in the rough sea about 300 yards from shore. Feeling that there was no time to go to the station, the patrolman dashed for the water, catching a 13-foot wherry on the beach by the stern as

he ran, threw the boat into the water, sprang in, seized the oars, whirled the boat around, and rowed with all his might against the strong wind and sea. The keeper, Captain Norton, was 400 yards distant and came running, but was not in time to get into the boat before Meservey pulled off. The imperiled man was washed off the bottom of the boat several times, each time regaining his position, before his deliverer reached him, and when Meservey came alongside was astride of the keel and clinging fast. The capsized boat was righted by the two men, everything belonging to her picked up, and the shore reached safely.

March 31.—The schooner *Oregon* stranded at 2.30 p. m. on the south-east side of the entrance to Biddeford Pool, Maine, in a heavy northerly snow-squall and rough sea. She was quickly discovered by the patrolman, and soon afterward boarded by the crew of Station No. 6, First District, who took a hawser out over the stern of the vessel, made it fast to some rocks, and, after heaving on the windlass for two hours, succeeded in working the vessel off without damage. But for the assistance rendered by the life-saving crew, the vessel would have bilged and her cargo of lime would have been lost.

March 31.—Keeper Philbrick, of Station No. 7, First District, New Hampshire, saw the schooner *Fairdealer*, of Castine, Maine, come to an anchor a mile southeast of the station in a thick northeast snow-storm and heavy surf, and soon afterward saw three men leave her in a boat for the shore. Seeing they would be unable to land, the keeper and crew launched the surf-boat, went out, and brought ashore the three men, who constituted the captain and crew of the vessel. The captain had left the vessel moored with two anchors and good cables, but at six o'clock the next morning it was seen that she had parted her cables and driven to sea before a strong northwest wind. The surf-boat was at once launched, with five station men and the three sailors, and overtook and boarded the vessel when about four miles out to sea. The captain gave up the command to the life-saving crew, and the attempt was made to work the vessel back, which for a time was baffled by the wind, now risen to a gale and threatening to blow the schooner out to sea. Finally, by working until dark, the station crew succeeded in getting the vessel into harbor at the Isle of Shoals. The wind continued so strongly off shore, that the life-saving crew did not regain their station until April 3. The vessel was saved by these efforts.

March 31.—The keeper of Station No. 15 (Nantucket), Second District, Massachusetts, saw, at five o'clock in the afternoon, during a strong northeast gale, with rain and a heavy surf, nine vessels at anchor from two to four miles off shore, and about seven miles to the east-southeast of the station. They were all more or less disabled in sails and spars, but showed no signals of distress. At 11.30 a. m. the next day, April 1, one of this fleet of schooners was seen to cut away both masts. It was then blowing a gale from the west-southwest, and the surf was running so heavily that the surf-boat could not be launched abreast of the station, and an attempt also failed to launch the boat after dragging it five miles up the beach toward the wreck. The life-saving crew remained on the beach all night, and the next day hauled the boat back abreast of the station, where the sea appeared to be now running less violently, and offered some prospect of opportunity for a launch. The wreck appeared to ride easily at her anchors. The surf continued very heavy through the night of April 3, and the gale did not abate. At two hours after midnight the keeper called all hands, but it was found best to wait until daylight. At seven o'clock in the morning there was no chance of get-

ting through the surf, but at half past eight the boat was launched and got through after shipping three seas, worked off shore, was freed of water, and reached the wreck by eleven o'clock. The schooner was found to be the *W. D. Cargill*, of Providence, Rhode Island, with five men on board. She was anchored in six fathoms of water, her masts and sails gone, leaking slightly, but otherwise in good condition. The captain and crew were taken off, with all their clothing, but the swell and surf were so great that the surf-boat could not land abreast of the wreck, but kept off, worked around under the lee of the island, and landed at Sconset, ten miles from the station, where a team was employed to transport the surf-boat across Nantucket to the station, where the crew arrived at half past eight o'clock in the evening of April 3.

March 31.—The schooner *Mary J. Cook* misstayed while standing in on the north point of Sandy Hook, New Jersey, let go her anchor, which dragged until she stranded about 600 yards from shore. The day was cold and cloudy, there was a heavy sea, and the north-northeast wind was blowing 50 miles an hour. It was nine o'clock in the morning when the vessel stranded, and within an hour the life-saving crew of Station No. 1, Fourth District, New Jersey, were abreast of her with the surf-boat, which the keeper did not think could be launched, but determined to make the effort. The boat was shoved in, but the violence of the wind and sea was too much for the crew, and the boat was driven back on shore, and with great effort was saved from being broken to pieces on the stone jetty. The keeper had meanwhile dispatched a team for the wreck ordnance. The tug-boat *Hudson* came up, however, and, getting a line to the schooner, pulled her off.

March 31.—The schooner *I Don't Know*, of Tuckerton, New Jersey, stranded with three men on board, at half past five in the afternoon, in clear weather, but a heavy northwest gale, a mile and a half south of Station No. 23, Fourth District, New Jersey. The vessel anchored below Barnegat on March 30, the gale being violent, and losing her anchor there the next day ran back for Little Egg Harbor, but was obliged by the stress of the wind to cast her small anchor, which dragged until she stranded. At 5.30 of that day she made signals of distress, which were seen by the station crew, who at once ran out the boat on its carriage, when the furious wind blew boat and carriage over, and whirled the boat off for about 80 yards, damaging it so much that it was not fit to put in the water. A message was dispatched to Station No. 22 adjacent, requesting that its boat be sent if the wind abated sufficiently to enable it to be kept upon its carriage. During the night the wind moderated a little, and by three o'clock in the morning of April 1. Captain Bond and his men of Station No. 22 arrived with their boat. The sea was very heavy, but by six o'clock in the morning the boat of No. 22 was launched, under the command of Captain Rider, of Station 23, and manned by his crew, together with Captain Bond and four of his men, making a complement of twelve. After a hard pull the vessel was reached, and the three men on board were taken off and safely landed. The gale abated in the evening of that day, and Captain Rider and his men took the captain of the schooner on board again, and brought the vessel safely into Little Egg Harbor.

March 31.—Several vessels near the pier at Lewes, Delaware, were in difficulty, the sea being heavy and the wind very strong. The keeper of Station No. 1, Fifth District, came to the scene on horseback and remained all day on the watch. One schooner drove ashore and the station surf-boat went out and brought the captain to land. A large schooner was in considerable danger from her stern battering against

the pier, and the keeper made some lines from her fast to the pier in order to keep her free. Several vessels in the harbor were injured, and two or three had to go to sea with their pilots, the pilot-boat being unable to go out to take the pilots off.

March 31.—At 8 a. m., the keeper of Station No. 1, Sixth District, North Carolina, observed the schooner *James M. Vance*, of Philadelphia, driving before a strong north-northwest wind in a heavy sea, and judging that she would certainly come ashore, ordered out the apparatus. As she passed Cape Henry light her jib blew away, her fore boom broke, and she became unmanageable. By 10 o'clock she drove ashore about two and three-quarters miles north of the station. The life-saving crew were meanwhile dragging the apparatus along the beach with as much speed as a heavy head wind and a high tide flooding the sands permitted; a horse being at length employed to expedite operations. The keeper of Station No. 2, having heard of the wreck by the telephone between the stations, overtook them on horseback before they came abreast of the vessel, which they did by 11 o'clock. A shot-line was immediately sent over the vessel, falling between the foremast and and jib-stay, the breeches-buoy was quickly rigged up, and the keeper of Station No. 2, with the consent of the other keeper, got into it and was hauled out to the wreck, which was pounding heavily, the sea meanwhile breaking over her. After conference with the captain, the keeper of Station No. 2 returned to the land by the breeches-buoy, and was followed one by one by the six men on board, the captain leaving last. Four of the crew of Station No. 2 arrived upon the scene toward the close of the operations, and lent their assistance. The five sailors of the schooner were taken to the station and cared for. The vessel became a total loss.

March 31.—The Austrian ship *Norina*, of Trieste, bound from New Orleans to Gibraltar, with a cargo of corn and lumber, sprung a leak off the coast of Florida, and in a few hours went ashore about ten miles north of Station No. 2, Seventh District, Florida. The crew, consisting of thirteen persons, landed in the ship's boat, but in so doing capsized and lost the water and provisions they had taken from the ship. Three of the number went in search of assistance and reached House of Refuge (Station) No. 2, Seventh District, about daylight on the 1st of April. The acting keeper, after giving the weary men breakfast, took his boat and returned with the sailors, taking bread and water along, and going up the Indian River until opposite the ship. Here they disembarked, and cut their way through a mango swamp to the sea-shore, where they found the captain and the remainder of the crew—the vessel lying about a quarter of a mile from the land with bow to the shore, sails set, and the sea running so high as to preclude any possibility of reaching her. In this condition of things the keeper took the men to the station, where everything was done to make them comfortable until the next day, when the weather permitted a return to the vessel to save the crew's clothing and the few provisions that remained. This they did, and then returned to the station, where they remained five days, when they found opportunity to leave. The ship and cargo were a total loss. But for the timely assistance furnished by the station, the men must have perished from hunger and thirst.

April 4.—The schooner *Sarah J. Fort*, of Tuckerton, New Jersey, ran ashore in a heavy northwest snow-squall and rough sea, at 1.30 a. m., nearly two miles from Station No. 7, Second District, Massachusetts. The crew of the station made all haste to the wreck, and upon their arrival found it already a ruin, the main and mizzen masts unstepped, and

the crew of six men up in the forerigging. It appears that the keeper did not understand the powers of the Lyle gun, which had just been supplied to the station, and used the old ordnance, nine shots from which were fired, none succeeding in getting a line to the vessel. By 11 o'clock in the forenoon the ebbing tide enabled the crew of the schooner to descend from the forerigging and take refuge on the port bow. The foremast fell subsequently and the vessel continued to break up. The comparative subsidence of the sea, due to the ebb, now made the attempt at a launch possible. At the first effort the boat filled. The second, the boat got beyond the first breaker, when the sea swept her back upon the beach, breaking her timbers and knees so as to render her useless. A number of people now arrived upon the beach from Provincetown with a light boat, which put out for the wreck with a fresh volunteer crew. In the attempt to go out it filled instantly, was emptied and started again, filled once more, but was kept afloat by bailing, and succeeded in getting to the wreck and taking off four men, the other two having dropped from the rigging through exhaustion before the foremast fell, and perished. In landing, the boat capsized with all on board, who were saved by the by-standers, now present in a large number, rushing into the surf with the keeper and his men and hauling them ashore. The men saved were taken to the station in a greatly exhausted condition, and the life-saving crew, who had started upon their work in the night, and eaten nothing since the evening before, were completely worn out. As this wreck involved the loss of two lives, it was made the subject of official investigation, the result of which will be found on page 38.

April 4.—The morning watch of Station No. 40, Fourth District, New Jersey, discovered a vessel, which proved to be the schooner *Fanny Tracy*, of Perth Amboy, New Jersey, drifting, nine miles up Delaware Bay, and five miles off shore, with her sails blown away and evidently in a sinking condition. The life-saving crew hired horses and transported the surf-boat on its carriage seven miles up the bay, where they launched it through a heavy surf, the wind blowing 35 miles an hour, and went out to the vessel. As the hull was seen to be under water, it was supposed that her crew were in the rigging, but upon nearing the vessel no one was found on board. It turned out that the vessel was disabled on the 31st of March, and her crew taken off by a tug. She eventually drifted down the bay within two and a half miles of the station, where she stranded, and was got off in bad condition by wreckers and towed to Philadelphia.

April 4.—The keeper of Station No. 10 (Saint Joseph's), Eleventh District, Lake Michigan, received a telegram from Coloma, which Mr. Eugene Beach had walked ten miles to send, stating that the schooner *South Haven*, of South Haven, Michigan, was lying off Pauline pier showing signals of distress. The keeper started at midnight with his crew in the life-boat, in tow of a tug, for the locality, which was about twenty miles distant. The sea was heavy and a northwest gale was prevailing. The life-boat arrived at South Haven by 6 o'clock the next morning, the vessel in the meantime having been towed into harbor by another vessel. She had been iced over and her rigging so frozen that the sails could not be hoisted.

April 10.—The schooner *Mary Ellen*, of St. Andrews, New Brunswick, misstayed and grounded at four o'clock in the morning on the South Breaker, one mile south of White Head Light-House, Maine. She was at once discovered by the patrolman of Station No. 5, First District Maine, and in twenty minutes afterward the surf-boat was launched for her relief

Her sails had been hauled down after she struck, and her forward part was on the rocks, where she was rolling with the swell, and striking so heavily that in a short time her hull would have been beaten in. The life-saving crew hoisted her mainsail, which stopped the rolling. They remained on board until the ebb-tide left the schooner safely aground, returned when the tide began to flow, ran out anchors and succeeded in heaving the vessel off the rocks into deep water, made sail and ran her past White Head Light-House into Muscle Ridge Channel, and left her safely on her way. Her crew were four in number.

April 10.—The schooner *Mary Emma*, of Onancock, Virginia, stranded with six men on board, at 2.45 p. m., in a strong southeast wind and heavy sea, half a mile east of Station No. 17, Fourth District, New Jersey. The life-saving crew boarded her, and by the use of her sails worked her into deep water and brought her to a safe anchorage.

April 11.—At 5 a. m., the patrolmen of Station No. 5, First District, Maine, saw that the small schooner *Onaway*, of Saint George, Maine, which had been lying moored by her anchors with no one on board, had dragged her anchors and was drifting on to the rocks. An east-southeast gale was raging, with a snow-storm and heavy sea. The station crew were at once aroused, launched a small boat, and reached the schooner just as she struck the rocks. They boarded her, reefed and set her mainsail, ran out anchors, hauled her a length ahead, hoisted her jib, and ran her into a sheltered cove, where they moored her securely, furled her sails, and left her. But for this prompt assistance, her total destruction would have been inevitable.

April 11.—The schooner *Alice M. Lewis*, of Gloucester, Massachusetts, with twelve men on board, ran aground in a northwest wind and high sea at ten o'clock in the morning on the north bar of Townsend's Inlet, New Jersey. The crew of Station No. 34, Fourth District, New Jersey, went out to the vessel, took ashore one sick man, whom they kept at the station, assisted in getting the men's clothing and the stores ashore, and sent a telegram for the captain to a New York Wrecking Company. The vessel became a total loss.

April 16.—An open sail-boat, carrying too much sail in the squally weather, shipped water and filled one mile from Ottawa Point, Lake Huron, at 4.30 p. m., having on board a man with a lady and a child. The keeper of Station No. 4, Tenth District, saw the boat when returning from East Tawas in the station supply-boat, ran down to their relief and took the lady and child to the light-house, they being much chilled by the wet and cold. The man stayed in the boat to try to bail her out until the keeper should return and help him to land; succeeded in the effort, and was met by the returning keeper, who assisted him to gain the shore.

April 18.—The schooner *Charlie and Willie* of Machias, Maine, with three men on board, got among Brown's Ledges, on the Maine coast, and anchored at 11 a. m., where she would have grounded and broken up at low tide. The patrolman of Station No. 5, First District, Maine, reported her situation to the keeper and crew, who went to her, and finding that the signal-flags warning her captain of his danger were not understood, launched the surf-boat and boarded her. The captain was quite unconscious of his peril, but upon being shown the rocks gave up the charge of the vessel to the life-saving crew, who hoisted her sails, got up her anchors, ran her out from the ledges, and put her into Duck Cove, where she was sheltered from the east wind. The vessel and probably the crew would have been lost but for this skillful aid.

April 19.—The steamship *Great Republic*, bound from San Francisco

to Portland, Oregon, with a cargo of general merchandise, a crew of 94 persons, and 579 passengers, ran aground at 1 a. m., in the attempt to enter the Columbia River. The keeper of Life-boat Station No. 3, Twelfth District, was in attendance during the landing of her passengers and crew, and voluntarily rendered such assistance as was in his power. Fourteen persons were lost by the accidental capsizing of one of the ship's boats while the landing was in progress. (See page 42.)

April 23.—The schooner *Orient*, of Boston, Massachusetts, with two men on board, was struck about noon by a violent squall near Gangway Ledge, Muscle Ridge Channel, Maine, which burst her flying-jib and foresail. The vessel was brought to, and, in an attempt to anchor, parted her chains, and was in an almost helpless condition. The keeper of Station No. 5, First District, Maine, was near the boat-house with four surfmen, helping some small boats to land, and at once launched a boat and went out with his men to the schooner. The sea was very rough, and most skillful maneuvering was required to take the boat through the combers which threatened to swamp her. After a hard pull in this way of about two miles, the wreck was reached and found heading westward with reefed mainsail and jib, her flying jib bursted and gone aloft, her main jib down-haul parted, which prevented her crew from lowering the sail, one anchor gone and the other without a stock. The life-saving crew boarded her, cleared her flying-jib, and ran her for Seal Harbor. Her wheel was wrenched, so that it took two of the surfmen to steer her. The keeper and the other two surfmen, aided by the two sailors, hauled in the stockless anchor upon deck. The only cutting-tool on board was an old dull ax with a broken handle, by means of which the surfmen contrived to make a stock for the anchor, which was finished by the time they got the vessel to her place of mooring. Having anchored her, they finished clearing away her torn sails, hauled down her mainsail and jib, and left her in safety.

April 23.—Two of the life-saving crew of Station No. 1, Ninth District, Lake Ontario, were practicing with their surf-boat at the mouth of the Big Sandy, the weather being stormy, a heavy surf beating up the creek and much ice floating and piled in banks along the shore. The men ventured out too far and the boat capsized. They clung to her, but, drifting among the floating ice, were in momentary danger of being washed off. Captain Van Alstine, the keeper of the station, and the three of the crew remaining on shore, launched the metallic life-boat, weighing more than 2,000 pounds, and worked their way out through the field of tossing ice, in the teeth of the gale, and rescued them.

April 30.—A small sail-boat, with two lads, out on a pleasure excursion, was capsized by a heavy squall on Lake Ontario, near Station No. 3, Ninth District, Oswego, New York. One of the volunteer crew of the station, at work on the pier, observed the accident, and, taking a small row-boat that was at hand, went out to the rescue, a task by no means easy, as the sea was running high, and the boat difficult to manage. Through the gallantry of the surfman, the lads were rescued and the boat saved.

May 3.—A schooner-rigged sail-boat, with two men on board, bound from Mistake Harbor to Lubec, Maine, with a cargo of short lumber, struck on Sail Rock, not far from Quoddy Light-House, at about half-past three o'clock in the morning. There was a heavy sea, and the tide rising made the position of the men one of great danger. Their plight was first discovered by Mrs. Thayer, wife of the light-house keeper, who at once went for help, while her husband went out as far as he dared in a small skiff, and lay off near the rock, to encourage the men until effectual help should arrive. Mrs. Thayer went through the woods to

the nearest house, and informed one of the crew of Station No. 1, First District. The surfman sent at once for the keeper, and, in the mean time, took his brother, and went out in a fishing-boat to the rock, where they were able to get near enough for the men to jump into the boat. The station boat joined them as they were returning, after landing the men, to endeavor to save such of the boat property as could be rescued. The main and fore sails were saved, but the boat was lost. The timely warning of Mrs Thayer, and the prompt action of the surfman, saved the lives of the two men.

May 3.—The schooner *Julia A. Berkele*, of Jeffersonport, Long Island, with a crew of six men, bound from Saugerties, New York, to Washington, D. C., with a cargo of curb-stones, stranded about a mile east-north-east of Station No. 17, Fourth District, New Jersey. Her condition was discovered at about 8 a. m., and at once the crew—at that time not employed at the station—were called together, the life-boat launched, and the stranded vessel boarded at 9.30 a. m. Two anchors were run out, and a part of the cargo discharged; then, with the assistance of the keeper and four men of Station No. 18, the vessel was got off and proceeded on her way.

May 10.—The schooner *George S. Low*, of Gloucester, Massachusetts, bound from Gloucester to New York, with a cargo of mackerel, went ashore about a mile north of Station No. 33, Fourth District, New Jersey. When discovered by the keeper of the station, the crew had landed themselves, and nothing could be done to save the vessel. But the shelter of the station, and the use of the hand-cart for removing their effects from the wreck, were gladly accepted by the crew. The station was not manned at this season.

May 11.—The fishing-schooner *Baltic*, of Portland, Maine, bound to Grand Menan, New Brunswick, with a cargo of lobsters, drifted, during a thick fog, on to Quoddy Head Rocks, near Station No. 1, First District, Maine, at about two o'clock in the morning. The cries of her crew for help were shortly after heard by the keeper, who summoned his crew, manned the boat, and went to their assistance. They ran out an anchor, hoping to heave the schooner off the rocks when the tide arose, the ebb-tide leaving her high and dry upon her beam-ends on the rocks. Awaiting the flood-tide, they obtained boats, and took out the greater portion of her cargo; and when this was done, took the tackles from the mast-head and endeavored to right her, but were unsuccessful. Before she could be raised or righted, she took the sea in at her hatches, and, in order to lose as little as possible, she was stripped of her sails and rigging, which were taken to the station. The three men, crew of the schooner, were kept at the station for two days. The vessel went to pieces.

May 11.—Two men in a row-boat, while under the influence of liquor, attempted to row from Chicago to "The Crib," off the harbor. The wind being high, and the sea rough, they were unable to manage the boat, and were not only drifting out to the lake, but the boat was fast filling with water. Their situation was discovered by a surfman of Station No. 11, Eleventh District; and the keeper, with a part of the crew, immediately went to their assistance, and rescued the men, who were in a very exhausted condition, and could not have held out much longer.

May 16.—The propeller *Champlain*, of Cleveland, Ohio, bound from Ogdenburgh to Chicago, stranded at the east end of Thunder Bay Island, near Station No. 6, Tenth District, Michigan, at 10.30 a. m. In fifteen minutes from the time she struck the life-boat was launched, and

reached her at 11.5 a. m., and, taking on board the mate of the vessel, went to Alpena, ten miles distant, and obtained a tug. Vessel was saved, with little damage beyond tug bills.

May 17.—The schooner *Almon Bird*, of Rockland, Maine, with eight men on board, stranded at 5 a. m., in a thick fog and heavy sea, on Seal Cove Ledges, southwest part of Cross Island, coast of Maine. The life-saving crew of Station No. 2, First District, offered their assistance, which was not accepted. They visited her on the three successive days, and on the third day joined in with her crew and helped to kedge her off. After she had floated, her captain bargained with a tug, which completed the operation of getting her out to sea.

May 23.—A small sail-boat having on board two men, bound from Chicago to "The Breakwater," was capsized. The watchman at Station No. 11, Eleventh District, immediately gave the alarm, and preparations were made to launch the surf-boat, but before it was accomplished the keeper discovered that a part of the crew who were exercising with his sail-boat and looking about, as is their custom, for accidents to yachts or small boats, had reached the capsized boat and rescued its men. They also towed the sail-boat in.

May 26.—A sail-boat 17 feet long, in boarding a schooner which was asking for a pilot, was capsized and sunk about a mile southwest of Gurnet Lights. The keeper of Station No. 4, Second District, Plymouth, Massachusetts, observed the accident and went out at once in a dory, and with the assistance of the pilot who owned the boat, and another, succeeded in getting her up with the grapnels belonging to the station, and then towed her a distance of three miles to the beach.

May 26.—At 9.20 a. m., a row-boat containing a man and woman capsized on Lake Erie, three or four hundred yards from the west pier at Cleveland. The man was saved by a tug which reached the capsized boat before the keeper of Station No. 8, Ninth District, could get out to the spot. The woman was under the capsized boat, and was lost, efforts to recover her body by the station men proving futile. (See page 44.)

May 28.—About 7 p. m., the crew of life-saving Station No. 1, Ninth District, Lake Ontario, pulled out to the schooner *Volunteer*, of Big Sandy, New York, which was about five miles distant. They found her destitute of provisions, pulled back to the station, and sent out two men with supper for her crew of four persons. The next morning, May 29, they returned to the vessel with breakfast for the people on board, and a breeze having sprung up from the west they undertook to pilot her in. The vessel was so heavily laden that she drew more water than there was on the bar, and the life-saving crew lightened her by taking off a portion of her load of lumber, of which they made rafts; then hove her inside the bar, and reloaded her with the lumber taken off.

May 30.—The schooner *Seaman*, of Port Huron, Michigan, bound from Alpena to Erie, laden with lumber, dragged her anchors and drifted ashore at 3 a. m., on the east side of Presqu'isle Point, during a north-east gale, and was scuttled by her crew to prevent her from breaking up. The life-saving crew of Station No. 6, Ninth District, Lake Erie, went out to the vessel in the surf-boat, but found that their assistance was not required. They subsequently helped to get off her deck-load into a lighter, and aided the revenue steamer *Perry* in getting her afloat and taking her into port.

May 31.—Service was rendered by the keeper of Station No. 9, Second District, Massachusetts, at the wreck of the schooner *Charles S. Rogers*, of Rockport, Massachusetts, which took place a mile from shore, by collision with the steamer *Hercules*, about two hours after midnight. The

schooner had five men on board, including her captain, one of whom was drowned in the fore-castle when she sunk. The other four were taken off by the colliding steamer. The station had been closed for the season, but about noon the keeper, being on the beach, saw a masthead spiring from the distant water (the other mast had been broken off at the deck), and as soon as possible mustered a volunteer crew and put out to the spot in the surf-boat. The boat was away from shore four hours, and thoroughly explored the scene of the disaster. The protruding masthead was broken off just clear of the standing rigging, which would bring it about 4 feet below water at high-tide, and as it was directly in the track of passing vessels it was very dangerous to navigation. Consequently, after due deliberation, the keeper concluded to cut the rigging, which at once let the mast float out and removed the danger to vessels. His action in this respect was subsequently approved by the underwriters and wreck commissioners. Suitable marks were placed by him before leaving, so that the wreck could be found easily. The cargo, which was of iron pipe, was afterwards saved by divers, one of whom also recovered the body of the drowned sailor from the fore-castle.

May 31.—The *Vixen*, a sloop-rigged yacht, of Oswego, New York, with a party of four on board, anchored off Station No. 2, Ninth District, Lake Ontario. In the night the wind shifted and freshened, and, the anchorage being poor, the yacht began to drag and drift towards the shore, which is rocky and dangerous, where she must have been seriously damaged or lost. She made signal for assistance. The keeper went at once with his crew to her relief, hove up her anchor, and sailed her safely into Salmon Creek, thus, probably, saving the vessel and crew from destruction, as the gale increased as the yacht made the harbor.

May 31.—A young girl rowed in her father's boat *Daisy* from Chicago to "The Crib." On her return, about a mile east of the harbor her strength gave out, and, the tide being strong and the wind fresh off shore, she was drifting helplessly out into the lake. Surfman No. 3, of Station No. 11, Eleventh District, being on watch, discovered her plight and reported to the keeper, who ordered off the sail-boat to her rescue, accompanying it himself. They found the girl much exhausted, and took her on board the sail-boat, carried her to the station, and gave her refreshment, after which she was able to return safely home.

June 1.—The schooner *Marshall Perrin*, of Sandwich, Massachusetts, bound from Boston to Philadelphia, in ballast, was stranded two and a half miles north of Station No. 12, Second District, Massachusetts, at low tide, in a thick fog, at about 1 a. m. At 5.30 a. m. she was discovered by a surfman of Station 12, who reported to the superintendent. Part of the life-saving crews of Stations 11 and 12 and several private citizens put off in small boats and assisted in getting the vessel off, so that she proceeded on her way without damage.

June 5.—At 1 a. m., the schooner *Souvenir*, of Parleboro', Nova Scotia, with a crew of seven men, ran ashore in a heavy sea, during a fog, upon Egg Rock, coast of Maine. The life-saving crew of Station No. 3, First District, Browney's Island, got news of the wreck at their homes in Jonesport, in the afternoon of the day, when the fog cleared up, and setting sail for Browney's Island, gained the station (which was closed for the season), launched the surf-boat, and by 8 p. m. reached the vessel. They at once ran out her anchors to keep her from going further up on the rocks, and at low tide dug a trench behind her, with the assistance of the vessel's crew and two fishermen. These labors were continued until half past one o'clock in the morning of June 8, when the

vessel came off the rocks into deep water. She was taken by the station men under the lee of Browney's Island, where they anchored and left her in charge of her captain and crew.

June 6.—A sail-boat, named the *Nellie Walker*, capsized, with two men on board, near Gurnet Point. Two surfmen of Station No. 4, Second District, Massachusetts, happened (although the station was not then open for service) to see the accident, and put out in a boat to the relief of the men, who, however, could not be found, having perished. (See page 44.)

June 9.—The fish-boat *Shaffer*, of Erie, Pennsylvania, with two men on board, was being towed in from the fishing grounds about 9 a. m., when the tow-line parted and the *Shaffer* capsized. The accident occurred about half a mile east of Station No. 6, Ninth District, Lake Erie, and the life-saving crew at once launched their boat, rowed out, helped to get the capsized boat in to the light-house pier, hoisted it up with tackles, bailed it out, and put it into condition to be towed into port.

June 9.—The steamer *Annie Moiles*, of Bay City, Michigan, bound from Au Sable to Ottawa Bay, with a raft of lumber in tow, stranded about midnight on a shoal off Ottawa Point. Her condition was discovered by the life-saving crew of Station No. 4, Tenth District, Lake Huron, in the early morning, who at once went out to her with the supply-boat, took the mate on board, and proceeded with him to Tawas, where a tug was secured to assist in releasing her from her position, which, owing to a heavy sea and strong wind, was extremely difficult. The station crew lent their efforts to the work, and by evening the steamer was got off, together with the lumber in tow. There were seven persons on board.

June 12.—The fish-boat *Louis*, of Erie, with a crew of three persons, was capsized by a sudden puff of wind in McDonald's Run, about four miles east of Station No. 6, Ninth District, Lake Erie. The life-saving crew were watching the boat at the time and at once proceeded to the rescue. The fishermen were taken into the life-boat, and the *Louis* was righted and saved.

June 16.—The crew of Station No. 11 (Chicago), Eleventh District, Lake Michigan, were summoned to the assistance of a yacht which was being dashed by the sea against the breakwater about a mile and a half from the station. The surf-boat was at once launched and taken in tow by a steam-tug, but was compelled to let go when near the breakwater, the heavy sea astern threatening to dash the boat to pieces against the vessel. Taking to the oars, the life-saving crew succeeded in getting alongside the yacht, from which they carried out a line through the breakers to the tug. It was then discovered that the yacht had lost the end of the line, which compelled the running out of the line once more by the crew of the surf-boat. The yacht, the stern of which was upon the beach, was then got off by the tug. But for the aid rendered by the surf-boat, the yacht would have pounded to pieces in a short time, according to the statement of her captain.

June 20.—At 3 p. m., the sloop *John Leach*, of Troy, New York, bound from New York to Baltimore, became unmanageable from the bursting of her sails, in a heavy sea but clear weather, off Little Egg Harbor, New Jersey, having five men on board. One of the surfmen, sailing in a yacht, discovered her, and notified the keeper of Station No. 27, Fourth District, who went out to her with his crew in the surf-boat. The captain declined assistance, but in the evening the jib-stay parted, leaving the mast in danger of falling, and three of the sailors were sent on shore to the station for help. The life-saving crew at once manned the surf-

boat, and started for the vessel at 2 a. m. of June 21. She was now ten miles distant from the station, and the crew reached her at sunrise. Her mast was found to be in danger of falling, but her hull all right. The two men remaining on board were taken off and rowed ashore by the life-saving crew, and the vessel was towed by fishermen into Little Egg Harbor.

June 22.—About 6 p. m., two intoxicated men started to cross the river in a skiff at Charlotte, Lake Ontario, and were capsized about 50 feet from the east pier. A surfman belonging to Station No. 4, Ninth District, put out in a boat and rescued them.

June 27.—On the night of the 27th of June the schooner *Amos Cutter*, of Gloucester, Massachusetts, returning to that place from the fishing grounds with a cargo of fish, owing to thick weather lost her bearing, and was wrecked on Matinic Island, about six miles from Station No. 5, First District, Maine. The place of the disaster being hidden by the island from the view of the station, the casualty was not discovered until the 29th, when a part of the crew, having taking advantage of passing dories, arrived at the station on Whitehead Island, in a destitute condition, exhausted with exertion, exposure, and long fasting. They were taken in at the station and furnished with food, fire, and beds. The keeper learning that there were others of the crew on the island awaiting relief, called together such of his surfmen as were to be had (the station not being at that time open for service) and one alternate, and went to their rescue, but found wreckers already there and in charge. The five men who had sought the shelter of the station remained until the next day, hospitably cared for, when they left with letters from the keeper to the collector of customs at Rockland, Me., who they hoped would aid them in getting home, as they were in an utterly destitute condition.

June 27.—At 3 p. m., the schooner *Empire*, of Bangor, Maine, with two men on board, stranded during a fog upon Hay Island Ledges, at the entrance of Seal Harbor, Maine. The keeper of Station No. 5, First District, summoned two surfmen (the station being closed for the season), and went off in a small boat to the vessel, and, with the assistance of other boats, got her off the rocks and towed her into Seal Harbor. The rudder of the schooner was broken, and the keeper and his men took it off and repaired it with two-inch plank and spikes, rehung it, and repaired the wheel. The vessel was leaking badly, and the rest of the station crew having arrived they towed her upon the flats, where she was examined and a bad leak was found in her garboard seam. This was stopped, the schooner generally put into condition, and she sailed on the next tide.

June 27.—The schooner *Lydia Budd*, of Cape May, New Jersey, bound from Great Egg Harbor to New York with a cargo of wood, having on board, beside the three men who manned her, the captain's wife and two children, got into the breakers on Absecom bar, about one mile east of Station No. 27, Fourth District, New Jersey. A signal of distress was hoisted and the keeper of the station at once manned the surf-boat and went to the sinking vessel. After taking the woman and children to the shore, the crew returned to the wreck to render assistance in saving from it whatever might be possible, but it was sinking so rapidly that they were obliged to take the crew of the vessel off immediately.

June 27.—The yacht *Belle*, of Charlotte, New York, took a party of ladies and gentlemen from Charlotte to Sea Breeze, where she left them, and on her return trip to Charlotte, owing to deficient ballast, was capsized in a squall. The keeper of Station No. 4, Ninth District, Lake Ontario, believing that the pleasure party were on board at the time of

the accident, went to the rescue, four miles distant, with a steam-tug which he hired to tow the surf-boat to gain time in reaching them. He found the two men who manned the yacht clinging to her, took them off, and towed the vessel back to Charlotte.

June 28.—At 5 a. m., the schooner *Mist*, of Oswego, New York, laden with coal and having three men on board, ran aground upon a bar at the mouth of Little Salmon Creek, Lake Ontario, and was hove off by the crew of Station No. 2, Ninth District, whose exertions were continued from a few minutes after 5 o'clock in the morning until 3 o'clock in the afternoon.

TABLE OF WRECKS

WITHIN THE FIELD OF OPERATIONS OF LIFE-SAVING SERVICE

SEASON OF 1878-'79.

LIFE-SAVING SERVICE.—TABLE

DISTRICT No. 1.—EMBRACING COASTS

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878.						
Aug. 17	Brown's Ledges, near Whitehead Island.	5	Sc. Daniel M. French	Barnstable, Mass.	Childs	191
Sept. 14	Red Ledge, Wheeler's Bay	5	Sc. Geo. B. Ferguson	Belfast, Me.	Ferguson	144
Sept. 14	Off Whitehead Island.	5	Sc. David Faust	Ellsworth, Me.	Smith	217
Oct. 10	Seal Harbor, three-quarters of a mile from Station No. 5.	5	Sc. Commodore	Bath, Me.	Frank	12
Oct. 17	Brown's Ledges, near Station No. 5.	5	Sc. Lucy Jane	Rockland, Me.	Hopkins	44
Oct. 20	Burnt Island Ledge	5	Sc. Mary E. Pearson	Islesborough, Me.	Pendleton	120
Oct. 21	Long Point, Spruce Head Island.	5	Sc. Wreath	Ellsworth, Me.	Hodgkins	98
Oct. 24	Shoal Ground, Wood Island Harbor.	6	Sc. Anna Frye	Pembroke, Me.	Bryant	128
Nov. 4	Duck Ledge Bar, Quoddy Bay	1	Sailboat	Lubec, Me.	Ellis	.....
Nov. 18	Burnt Island Ledge, Seal Harbor.	5	Sc. Arianna	Saint John's, N. B.	Wood	163
Nov. 22	Foss Beach, one mile east of Station No. 7.	7	Sc. Sea Queen	Franklin, Me.	Dyer	80
Nov. 22	Straw's Point	7	Sc. Caroline Knight	Rockland, Me.	do	99
Nov. 22	Quoddy Bay, west side	1	Sc. Guiding Star	Saint John's, N. B.	Palmer	56
Nov. 23	Rackliff Island, Seal Harbor.	5	Sc. Mary A. Rowland	Bangor, Me.	Pendleton	84
Nov. 23	Muscle Ridge Channel, head of Seal Harbor.	5	Sc. Polly	Rockland, Me.	Lewis	46
Dec. 3	Godfrey Ledge, east side of Quoddy Bay.	1	Ship Owego	New York City	White	974
Dec. 17	Guptill's Ledge, Quoddy Bay	1	Sailboat	Lubec, Me.	Wallas	.....
Dec. 21	Southeast side of Stage Island, Saco River.	6	Sc. S. H. Pool	Wiscasset, Me.	Pushard	82
Dec. 24	Southern Point, Burnt Island, Seal Harbor.	5	Sc. Lucy Robinson	Deer Isle, Me.	Beverage	80
1879.						
Jan. 30	Hay Island Ledge	5	Sc. Emma	Saint John's, N. B.	Howard	130
Feb. 20	Rye Ledge, one and a half miles south of Station No. 7.	7	Sc. Torpedo	Lubec, Me.	Wilson	56
Feb. 25	Ragged Neck Point, Rye Harbor.	7	Sc. Rival	Gloucester, Mass.	Smith	54
Feb. 25	Verrill Point, Rye Harbor.	7	Sc. Northern Star	do	Lane	56
Feb. 26	Fisherman's Island, Southwest Point.	3	Sc. Frances	Saint John's, N. B.	Bradley	142
Mar. 7	Duck Ledge, Quoddy Bay	1	Sc. Addie Sawyer	Calsia, Me.	Cook	132
Mar. 31	Seal Harbor, near Whitehead Island.	5	Sailboat	Saint George, Me.	Maker	.....
Mar. 31	Southeast side entrance to Pool.	6	Sc. Oregon	Rockland, Me.	Richards	62
Mar. 31	One mile southeast Straw's Point.	7	Sc. Fair-Dealer	Castine, Me.	Hutchins	63
Apr. 10	South Breaker, one mile south of Whitehead Light.	5	Sc. Mary Ellen	Saint Andrew's, N. B.	Clark	113
Apr. 11	Whitehead Island, north point of.	5	Sc. Onaway	Saint George, Me.	.....	4
Apr. 18	Brown's Ledges, near Station No. 5.	5	Sc. Charlie and Willie	Machias, Me.	Bragg	16
Apr. 23	Near Gangway Ledge, Muscle Ridge Channel.	5	Sc. Orient	Boston, Mass.	Blake	58
May 3	Sail Rock, near Quoddy Light	1	Sailboat	Lubec, Me.	Ramsdell	7
May 6	Eastern Egg Rock	3	Sc. Zina	Machias, Me.	Bradbury	91
May 11	Quoddy Head, near Station No. 1	1	Sc. Baltic	Portland, Me.	Greenlaw	88
May 15	South Side, Seal Cove	2	Sc. Ada Ames*	Rockland, Me.	Adams	280
May 17	Seal Cove Ledges, Cross Island.	2	Sc. Almon Bird	do	Drinkwater	397
June 5	Egg Rock, near Browney's Island.	3	Sc. Souvenir	Parrsborough, N. S.	Hatfield	173
June 27	Hay Island Ledge	5	Sc. Empire	Bangor, Me.	Rider	43
June 27	Cat Ledge, Matinicus Island	5	Sc. Amos Cutter	Gloucester, Mass.	Wilson	60
	Total					

* No assistance rendered by life-saving crew; got off by steam-tugs.

OF WRECKS, SEASON OF 1878-'79. OF MAINE AND NEW HAMPSHIRE.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
Boston, Mass ..	Hurricane Isl- and, Me .....	.....	\$6,000 .....	.....	\$6,000	\$5,925	\$75	5	5	.....	.....	.....
.....do	Balfast, Me .....	.....	7,000 .....	.....	7,000	7,000	.....	5	5	.....	.....	.....
Portsmouth, N. H.	Ellsworth, Me .....	.....	3,000 .....	.....	3,000	3,000	.....	5	5	.....	.....	.....
Bath, Me	Rockland, Me ..	Apples	2,000	\$500	2,500	2,500	.....	2	2	.....	.....	.....
Boston, Mass ..	.....do	Flour	800	1,000	1,800	1,800	.....	6	6	.....	.....	.....
Bangor, Me	Boston, Mass...	Lumber	2,000	1,500	3,500	3,300	200	4	4	.....	.....	.....
.....do	Stonington, Conn. ....	... do	4,000	2,000	6,000	5,450	550	4	4	.....	.....	.....
Windsor, N. S. ..	New York City.	Plaster	2,000	450	2,450	2,375	75	5	5	.....	.....	.....
Lubec, Me	Fishing .....	.....	50 .....	.....	50	40	10	1	1	.....	1	1
Windsor, N. S. ..	Franklin, Me ..	Plaster	6,000	2,000	8,000	7,500	500	7	7	.....	.....	.....
Salem, Mass	Franklin, Me ..	.....	2,500 .....	.....	2,500	2,500	.....	4	4	.....	.....	.....
Boston, Mass ..	Rockland, Me ..	Fire-brick ..	4,000	150	4,150	1,600	2,550	5	5	.....	.....	.....
St. John's, N. B. ..	Boston, Mass ..	Lumber	2,000	700	2,700	2,200	500	3	3	.....	.....	.....
Bangor, Me	Plymouth, Mass	... do	1,800	1,200	3,000	2,450	550	3	3	.....	.....	.....
Owl's Head, Me ..	Seal Harbor, Me	.....	1,000 .....	.....	1,000	900	100	2	2	.....	.....	.....
Almer, N. B.	Liverpool, Eng- land.	Lumber	18,000	7,000	25,000	.....	25,000	15	15	.....	.....	.....
Mistake Har- bor, Me	Eastport, Me ..	Fish	100	75	175	175	.....	4	4	.....	.....	.....
Wiscasset, Me ..	Saco, Me	Lumber & staves.	2,000	1,200	3,200	800	2,400	4	4	.....	4	8
Boston, Mass ..	Deer Isle, Me ..	.....	1,400 .....	.....	1,400	600	800	4	4	.....	.....	.....
New York City ..	St. John's, N. B.	Coal	7,000	1,000	8,000	7,950	50	6	6	.....	.....	.....
Lubec, Me	Boston, Mass...	Smoke d herring.	800	1,500	2,300	150	2,150	4	4	.....	4	27
Gloucester, Mass.	Portsmouth, N. H.	Fish	1,410	700	2,110	.....	2,110	10	10	.....	10	10
.....do .....	.....do .....	... do	1,581	800	2,381	1,881	500	9	9	.....	9	18
New York City ..	Saint John's, N. B.	General ...	4,000	10,000	14,000	12,000	2,000	7	7	.....	.....	.....
Boston, Mass ..	Calais, Me	Corn	6,000	2,000	8,000	8,000	.....	7	7	.....	.....	.....
Seal Harbor, Me .....	.....	.....	30 .....	.....	30	30	.....	1	1	.....	.....	.....
Rockland, Me ..	Providence, R. I	Lime	3,000	800	3,800	3,800	.....	4	4	.....	.....	.....
Gloucester, Mass.	Castine, Me .....	.....	1,200 .....	.....	1,200	1,200	.....	3	3	.....	.....	.....
Boston, Mass ..	Saint Andrew's, N. B. ....	.....	6,000 .....	.....	6,000	5,900	100	4	4	.....	.....	.....
.....do	In harbor .....	.....	400 .....	.....	400	400	.....	.....	.....	.....	.....	.....
Matinicus Isl- and, Me	Rockland, Me ..	Wood	1,000	64	1,064	1,064	.....	3	3	.....	.....	.....
Boston, Mass ..	Bangor, Me	Corn	800	1,500	2,300	2,100	200	2	2	.....	.....	.....
Mistake Har- bor, Me	Lubec, Me	Box-shooks	150	50	200	.....	200	2	2	.....	.....	.....
Boston, Mass ..	Machias, Me ..	General ...	1,000	5,000	6,000	.....	6,000	5	4	1	.....	.....
Grand Manan, N. B.	Jonesboro', Me	Lobsters ..	750	100	850	75	775	3	3	.....	3	6
Rockland, Me ..	Windsor, N. S. ..	.....	10,000 .....	.....	10,000	5,000	5,000	6	6	.....	.....	.....
.....do	St. John's, N. B.	.....	16,000 .....	.....	16,000	14,000	2,000	8	8	.....	.....	.....
New York City ..	Parrsborough, N. S. ....	.....	5,000 .....	.....	5,000	4,200	800	7	7	.....	.....	.....
Boston, Mass ..	Bangor, Me .....	.....	800 .....	.....	800	700	100	2	2	.....	.....	.....
Fishing Gr'nds ..	Gloucester, Mass	Fish	2,000	600	2,600	1,400	1,200	12	12	5	5
			134,571	41,889	176,460	119,935	56,495	193	192	1	36	75

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Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878.						
Sept. 27	Near Station No. 6.	6	Sc. Water Lily	Dennis, Mass.	Baker.	11
Oct. 8	Near Gurnet	4	Sl. Teazer .....	.....	Martin. ....	.....
Oct. 13	Monomoy Beach, one mile west of Station No. 14.	14	Sc. Joseph Story	Gloucester, Mass.	Eldridge ..	5
Oct. 13	Common Flat, two miles west by north of Station No. 13.	13	Sc. Tunis Depew	Hyannis, Mass.	Baker.	77
Oct. 13	Common Flat, two miles west by north of Station No. 13.	13	Sc. T. & C. Hawes ..	Chatham, Mass.	Hammond.	37
Oct. 13	Nantucket Island, back of.	15	Sc. Clara Jane	Lubec, Me.	Allen.	125
Oct. 13	Common Flats, near Chatham.	8	Sc. Lettie S. Hawes*	Chatham, Mass.	Hawes.	32
Nov. 19	One and a half miles west of Station No. 8.	8	Nor. bark Fram.	Christiansand, Norway.	Petersen ..	244
Nov. 24	Four miles east of Station No. 13.	13	Sc. Marietta Steelman.	Great Egg Harbor, N. J.	Smith.	292
Nov. 25	Ipswich Bar, five miles from Station No. 2.	2	Sc. Sparta.	Winterport, Me.	Avery.	75
Nov. 28	North Island, Salisbury Point.	1	Sc. Wm. Carroll † ...	Bucksport, Me.	Higgins.	95
Dec. 8	Bar, three-quarters mile east-northeast Station No. 13.	13	Sc. Menawa	New York City ...	Fairchild.	211
Dec. 18	Old Harbor Bar, two and a half miles northeast of Station No. 13.	13	Sc. Rosina ‡	Machias, Me.	Kelly.	111
1879.						
Jan. 3	Common Flat, three and a half miles west of Station No. 13.	13	Sc. Nellie §	Calais, Me.	Warr.	95
Jan. 23	One mile east-northeast of Station No. 7.	7	Sc. General Scott.	Provincetown, Mass.	Silver.	66
Jan. 24	One mile south of Station No. 12.	12	Sc. Scud	Eastport, Me.	Janes.	120
Jan. 26	Old Harbor Bar, two and a half miles northeast Station No. 13.	13	Sc. Snow Bird	Saint John, N. B. ...	Cripps.	99
Jan. 26	Gurnet Point.	4	Sc. America	Rockland, Me.	Trueworthy.	95
Feb. 25	One and a quarter miles west of Station No. 7.	7	Brig Persis Hinckley	New York City ...	Erickson.	262
Mar. 20	Half mile west of Station No. 7.	7	Sc. Leonard B. Snow.	Provincetown, Mass.	Brown.	36
Mar. 31	Five miles northwest of Station No. 5.	5	Sc. Anna D. Price || ...	Plymouth, Mass.	Nightingale.	56
Apr. 1	Off Tom Never's Head	15	Sc. Wm. D. Cargill.	Providence, R. I. ...	Rich.	141
Apr. 4	Two miles west of Station No. 7.	7	Sc. Sarah J. Fort	Tuckerton, N. J. ...	Steelman.	208
May 26	One mile southwest of Gurnet Light.	4	Sailboat	Plymouth, Mass. ....	.....	.....
June 1	Two and a half miles north of Station No. 12.	12	Sc. Marshall Perrin.	Sandwich, Mass.	Packard.	149
June 6	One-quarter mile south of Gurnet Light.	4	Sailboat Nellie Walker.	Duxbury, Mass.	Burgess. ....	.....
	Total .....		.....	.....	.....	.....

* No assistance rendered by Life-Saving Service; no one on board at time of disaster; vessel sunk, but was raised by her own crew.

† No assistance rendered by Life-Saving Service; distance from station so great (4 miles) that crew of vessel was rescued by inhabitants ten minutes before life-saving crew arrived.

‡ Got off by wrecking company; totally wrecked three days afterward near Rockport, Mass.

§ Crew taken off by wreckers before life-saving crew could reach her on account of distance.

|| Crew came ashore in their own boat.

COAST OF MASSACHUSETTS.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
Provincetown, Mass.	Dennisport, Mass.	Fishing gear.	\$700	\$25	\$725	.....	\$725	2	2	..	2	4
New Bedford, Mass.	Swampscott, Mass.	.....	600	.....	600	\$600	.....	3	3	..	..	..
Gloucester, Mass.	Fishing voyage	Salt, barrels, &c.	2,250	500	2,750	350	2,400	1	1	..	1	3
New York City	Boston, Mass...	Pig iron and powder.	2,000	3,350	5,350	2,000	3,350	4	4	..	4	12
Fishing	Fishing	Barrels and salt.	2,500	500	3,000	2,950	50	.....	.....	.....	.....	.....
Lubec, Me	New York City.	Potatoes & herring.	2,000	3,600	5,600	4,100	1,500	6	6	..	..	..
Fishing	Fishing	Barrels, salt, &c.	2,500	500	3,000	2,675	325	.....	.....	.....	.....	.....
Stockholm, Sweden.	Boston, Mass...	Iron	12,000	13,000	25,000	19,000	6,000	8	8	..	..	..
Boston, Mass..	Philadelphia, Pa	.....	6,000	.....	6,000	5,720	280	7	7	..	..	..
Bangor, Me ...	Ipswich, Mass.	Lumber...	1,000	1,000	2,000	1,400	600	4	4	..	..	..
...do	Salisbury, Mass	...do	1,000	1,400	2,400	.....	2,400	5	5	..	..	..
Perth Amboy, N. J.	Boston, Mass...	Coal	8,000	2,000	10,000	9,300	700	7	7	..	..	..
Port Johnson, N. J.	Cambridge, Mass.	...do	2,500	700	3,200	2,625	575	4	4	..	..	..
Calais, Me.	New York City.	Lumber...	2,500	1,100	3,600	.....	3,600	5	5	..	..	..
Provincetown, Mass.	Fishing .....	.....	2,000	.....	2,000	2,000	.....	14	14	..	..	..
Eastport, Me..	Richmond, Va..	Fish	2,000	3,400	5,400	2,000	3,400	5	5	..	5	10
New York City	St. John, N. B.	Coal	1,000	400	1,400	250	1,150	5	5	..	3	9
Elizabethport, N. J.	Rockland, Me ...	...do	8,000	600	8,600	8,450	150	5	5	..	..	..
Cienfuegos, W. I.	Boston, Mass...	Sugar	11,000	30,000	41,000	41,000	.....	8	8	..	..	..
Provincetown, Mass.	Fishing	Fish	1,500	25	1,525	1,525	.....	12	12	..	..	..
Boston, Mass..	Plymouth, Mass	General ...	2,000	1,000	3,000	1,600	1,400	3	3	..	..	..
Calais, Me.	Providence, R. I.	Lumber...	2,000	1,500	3,500	1,800	1,700	5	5	..	..	..
Hoboken, N. J.	Boston, Mass...	Coal	12,000	2,100	14,100	.....	14,100	6	4	2	4	10
Plymouth, Mass.	Pilot duty .....	.....	175	.....	175	165	10	.....	.....	.....	.....	.....
Boston, Mass..	Philadelphia, Pa	.....	3,000	.....	3,000	3,000	.....	7	7	..	..	..
Scituate, Mass	Plymouth, Mass	.....	65	.....	65	65	.....	2	2	..	..	..
.....	.....	.....	90,290	66,700	156,990	112,575	44,415	128	124	4	19	48

DISTRICT No. 3.—EMBRACING COASTS

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878.						
July 2	Waite's Spring Gully, Block Island.	5	Sc. J. Paine*	Provincetown, Mass.	Smith	150
July 4	West side of Block Island ..	4	Sc. Ella Brown*	Machias, Me	Wilson	140
Aug. 5	Near Station No. 10	10	S. S. Blackstone	Baltimore, Md.	March	1,147
Aug. 14	Whale Rock, West Bay, R. I.	1	Sc. Armenia	Tuckerton, N. J.	Cole	199
Sept. 1	West part of Block Island ..	5	Sc. Rebecca W. Huddell.	Philadelphia, Pa.	Duputy	257
Sept. 2	Near Station No. 9	9	Sc. Hattie V. Kelsey.	New Haven, Conn.	Ramsdall ..	450
Sept. 14	West point of beach, Fire Island.	25	Yacht Foam	Babylon, N. Y. ....	.....	.....
Oct. 17	South side of Main Inlet, Rockaway Beach.	36	Sc. Greenbury Willey.	Wilmington, Del. ..	Tomlinson ..	77
Oct. 21	One mile east of Hog Island Inlet.	33	Sloop Cora .....	.....	Collyer	3
Nov. 5	Outer Point, Jones Inlet Bar.	31	Sc. Gazelle	Patchogue, N. Y.	Mott	30
Nov. 22	Half mile west of Station No. 34.	34	Sc. Wm. H. Hopkins.	Mystic, Conn.	Bush	324
Nov. 23	One mile east of Fire Island Light.	25	Sloop Alert	Patchogue, N. Y.	Cochran	7
Nov. 23	Fire Island Bar, west part.	25	Sc. Ida B. Silsbee	do	Thurber	45
Dec. 19	Harbor Rock Point.	5	Sailboat .....	.....	.....	7
Dec. 19	Outer point, Jones Inlet Bar.	31	Sc. Eliza Ann Hooper	Camden, N. J.	Hand	167
Dec. 22	Three-quarters of a mile east of Station No. 10.	10	Sc. James A. Potter .	Thomaston, Me	Ogier	348
Dec. 25	Inside of Fire Island Inlet, on bar.	25	Sc. Mary Ann Grier.	New York City ...	Ward	81
1879.						
Jan. 3	Two miles north of Station 5	5	Sc. Eliza Ann Hooper	Camden, N. J.	Hand	167
Jan. 4	One mile west of Station 20 ..	20	S. S. Vindicator.	New York City ...	Rogers	1,021
Feb. 23	Two and three-quarters miles east of Station 19.	19	Sc. C. B. Paine.	Eastport, Me.	Hilyard	207
Mar. 19	Outer point, Jones Inlet Bar.	31	Sc. Eva L. Leonard ..	Boston, Mass.	Stanwood ..	115
Apr. 16	Grove Point, northeast part of Block Island.	4	Sc. Keystone†	Pembroke, Me.	Wilder	187
Apr. 18	Two miles east of Station 38.	38	Sc. Ann T. Sipple.	New Bedford, Mass.	Turner	185
May 12	Waite's Spring Gully, west side of Block Island.	5	Sc. Alexander‡	Halifax, N. S.	Macomber ..	160
May 17	Half mile west from Station 2	2	Str. Ashland‡	Philadelphia, Pa.	Hunter	762
June 12	Clay Head, Northeast Point .	4	Sc. Forest City§	Ellsworth, Me.	Moon	118
June 25	Near Station 2	2	Sc. R. S. Dean‡	Taunton, Mass.	Carlyle	180
June 29	Stephens Cove, southwest part.	5	Brig Arctic‡	Annapolis, N. S.	Munroe	280
	Total					

DISTRICT No. 4.—EMBRACING

1878.						
July 7	Cape May Point	40	Sc. Electa Bailey || ...	Philadelphia, Pa.	Smith	344
July 25	South end of Crow Shoal ..	40	Sc. Peerless	Port Jefferson, N. Y.	do	73
July 26	South Bar, Cold Spring Inlet.	39	Sc. Imogene Diverty.	Camden, N. J.	Gandy	186
Sept. 4	North Shoal	23	Sc. Ann S. Cannon.	Philadelphia, Pa.	Norbury	162

* Vessel gotten off by wrecking company.

† No assistance by life-saving crew; got off by revenue steamer Dexter.

‡ No assistance required from Life-Saving Service.

§ Got off without assistance.

|| Got off without damage.

OF RHODE ISLAND AND LONG ISLAND.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days shelter afforded.
Philadelphia, Pa.	Quincy Point, Mass.	Coal.....	\$3,500	\$1,200	\$4,700	\$4,400	\$300	6	6	.....	.....	.....
Port Johnson, N. J.	Boston, Mass.	.....do.....	2,500	800	3,300	3,250	50	6	6	.....	.....	.....
Norfolk, Va.	Providence, R. I.	General...	25,000	20,000	45,000	44,875	125	23	23	.....	.....	.....
Providence, R. I.	Philadelphia, Pa.	.....	8,000	.....	8,000	.....	8,000	6	6	.....	6	7
Philadelphia, Pa.	Gloucester, Mass.	Coal.....	6,400	2,200	8,600	6,500	2,100	7	7	.....	.....	.....
Georgetown, D. C.	New London, Conn.	.....do.....	20,000	2,000	22,000	21,400	600	11	11	.....	.....	.....
Babylon, N. Y.	Fishing.....	.....	300	.....	300	300	.....	2	2	.....	2	1
Drawbridge, Del.	Norfolk, Va....	Phosphate	4,000	4,500	8,500	.....	8,500	5	5	.....	5	5
Rockaway, N. Y.	Bay Ridge, N. Y.	.....	200	.....	200	200	.....	2	2	.....	2	1
Albany, N. Y.	Sayville, N. Y.	Lumber...	1,500	800	2,300	400	1,900	3	3	.....	3	15
Georgetown, D. C.	Providence, R. I.	Coal.....	16,000	1,800	17,800	13,300	4,500	7	7	.....	7	10
Blue Point, N. Y.	Fishing.....	Ballast...	1,000	.....	1,000	1,000	.....	.....	.....	.....	.....	.....
Haverstraw, N. Y.	Patchogue, N. Y.	Brick.....	2,500	189	2,689	1,514	1,175	3	3	.....	3	6
.....	.....	Household goods.	400	100	500	500	.....	.....	.....	.....	.....	.....
Philadelphia, Pa.	Pawtucket, R. I.	Coal.....	6,000	800	6,800	2,000	4,800	5	5	.....	5	22
Pensacola, Fla.	Boston, Mass....	Lumber...	16,000	4,914	20,914	1,914	19,000	8	7	1	7	28
Fire Island, N. Y.	Barren Island, N. Y.	Fish and guano.	4,000	2,000	6,000	5,930	70	3	3	.....	.....	.....
Jones Inlet, N. Y.	New York City	Coal.....	4,000	200	4,200	2,700	1,500	8	8	.....	.....	.....
Fall River, Mass.	Philadelphia, Pa.	Gen'l merchandise.	100,000	75,000	175,000	35,000	140,000	18	18	.....	18	39
Aquin, Hayti..	Providence, R. I.	Logwood..	8,000	5,000	13,000	2,500	10,500	7	7	.....	7	29
Boston, Mass. .	Charleston, S. C.	General...	4,000	1,200	5,200	4,950	250	5	5	.....	5	5
Pembroke, Me.	New York City.	Laths.....	8,500	983	9,483	6,033	3,450	6	6	.....	.....	.....
New Bedford, Mass.	.....do.....	Ballast...	2,000	.....	2,000	1,500	500	4	4	.....	.....	.....
New York City	Saint John, N. B.	Pork and flour.	4,000	8,000	12,000	10,000	2,000	6	6	.....	.....	.....
.....do.....	Fall River, Mass.	Ballast...	20,000	.....	20,000	10,000	10,000	18	18	.....	.....	.....
Ellsworth, Me.	New York City.	Lumber...	2,000	1,960	3,960	3,460	500	4	4	.....	.....	.....
Fall River, Mass.	.....do.....	Ballast...	2,500	.....	2,500	2,000	500	3	3	.....	.....	.....
New York City	Luarca, Spain..	Corn, flour, &c.	4,500	25,000	29,500	26,500	3,000	8	8	.....	.....	.....
.....	.....	.....	276,800	158,646	435,446	212,126	223,320	184	183	1	70	168

COAST OF NEW JERSEY.

Boston, Mass..	Philadelphia, Pa.	Ballast....	18,000	.....	18,000	18,000	.....	10	10	.....	.....	.....
Philadelphia, Pa.	Chatham, Mass.	Coal.....	2,000	500	2,500	.....	2,500	3	3	.....	.....	.....
Bondout, N. Y.	Philadelphia, Pa.	Railroad iron.	7,500	4,000	11,500	5,200	6,300	4	4	.....	.....	.....
Georgetown, D. C.	Pawtucket, R. I.	Coal.....	10,000	600	10,600	.....	10,600	6	6	.....	.....	.....

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878.						
Sept. 27	South end of Crow Shoals . . .	40	Sc. Brutus	Grovesville, N. J . .	Cathcart . .	94
Oct. 22	North side of Barnegat Inlet . .	17	Sc. Samuel Carlton . .	Bridgeton, N. J . . .	Burk	144
Oct. 23	Peck's Beach, one mile east of Station No. 31	31	Sc. Sarah Clark	Greenport, N. Y . . .	Brooks	164
Oct. 23	Upper end Short Beach	23	Sailboat Adrienne . . .	Tom's River, N. J . .	Shudick . . .	5
Oct. 23	On meadow, one mile north of Station No. 23	23	Sloop Mary A. Mott . .	Tuckerton, N. J . . .	Gale	21
Oct. 23	One mile south of Hereford Shoals	36	Sc. H. F. Potter	Middletown, Conn . .	Anderson . . .	.....
Oct. 23	Half mile north of Station No. 19	19	Sc. William Collyer . .	Providence, R. I . . .	Taylor	146
Oct. 23	Little Mud Thoroughfare . . .	24	Sloop Sarah B	Tuckerton, N. J . . .	Gaskill	6
Nov. 1	Southeast side Barnegat Inlet . .	17	Sc. Lady Ellen	Providence, R. I . . .	Howe	218
Nov. 1	Hereford Light, southwest by west, thirteen miles . .	36	Sc. Joseph P. Cake* . .	Camden, N. J	Enoch	166
Nov. 2	Little Egg Harbor Bar	24	Sc. Dick Williams . . .	Philadelphia, Pa . . .	Willetts . . .	175
Nov. 9	Corson Inlet Bar, south side . .	33	Sloop Jordan	Patchogue, N. Y . . .	Goodall . . .	26
Nov. 10	Near Cold Spring Inlet	38	Sc. Barnett Jones	New York City	Crittenden . .	92
Nov. 23	On West Beach	1	Sloop Star	do	Hensephel . .	3
Nov. 24	Three-fourths of a mile from Station No. 17	17	Sloop S. Eliza Dunn . .	Camden, N. J	Tyler	48
Dec. 4	Egg Harbor Bar, opposite Station No. 24	24	Bark Wilhelmina . . .	Quebec	Welsh	664
Dec. 6	Eastern point of shoal, three miles from shore	25	Sc. Asenath A. Shaw . .	Barnegat, N. J	Vanclere . . .	557
Dec. 7	Near railroad pier, on West Beach	1	Sloop General Scott . .	New York City	Ferdon	63
Dec. 10	One and a half miles north of Station No. 35	35	Sc. Minnie Still	Patchogue, N. Y . . .	Silsbie	55
Dec. 19	Southside of Cold Spring Bar . .	39	Sc. S. T. Denuis	Berlin, Md	Turner	100
Dec. 20	Brigantine Shoals, three miles from shore	25	Sc. J. B. Van Dusen . .	Philadelphia, Pa . . .	Buoy	222
Dec. 23	Near Station No. 11	11	Sc. Sarah Quinn	New York City	Lee	113
Dec. 24	Three-fourths mile north of Station No. 25	25	Sc. C. and C. Brooks . .	do	Darby	135
Dec. 25	Half mile east of Station No. 17	17	Sc. Stephen D. Barnes . .	do	Wright	91
Dec. 28	Half mile eastward of Station No. 40	40	Sc. James D. Godfrey . .	Bridgeton, N. J . . .	Henderson . .	15
1879.						
Jan. 8	Anchorage Island	23	Sloop Wm. H. Mills . .	Tuckerton, N. J . . .	Parker	12
Jan. 16	Robinson Farm, Deal Beach . .	6	Bark Italia	Lockwood, Italy . . .	Mazzan . . .	625
Jan. 16	Three-fourths mile from Station No. 20	20	Sc. Cuba	St. John's N. B . . .	Hutchinson .	143
Jan. 19	North Bar, Townsend's Inlet . .	34	Sc. Lucy May	Newburyport, Mass . .	Freeman . . .	184
Jan. 26	Brigantine Shoals	23	Sc. Emma	Patchogue, N. Y . . .	Newton	30
Feb. 18	Atlanticville	4	Ship Hanna	Christiania, Norway .	Lutkin	996
Feb. 19	Three-fourths mile south Ocean House, Point Pleasant	10	Bark Sadie	Boston, Mass	Gregory . . .	514
Feb. 20	Point Creek	23	Sloop America	Greenport, N. Y . . .	Lord	26
Feb. 26	Half mile north of Station No. 19	19	Sc. David H. Tolck . . .	New York City	Sawyer	445
Mar. 6	One and three-fourths miles north of Station No. 13	13	Sc. Mary Helena	Somers Point, N. J . .	Conover . . .	16
Mar. 21	One mile north of Station No. 8	8	Bark Homeward Bound .	Searsport, Me	Pendleton . .	561
Mar. 31	One and a half miles south of Station No. 23	23	Sc. I Don't Know . . .	Tuckerton, N. J . . .	Maxwell . . .	60
Mar. 31	Two and a half miles north of Station No. 40	40	Sc. Fanny Tracyt	Perth Amboy, N. J . .	Tilton	245
Apr. 10	Barnegat Shoals	17	Sc. Mary Emma	Norfolk, Va	Meers	52
Apr. 11	North Bar, Townsend's Inlet . .	34	Sc. Alice M. Lewis . . .	Gloucester, Mass . . .	Lewis	67

*Schooner foundered; crew taken off by passing vessel.

†Crew taken off by tug-boat.

COAST OF NEW JERSEY—Continued.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
Millville, N. J.	New York City.	Iron	\$2,000	\$4,000	\$6,000	\$6,000	.....	7	7	.....	.....	.....
Stonington, Conn.	Philadelphia, Pa.	Railroad iron.	4,000	6,000	10,000	10,000	.....	4	4	.....	1	1
Jacksonville, Fla.	New York City.	Lumber...	6,000	2,000	8,000	.....	\$8,000	6	4	2	4	29
Tom's River, N. J.	Short Beach, N. J.	.....	350	.....	350	350	.....	3	3	.....	.....	.....
Tuckerton, N. J.	Little Egg Harbor, N. J.	.....	3,000	.....	3,000	3,000	.....	8	8	.....	.....	.....
Fernandina, Fla.	New York City.	Pine lumber.	12,000	3,000	15,000	2,380	12,620	6	4	2	4	4
Providence, R. I.	Alexandria, Va.	Ballast	4,000	.....	4,000	.....	4,000	5	5	.....	.....	.....
Tuckerton, N. J.	Little Mud Thoroughfare, N. J.	do	500	.....	500	500	.....	2	2	.....	.....	.....
Philadelphia, Pa.	Providence, R. I.	Coal	3,000	1,000	4,000	3,460	540	5	5	.....	.....	.....
New York City.	Baltimore, Md.	Guano	4,000	6,000	10,000	.....	10,000	6	6	.....	4	4
do	Philadelphia, Pa.	Chalk	5,000	5,000	10,000	9,925	75	7	7	.....	.....	.....
Virginia	New York City.	Sweet potatoes.	1,500	200	1,700	1,700	.....	3	3	.....	.....	.....
New York City.	Philadelphia, Pa.	Salt	10,000	1,000	11,000	11,000	.....	6	6	.....	.....	.....
do	Galveston, Tex.	.....	500	.....	500	480	20	3	3	.....	.....	.....
Camden, N. J.	Tom's River, N. J.	.....	1,000	.....	1,000	1,000	.....	3	3	.....	.....	.....
Antwerp	Philadelphia, Pa.	Ballast, casks.	7,500	450	7,950	.....	7,950	14	14	.....	14	42
Baltimore, Md.	Hoboken, N. J.	Soft coal...	33,000	10,000	43,000	40,500	2,500	8	8	.....	.....	.....
New York City.	R. R. pier, Sandy Hook, N. J.	Lumber ..	1,000	1,600	2,600	1,500	1,100	4	4	.....	4	24
Virginia	New York City.	Oysters ..	3,000	1,000	4,000	2,000	2,000	4	4	.....	4	16
Chincoteague, Va.	do	Pine wood.	2,500	250	2,750	2,690	60	5	5	.....	.....	.....
Chickahominy River, Va.	do	do	10,000	1,000	11,000	10,792	208	5	5	.....	.....	.....
Virginia	do	do	3,000	325	3,325	525	2,800	5	5	.....	5	35
do	do	do	2,000	435	2,435	.....	2,435	5	5	.....	5	20
York River, Va.	do	Oysters ..	12,000	2,500	14,500	14,500	.....	6	6	.....	.....	.....
Philadelphia, Pa.	Leesburg, N. J.	.....	2,500	.....	2,500	2,500	.....	4	4	.....	3	3
New York City.	Tuckerton, N. J.	Coal	750	75	825	825	.....	3	3	.....	.....	.....
Plymouth, Eng.	New York City.	Ballast ..	35,000	.....	35,000	35,000	.....	14	14	.....	13	41
Areciba, P. R.	do	Molasses ..	2,700	9,000	11,700	8,900	2,800	6	6	.....	6	18
Newburyport, Mass.	Philadelphia, Pa.	Horn waste	15,000	2,500	17,500	16,900	600	6	6	.....	1	2
York River, Va.	New York City.	Oysters ..	2,300	500	2,800	2,725	75	4	4	.....	.....	.....
London, Eng.	do .....	.....	39,000	.....	39,000	39,000	.....	17	17	.....	13	39
Antwerp	do	Ballast ..	15,000	.....	15,000	10,000	5,000	10	10	.....	8	8
Little Egg Harbor, N. J.	do	Codfish ..	1,500	300	1,800	1,800	.....	4	4	.....	.....	.....
Sagua la Grande, W. I.	do	Sugar	15,000	40,000	58,000	.....	58,000	11	6	5	.....	.....
New York City.	Absecon, N. J.	Ballast ..	500	.....	500	.....	500	3	3	.....	3	4
Amsterdam ..	New York City.	.....	7,000	.....	7,000	.....	7,000	12	12	.....	12	12
Wading River, N. Y.	do	Lumber...	1,500	1,000	2,500	2,350	150	3	3	.....	3	3
Fernandina, Fla.	Philadelphia, Pa.	Lumber and iron.	7,000	2,500	9,500	3,900	5,600	10	10	.....	.....	.....
New York City.	Patuxent, Va.	Ballast ..	5,000	.....	5,000	5,000	.....	6	6	.....	.....	.....
Gloucester, Mass.	Fishing	Ice, salt, &c.	4,000	1,500	5,500	750	4,750	12	12	.....	12	53

DISTRICT No. 4.—EMBRACING

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1879.						
May 3	One mile east-northeast Station No. 17.	17	Sc. Julia A. Berkeley	New Haven, Conn.	Sanderson.	169
May 10	One mile north Station No. 33.	33	Sc. George S. Low	Gloucester, Mass.	Osborne	62
June 21	Little Egg Harbor	27	Sloop John Leach	Troy, N. Y.	Keegan	75
June 27	Absecom Bar, one mile east of Station No. 27.	27	Sc. Lydia Budd	Cape May, N. J.	Taylor	50
	Total					

DISTRICT No. 5.—EMBRACING COAST BETWEEN

1878.						
July 26	Fishing Point, abreast Chincoteague Shoals.	7	Sloop Franklin*	New York City	Tetzlaff	25
Sept. 15	Southeast point Cobb's Island.	10	Sc. Wm. A. Low	Perth Amboy, N. J.	Green	64
Dec. 1	Middle Grounds, five miles west-southwest Station No. 11.	11	Sc. Peerless	Baltimore, Md.	Kean	180
Dec. 21	Williams Shoal, southwest of Chincoteague Bar.	7	Sc. Flora Curtis	Squan, N. J.	Longstreet	83
Dec. 23	Turner's Shoal, two miles south of Station No. 7.	7	Sc. Emma G. Edwards.	Camden, N. J.	Brines	200
1879.						
Jan. 28	Four and a half miles north-east of Station No. 11.	11	Brig Water Witch	Baltimore, Md.	Smoot	238
Feb. 16	Southeast point Dawson Shoal.	8	Sloop John Clark	Somers Point, N. J.	Rogers	17
Feb. 19	Green Run Beach, two and three-quarters miles north of Station No. 5.	5	Brig Moses Day	Philadelphia, Pa.	Crosby	344
Mar. 3	Three miles north of Station No. 4.	4	Brig E. A. Barnard	Saint Andrew's, N. B.	Willeby	310
Mar. 11	New Inlet Bar, two and a half miles southwest of Station No. 7.	7	Sloop Hattie Mary	Chincoteague, Va.	Mumford	10
Mar. 27	Sinepuxent Beach, six and a half miles from Station No. 4.	4	Bark Champion	Yarmouth, N. S.	Moses	799
	Total					

DISTRICT No. 6.—EMBRACING COAST

1878.						
Oct. 23	One and one-half miles north of Station No. 2.	2	Ship A. S. Davis	Searsport, Me.	Ford	1,399
Dec. 28	One mile south of Station No. 1.	1	S. S. Tunis	London, England	Truro	886
1879.						
Jan. 15	Opposite to Station No. 15	15	Bark Success	Porsgrund, Norway	Haberg	356
Feb. 2	Opposite to Station No. 13	13	Sc. Sarah Wood	Philadelphia, Pa.		272
Mar. 2	One and a quarter miles south of Station No. 5.	5	Bark Admiral	Bergen	Jensen	698
Mar. 31	Two and three-quarters miles north of Station No. 1.	1	Sc. James M. Vance	Philadelphia, Pa.	Redmore	202
	Total					

* Crew got ashore themselves, and were sheltered at light-house.

COAST OF NEW JERSEY—Continued.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
Saugerties, N. Y.	Washington, D. C.	Stone	\$15,000	\$4,000	\$19,000	\$18,490	\$510	6	6	.....	.....	.....
Gloucester, Mass.	New York City	Mackerel ..	2,800	600	3,400	300	3,100	15	15	..	15	90
New York City	Baltimore, Md.	Machinery	1,000	1,500	2,500	2,500	.....	5	5	.....	.....	.....
Great Egg Harbor, N. J.	New York City	Wood	1,800	120	1,920	.....	1,920	6	6	..	3	9
.....	.....	.....	345,700	114,455	460,155	222,442	237,713	310	301	9	137	457

CAPE HENLOPEN AND CAPE CHARLES.

Norfolk, Va. . .	New York City	.....	200	.....	200	.....	200	3	3	.....	.....	.....
Eastern Shore, Md.	.....do	Sweet potatoes.	4,000	1,300	5,300	5,300	.....	4	4	.....	.....	.....
Porto Bello, Spain.	Baltimore, Md. .	Cocoa-n'ts, shells, &c	1,000	6,100	7,100	.....	7,100	8	8	..	8	40
New York City	Norfolk, Va.	Oil, cem't, &c.	7,000	1,000	8,000	8,000	.....	6	6	.....	.....	.....
Jacksonville, Fla.	New York City	Lumber ...	7,000	5,000	12,000	11,600	400	8	8	.....	.....	.....
Rio de Janeiro, S. A.	Baltimore, Md..	Coffee	4,000	25,000	29,000	27,000	2,000	8	8	..	8	24
Hampton, Va. .	New York City	Oysters ...	2,300	200	2,500	2,500	.....	3	3	.....	.....	.....
Sagua, W. I.	Philadelphia, Pa.	Sugar and molasses.	12,000	31,542	43,542	16,542	27,000	13	13	..	8	40
Leghorn, Italy. .	.....do	Marble, oil, &c.	10,000	.....	10,000	10,000	.....	8	8	..	8	25
Hog Island, Va	Chincoteague, Va.	Oysters ...	300	100	400	400	.....	3	3	.....	.....	.....
Dunkirk, France.	Delaware Breakwater.	Ballast	35,000	.....	35,000	30,000	5,000	13	13	.....	.....	.....
.....	.....	.....	82,800	70,242	153,042	111,342	41,700	77	77	..	32	129

BETWEEN CAPE HENRY AND CAPE FEAR.

Callao, South America.	Hampton Roads, Va.	Guano	60,000	80,000	140,000	.....	140,000	20	119	.....	.....	.....
Galveston, Tex	Liverpool, England.	Cotton	100,000	134,363	234,363	234,363	.....	24	24	.....	.....	.....
Wilmington, N. C.	Hamburg, Germany.	Resin	15,000	6,000	21,000	.....	21,000	10	10	.....	.....	.....
Fernandina, Fla.	Baltimore, Md..	Lumber ...	10,000	1,800	11,800	10,450	1,350	6	6	.....	.....	.....
Dunkirk, France.	... do	Ballast	12,000	.....	12,000	.....	12,000	14	14	..	14	17
New York City	Chickahominy River, Va.	.....	3,000	.....	3,000	.....	3,000	6	6	..	5	5
.....	.....	.....	200,000	222,163	422,163	244,813	177,350	80	61	19	19	22

DISTRICT No. 7.—EMBRACING

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878. Sept. 7	One and one-half miles south of New River.	5	Bark Alexander Nickels.	New York City ...	Peacock...	271
Sept. 11	Sixteen miles north of Station No. 1.	1	Brig Sevre	Nantes, France....	Trocher...	400
Oct. 23	Two and a half miles south of Station No. 3.	3	Bark Virgin de las Nieves.	.....	.....	366
1879. Mar. 31	Ten miles north of Station No. 2.	2	Bark Norina	Trieste, Austria ..	Sutora	579
	Total .....	..	.....	.....	.....	.....

DISTRICT No. 9.—EMBRACING

1878. July 28	Near Station No. 9	9	Open boat	Marblehead, O .....	.....	.....
Aug. 12	Five miles off Big Sandy Creek.	1	Sloop Belle	Oswego, N. Y.	Whitney ..	4
Aug. 14	One and a half miles north of Station No. 2.	2	Skiff	Texas, N. Y.	Slater .....	.....
Sept. 10	One mile off Oswego Harbor.	3	Yacht Silver Cloud..	Oswego, N. Y.	Atkinson ..	3
Sept. 11	One mile west of Station No. 4.	4	Sc. E. P. Dorr	do	Defraime ..	216
Sept. 13	Near harbor, Fairport	7	St. Pearl	Detroit, Mich	Gaylord...	550
Oct. 9	Near east pier, Oswego	3	Sc. W. W. Grant....	Port Hope, Ont....	Bartley ...	200
Oct. 19	Near harbor, Charlotte	4	Sc. Julia	Kingston, Ont....	Hardnaut ..	107
Oct. 23	Near pier, Charlotte	4	Sc. Star	Napanee, Ont	Williamson	200
Oct. 30	Point Abino, Canada	5	Sc. Frank C. Leighton	Bay City, Mich	Manning ..	328
Nov. 7	One and a half miles from pier, Charlotte.	4	Sc. Wacousta	Montreal, Canada.	Donaldson.	181
Nov. 9	Four miles west of Oswego.	3	Sc. Speedwell	Picton, Ont.	Ewart	180
Nov. 29	Near harbor, Oswego	3	Sc. Sweet Home ...	Kingston, Ont.	Charles .....	.....
1879. Mar. 17	One and a half miles west-northwest from Cedar Point Light, Lake Erie.	9	Barge Bay City	Bay City, Mich .....	.....	158
Apr. 30	Westward of New Harbor...	3	Sailboat .....	.....	.....	.....
May 23	Northwest of Marblehead Light.	9	do .....	.....	Elwelt .....	.....
May 26	Near pier, Cleveland	8	Rowboat .....	.....	Parker .....	.....
May 29	Mouth of Big Sandy Creek..	1	Sc. Volunteer	Big Sandy, N. Y.	VanAlstine	52
May 30	East side of Presque Isle Point.	6	Sc. Seaman	Port Huron, Mich.	Flood	132
May 31	Off the jetty, north of Little Salmon Creek.	..	Sloop yacht Vixen ...	Oswego, N. Y.	Lyon	4
June 9	One mile east of Station No. 6.	6	Fishboat Shaffer ...	Erie, Pa.	Masters .....	.....
June 12	McDonald's Run, four miles east Station No. 6.	6	Fishboat Louis	do	Dash .....	.....
June 15	Three miles northeast of Station No. 9.	..	Fishboat* .....	.....	.....	.....
June 22	Near east pier, Charlotte.	4	Skiff .....	.....	.....	.....
June 27	Four miles east of Station No. 4.	4	Sloop Belle	Charlotte, N. Y.	Everest .....	.....
June 28	Mouth of Little Salmon Creek.	2	Sc. Mist	Oswego, N. Y.	Tift	15
	Total .....	..	.....	.....	.....	.....

*Capsized; crew taken off by passing

COAST OF FLORIDA.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
Cienfuegos, W. I.	Boston, Mass...	Sugar.....	\$8,000	\$37,500	\$45,500	.....	\$45,500	6	5	1	5	35
Tampico, Mexico.	Havre, France..	Corn, jute, &c.	.....	.....	.....	.....	.....	10	9	1	1	10
Havana, Cuba	New York City.	.....	.....	.....	.....	.....	.....	11	11	.....	11	33
New Orleans, La.	Gibraltar, Spain.	Corn and lumber.	15,000	18,000	33,000	.....	33,000	13	13	.....	13	65
.....	.....	.....	23,000	55,500	78,500	.....	78,500	40	38	2	30	143

LAKE ERIE AND LAKE ONTARIO.

Marblehead, O	Pleasure trip.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....
Henderson, N. Y	Oswego, N. Y ..	.....	250	.....	250	250	.....	3	3	.....	3	3
Texas, N. Y ..	Pleasure trip.....	.....	25	.....	25	25	.....	5	5	.....	.....	.....
Oswego, N. Y ..	Yacht race.....	.....	100	.....	100	100	.....	7	7	.....	.....	.....
Cleveland, O...	Cape Vincent, N. Y.	Coal.....	5,000	1,300	6,300	4,300	2,000	7	7	.....	.....	.....
Put-in-Bay, O.	Buffalo, N. Y ..	Fruit.....	60,000	367	60,367	59,800	567	26	25	1	.....	.....
Oswego, N. Y ..	Napanee Light, Ontario.	Ballast.....	4,000	.....	4,000	3,800	200	6	6	.....	.....	.....
Toronto, Ca'ada	Charlotte, N. Y.	.....do.....	8,000	.....	8,000	8,000	.....	6	6	.....	.....	.....
Port Stanley, Lake Erie.	Kingston, Ont..	Pease and wheat.	10,000	12,000	22,000	.....	22,000	7	7	.....	.....	.....
Buffalo, N. Y ..	Detroit, Mich..	Coal.....	15,000	1,353	16,353	9,053	7,300	8	8	.....	.....	.....
Oswego, N. Y ..	Thorold, Ont..	.....do.....	7,000	800	7,800	7,800	.....	6	6	.....	.....	.....
Brockville, Ont.	Oswego, N. Y ..	Lumber.....	.....	.....	.....	.....	.....	5	5	.....	.....	.....
Will Point, Ont	Oswego, N. Y ..	Lumber.....	2,500	1,000	3,500	500	3,000	5	5	.....	.....	.....
Unknown.....	Unknown.....	.....	500	.....	500	.....	500	.....	.....	.....	.....	.....
Oswego, N. Y ..	Pleasure trip...	.....	40	.....	40	40	.....	2	2	.....	.....	.....
Kelly's Island, O	Sandusky, O ..	.....	75	.....	75	50	25	1	1	.....	1	1
Cleveland, O...	Pleasure trip...	.....	20	.....	20	20	.....	2	1	1	.....	.....
Trent, Ont.....	Big Sandy, N. Y	Lumber.....	1,000	600	1,600	1,600	.....	4	4	.....	4	6
Alpena, Mich..	Erie, Pa.....	.....do.....	3,000	2,000	5,000	4,990	10	7	7	.....	.....	.....
Little Sandy Creek, Lake Ontario.	Oswego, N. Y ..	Fishing tackle.	1,500	200	1,700	1,700	.....	4	4	.....	.....	.....
Fishing ground ..do	Erie, Pa.....	Fish.....	400	75	475	455	20	2	2	.....	.....	.....
.....do.....	.....do.....	.....do.....	500	100	600	550	50	3	3	.....	.....	.....
Kelly's Island, Ohio.	Sandusky, Ohio.	.....	75	.....	75	65	10	3	3	.....	.....	.....
Charlotte, N. Y	Across the river	.....	35	.....	35	35	.....	2	2	.....	.....	.....
.....do.....	Pleasure trip...	Ballast.....	1,000	.....	1,000	950	50	2	2	.....	.....	.....
Big Sodus	Little Salmon River.	Coal.....	1,500	150	1,650	1,650	.....	3	3	.....	.....	.....
.....	.....	.....	121,520	19,945	141,465	105,733	35,732	128	126	2	8	10

steamer just before station boat reached her.

DISTRICT No. 10.—EMBRACING LAKE

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878. Aug. 14	Ottawa Bay	4	Small sailboat	East Tawas, Mich. ....	.....	.....
Sept. 3	Eight miles east-northeast of Station No. 3.	5	Sc. Vampire	Ashtabula, Ohio ...	Humphrey	144
Oct. 3	Four miles south of Station No. 5.	5	Scow E. K. Kane ...	Toledo, Ohio	Goulet	65
Oct. 23	Three and a half miles from Station No. 1.	1	...do .....	...do .....	...do	65
1879. Apr. 16	One mile from Ottawa Point.	4	Open sailboat .....	.....	.....	.....
May 16	East end of Thunder Bay Island.	6	Str. Champlain	Cleveland, Ohio ...	Davis	437
June 9	End of shoal at Ottawa Point.	4	Str. Annie Moiles ...	Bay City, Mich.	Fuller	73
	Total .....		.....	.....	.....	.....

DISTRICT No. 11.—EMBRAC

1878. Sept. 3	One-half mile southwest of south pier.	10	Sloop-yacht Annie Louise Cary.*	Chicago, Ill	Farrow	7
Sept. 25	Four miles southwest of Station No. 17.	17	Sc. Erastus Corning.	Buffalo, N. Y	Clark	900
Oct. 11	One mile off Station No. 9 ...	9	Barge C. O. D	Grand Haven, Mich	Mulvany	288
Oct. 11	Near north pier, Grand Haven.	9	Sc. Alice M. Beers...	Chicago, Ill	Peacock	.....
Oct. 28	One-half mile south of Grand Haven.	9	Sc. Persia† .....	...do	Anderson	96
Oct. 28	Near north pier, Grand Haven.	9	Sc. Presto	Grand Haven, Mich	Nenner	198
Oct. 29	.....do	9	Sc. Geo. W. Wescott.	Kenosha, Wis	Reid	122
Oct. 29	One-quarter mile north of pier, Grand Haven.	9	Sc. H. B. Moore	South Haven, Mich	Crawford	228
Nov. 1	Three-quarters mile north of White Lake Harbor.	9	Bark L. C. Woodruff.	Cleveland, Ohio ...	Lingham	548
Nov. 1	One-half mile north of harbor.	9	Sc. Montpelier	Detroit, Mich	Cuddy	1,290
Nov. 1	Near north pier, Grand Haven.	9	Sc. Australia	Grand Haven, Mich	Mulvany	171
Nov. 1	One-quarter mile north of harbor, Grand Haven.	9	Sc. Elvina	Oswego, N. Y	Mulligan	297
Nov. 1	One-half mile north of harbor, Grand Haven.	9	Sc. America	Chicago, Ill	Goodall	270
Nov. 1	One mile north of Ludington Pier.	6	Sc. J. H. Rutter	Toledo, Ohio	Simpson	1,224
Nov. 5	One mile north of Station No. 17.	17	Unknown schooner ..	.....	.....	.....
Nov. 5	South end of Sand Bay, Beaver Island.	1	Sc. Jas. G. Worts ...	Toronto, Ontario ..	Taylor	309
Nov. 10	Fox Point, nine miles north of harbor, Milwaukee.	15	Str. St. Albans	Cleveland, Ohio ...	Washburn	435
1879. May 11	Two miles east of Chicago Harbor.	11	Rowboat	Chicago, Ill .....	.....	.....
May 23	Between harbor and break-water, Chicago.	11	Sailboat .....	...do .....	.....	.....
May 31	One mile east of harbor, Chicago.	11	Rowboat Daisy .....	...do .....	.....	.....
June 16	Near Round House, south of Station No. 11.	11	Sloop .....	...do	Walker	10
	Total .....		.....	.....	.....	.....

* Rescued by another boat just before station boat

HURON AND LAKE SUPERIOR.

Where from.	Where bound	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
East Tawas, Mich.	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....
Alpena, Mich.	Vermillion, Ohio	Lumber...	\$3,000	\$1,500	\$4,500	\$4,500	.....	6	6	.....	.....	.....
Toledo, Ohio...	Harrisville, Mich.	Stone, lime, and brick.	1,200	300	1,500	1,400	\$100	5	5	.....	.....	.....
An Sable, Mich.	Cleveland, Ohio	Lumber...	1,200	600	1,800	450	1,350	5	5	.....	5	7
East Tawas, Mich.	Ottawa Point light-house.	.....	.....	.....	.....	.....	.....	3	3	.....	.....	.....
Ogdensburg, N. Y.	Chicago, Ill.	General merchandise.	50,000	6,000	56,000	55,000	1,000	34	34	.....	.....	.....
An Sable, Mich.	Ottawa Bay....	Raft of logs and lumber.	8,000	5,000	13,000	12,900	100	7	7	.....	.....	.....
.....	.....	.....	63,400	13,400	76,800	74,250	2,550	62	62	.....	5	7

ING LAKE MICHIGAN.

Chicago, Ill...	Chicago, Ill....	.....	500	.....	500	350	150	4	4	.....	.....	.....
Buffalo, N. Y.	do	Coal	30,000	3,700	33,700	32,700	1,000	12	12	.....	.....	.....
Grand Haven, Mich.	do	Lumber...	15,000	3,000	18,000	13,200	4,800	4	4	.....	.....	.....
Chicago, Ill...	Muskegon, Mich.	.....	2,000	.....	2,000	1,700	300	7	7	.....	.....	.....
do	do .....	.....	1,500	.....	1,500	1,100	400	5	5	.....	.....	.....
do	Grand Haven, Mich.	.....	3,000	.....	3,000	1,500	1,500	8	8	.....	.....	.....
Kenosha, Wis.	Muskegon, Mich.	Hay	3,600	370	3,970	3,470	500	7	7	.....	.....	.....
Chicago, Ill...	do .....	.....	13,000	.....	13,000	12,000	1,000	8	8	.....	.....	.....
do	Buffalo, N. Y.	Corn	12,500	13,000	25,500	.....	25,500	10	7	3	.....	.....
Muskegon, Mich.	Chicago, Ill....	Lumber...	9,000	3,500	12,500	2,800	9,700	8	8	.....	8	8
do	do	do	3,000	1,600	4,600	3,800	800	8	7	1	6	6
Chicago, Ill...	Muskegon, Mich.	.....	8,000	.....	8,000	3,000	5,000	8	8	.....	.....	.....
do	do .....	.....	8,000	.....	8,000	7,500	500	8	8	.....	.....	.....
do	Buffalo, N. Y.	Corn and rye.	40,000	25,000	65,000	.....	65,000	44	44	.....	.....	.....
Manitowoc, Wis.	Two Rivers, Wis.	.....	800	.....	800	800	.....	3	3	.....	.....	.....
Chicago, Ill...	Collingwood, Ontario.	Corn, oats, and pork.	15,000	7,500	22,500	14,000	8,500	8	8	.....	.....	.....
Oswego, N. Y.	Chicago, Ill....	General ..	28,000	65,000	93,000	89,000	4,000	25	25	.....	.....	.....
Chicago, Ill...	The crib .....	.....	40	.....	40	40	.....	2	2	.....	.....	.....
do	The breakwater	.....	30	.....	30	30	.....	2	2	.....	.....	.....
do	The crib .....	.....	25	.....	25	25	.....	1	1	.....	1	1
do	The lake .....	.....	1,200	.....	1,200	1,075	125	3	3	.....	.....	.....
.....	.....	.....	194,195	122,670	316,865	188,090	128,775	185	181	4	15	15

reached them. † Crew got ashore without assistance.

Date.	Place.	No. of station.	Name of vessel.	Where owned.	Master.	Tonnage.
1878. Oct. 18	On beach near Adams light-house.	3	Ship City of Dublin*.	Liverpool, England	Stevens ...	814
Nov. 24	On Chinook Spit, near head of Sand Island.	3	Ship McNeart.....	Boston, Mass.....	Taylor	1, 308
1879. Apr. 19	Lower end of Sand Island, two miles southeast of Station No. 3.	3	Steamship Great Republic.	San Francisco, Cal.	Carroll	3, 882
Total						

* Came ashore in ship's boat. † No assistance required from station; vessel got off by steam-tugs.

RECAPITU

District.	Total number of disasters.	Total value of vessels.	Total value of cargoes.
District No. 1	40	\$134, 571	\$41, 889
District No. 2	26	90, 290	66, 700
District No. 3	28	276, 800	158, 646
District No. 4	48	345, 700	114, 455
District No. 5	11	82, 800	70, 242
District No. 6	6	200, 000	222, 163
District No. 7	4	23, 000	55, 500
District No. 9	25	121, 520	19, 945
District No. 10	7	63, 400	13, 400
District No. 11	21	194, 195	122, 670
District No. 12	3	390, 000	80, 000
Aggregate	219	1, 922, 276	965, 610

EMBRACING PACIFIC COAST.

Where from.	Where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	No. of persons on board.	No. of persons saved.	No. of persons lost.	No. of persons sheltered at station.	No. of days' shelter afforded.
Port Chalmers, N. Z.	Portland, Oreg.		\$40, 000	.....	\$40, 000	.....	\$40, 000	23	23	.....	.....	.....
Hong-Kong, China.	....do	Rice, oil, &c.	50, 000	\$5, 000	55, 000	\$35, 000	20, 000	22	22	.....	.....	.....
San Francisco, Cal.	....do	Gen'l merchandise.	300, 000	75, 000	375, 000	18, 750	356, 250	673	659	14	.....	.....
.....	.....	.....	390, 000	80, 000	470, 000	53, 750	416, 250	718	704	14	.....	.....

LATTON.

Total amount of property involved.	Total amount of property saved.	Total amount of property lost.	Total number of persons on board.	Total number of persons saved.	Total number of persons lost.	Number of shipwrecked persons succored at stations.	Total number of days' succor afforded.	Number of disasters involving total loss of vessels.
\$176, 460	\$119, 965	\$56, 495	193	192	1	36	75	7
156, 990	112, 575	44, 415	128	124	4	19	48	8
435, 446	212, 126	223, 320	184	183	1	70	168	6
460, 155	222, 442	237, 713	310	301	9	137	457	16
153, 042	111, 342	41, 700	77	77	.....	32	129	2
422, 163	244, 813	177, 350	80	61	19	19	22	4
78, 500	.....	78, 500	40	38	2	30	143	4
141, 465	105, 733	35, 732	128	126	2	8	10	2
76, 800	74, 250	2, 550	62	62	.....	5	7	1
316, 865	188, 090	128, 775	185	181	4	15	15	2
470, 000	53, 750	416, 250	718	704	14	.....	.....	2
2, 887, 886	1, 445, 086	1, 442, 800	2, 105	2, 049	56	371	1, 074	54

APPROPRIATIONS AND EXPENDITURES

FOR THE

FISCAL YEAR ENDING JUNE 30, 1879.

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STATEMENT SHOWING THE APPROPRIATIONS AND EXPENDITURES FOR THE MAINTENANCE OF THE LIFE-SAVING SERVICE FOR THE FISCAL YEAR ENDING JUNE 30, 1879.

APPROPRIATION—LIFE-SAVING SERVICE, 1879.

For salary of one superintendent for the life-saving stations on the coasts of Maine and New Hampshire, District No. 1.	\$1,000 00	
For salary of one superintendent for the life-saving stations on the coast of Massachusetts, District No. 2	1,000 00	
For salary of one superintendent for the life-saving stations on the coasts of Rhode Island and Long Island, District No. 3	1,500 00	
For salary of one assistant superintendent for the life-saving stations on the coasts of Rhode Island and Long Island, District No. 3	500 00	
For salary of one superintendent for the life-saving stations on the coast of New Jersey, District No. 4	1,500 00	
For salary of one superintendent for the life-saving stations on the coasts of Delaware, Maryland, and Virginia, District No. 5	1,000 00	
For salary of one superintendent for the life-saving stations on the coasts of Virginia and North Carolina, District No. 6.	1,000 00	
For salary of one superintendent for the houses of refuge on the coast of Florida, District No. 7	1,000 00	
For salary of one superintendent for life-saving and life-boat stations on the coast of Texas, District No. 8	1,000 00	
For salary of one superintendent for life-saving and life-boat stations on the coasts of Lakes Ontario and Erie, District No. 9	1,000 00	
For salary of one superintendent for life-saving and life-boat stations on the coasts of Lakes Huron and Superior, District No. 10	1,000 00	
For salary of one superintendent for life-saving and life-boat stations on the coast of Lake Michigan, District No. 11...	1,000 00	
		\$12,500 00
For salary of keepers of life-saving and life-boat stations, at \$400 each	69,046 90	
For salary of five keepers of houses of refuge on the Florida coast, at \$40 per month	2,400 00	
		71,446 90
For pay of crews of experienced surfmen at such stations and for such periods as the Secretary of the Treasury may deem necessary and proper	246,260 00	
For compensation of volunteer crews of life-boat stations for services rendered upon each occasion of disaster, at such rate, not to exceed \$10 for each person, as the Secretary of the Treasury may determine, and for pay of such crews for drill and exercise		4,000 00
Total		<u>334,206 90</u>

EXPENDITURES.

Salary of superintendent of life-saving stations in District No. 1	\$1,000 00
Salary of superintendent of life-saving stations in District No. 2	1,000 00
Salary of superintendent of life-saving stations in District No. 3	1,500 00

Salary of assistant superintendent of life-saving stations in District No. 3	\$500 00	
Salary of superintendent of life-saving stations in District No. 4	1,500 00	
Salary of superintendent of life-saving stations in District No. 5	1,000 00	
Salary of superintendent of life-saving stations in District No. 6	962 00	
Salary of superintendent of houses of refuge in District No. 7	1,000 00	
Salary of superintendent of life-saving and life-boat stations in District No. 9	1,000 00	
Salary of superintendent of life-saving and life-boat stations in District No. 10	1,000 00	
Salary of superintendent of life-saving and life-boat stations in District No. 11	1,000 00	
		\$11,462 00
Pay of 149 keepers, Districts Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, quarter ending September 30, 1878	14,881 52	
Pay of 156 keepers, Districts Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, quarter ending December 31, 1878	15,060 87	
Pay of 170 keepers, Districts Nos. 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, and 12, quarter ending March 31, 1879	16,778 66	
Pay of 171 keepers, Districts Nos. 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, and 12, quarter ending June 30, 1879	17,012 09	
		63,733 14
Pay of surfmen in District No. 1, between September 1, 1878, and April 30, 1879	11,040 00	
Pay of surfmen in District No. 2, between September 1, 1878, and April 30, 1879	26,905 07	
Pay of surfmen in District No. 3, between September 1, 1878, and April 30, 1879	58,006 87	
Pay of surfmen in District No. 4, between September 1, 1878, and April 30, 1879	68,119 49	
Pay of surfmen in District No. 5, between September 1, 1878, and April 30, 1879	18,023 16	
Pay of surfmen in District No. 6, between September 1, 1878, and April 30, 1879	29,154 25	
Pay of surfmen in District No. 9, between July 1, 1878, and December 15, 1878, and between April 1 and June 30, 1879	7,125 05	
Pay of surfmen in District No. 10, between July 1 and December 15, 1878, and between April 1 and June 30, 1879	17,091 13	
Pay of surfmen in District No. 11, between July 1 and December 31, 1878, and between April 1 and June 30, 1879	8,133 31	
Pay of surfmen in District No. 1, for services at wrecks which occurred at periods when crews were not required to reside at the stations	33 00	
Pay of surfmen in District No. 3, for services at wreck which occurred at a period when crews were not required to reside at the stations	12 00	
Pay of surfmen in District No. 4, for services at wrecks which occurred at periods when crews were not required to reside at the stations	90 00	
		243,733 33
Pay of volunteer surfmen in District No. 9, for drill and exercise	846 00	
Pay of volunteer surfmen in District No. 9, for services at wrecks	784 00	
Pay of volunteer surfmen in District No. 11, for drill and exercise	852 00	
Pay of volunteer surfmen in District No. 11, for services at wrecks	1,116 00	
		3,598 00
Total expenditures from appropriation, Life-Saving Service, 1879	322,526 47	
Balance of available funds July 1, 1879	11,680 43	
		334,206 90

APPROPRIATION—LIFE-SAVING SERVICE, CONTINGENT EXPENSES, 1879.

For fuel for 155 stations and houses of refuge; repairs and outfits for the same; supplies and provisions for houses of refuge and for shipwrecked persons succored at stations; traveling expenses of officers under orders from the Treasury Department; and contingent expenses, including freight, storage, repairs to apparatus, medals, labor, stationery, advertising, and miscellaneous expenses that cannot be included under any other head of life-saving stations on the coasts of the United States...	\$38,000 00
For deficiency appropriation as above	10,000 00
	<u>48,000 00</u>

EXPENDITURES.

Apparatus.....	\$4,284 83
Books, charts, stationery, advertising, &c.....	453 22
Equipments.....	1,126 05
Experiments in improving apparatus.....	57 48
Flag-staffs for display of signals.....	2,880 00
Freight, packing, storage, telegraphing, &c.....	1,468 31
Fuel for stations.....	5,236 56
Furniture, supplies, &c.....	10,952 18
Lithographing and engraving.....	1,231 00
Medals.....	520 60
Recording deeds.....	5 22
Removal of stations on account of encroachment of the sea.....	836 00
Rent of inspector's office, New York.....	300 00
Repairs to stations and apparatus.....	5,657 41
Relief-boat house on Cape Cod.....	247 00
Sites for stations.....	104 00
Sustenance of persons rescued from wrecked vessels.....	161 37
Transporting apparatus to and from wrecks.....	276 50
Traveling expenses of officers.....	5,137 21
Wells, cisterns, and pumps.....	117 00
Total expenditures from appropriation, Life-Saving Service, contingent expenses, 1879.....	41,051 94
Balance available funds July 1, 1879.....	6,948 06
	<u>48,000 00</u>

At the beginning of the fiscal year there remained on hand available from the appropriations of the preceding year the following:

	Life-Saving Service, 1878.	Life-Saving Service, contingent ex- penses, 1878.
Unexpended balances July 1, 1878	\$11,448 23	\$227 69
To which repayments have been made as follows	51 95	1,418 43
Total available funds	11,500 18	1,646 12

The expenditures from these balances during the last year, made in payment of indebtedness standing over from the preceding year, were as follows:

Life-Saving Service, 1878, available as above	\$11,500 18	
Pay of J. J. Guthrie, late superintendent of District No. 6, for salary from October 1 to November 25, 1877	\$152 17	
Pay of surfmen in Districts Nos. 1, 2, 3, and 10, for services at wrecks which occurred during periods when crews were not required to reside at the stations	210 00	
Amount transferred to appropriation, Life-Saving Service, 1877, and carried to surplus fund	4 40	366 57
Balance unexpended July 1, 1879		11,133 61
		11,500 18
Life-Saving Service, contingent expenses, 1878, available, as heretofore stated		1,646 12
Books, charts, stationery, &c	\$2 87	
Flag-staffs for display of signals	50 00	
Freights, &c	8 80	
Fuel for stations	451 25	
Medals	57 00	
Sites for stations	20 00	
Supplies	99 00	
Sustenance of persons rescued from wrecked vessels	57 20	
Transportation of apparatus to and from wrecks	131 40	
Traveling expenses of officers	513 42	1,390 94
Balance unexpended July 1, 1879		255 18
		1,646 12

There also remained on hand at the beginning of the year, available from appropriations of 1877, the following:

	Life-Saving Service, 1877.	Life-Saving Service, contingent ex- penses, 1877.
Unexpended balances July 1, 1878	\$25,554 08	\$497 94
To which repayments have been made as follows		235 39
Total available funds	25,554 08	733 33

The expenditures from these balances during the last fiscal year were as follows:

Life-Saving Service, 1877, available, as above stated	\$25,554 08	
Balance of item of \$175.32 transferred from appropriation, "Life-Saving Service, 1877," to appropriation "Establishing life-saving stations," \$150 of this item having been previously transferred, as shown in the table of differences in expenditures on page 6 of the report for 1877	\$25 32	
Balance unexpended, carried to the surplus fund, June 30, 1879.	25,528 76	25,554 08
Life-Saving Service, contingent expenses, 1877, available, as above stated		733 33
Advertising, stationery, &c	\$19 25	
Balance unexpended, carried to the surplus fund, June 30, 1879.	714 08	733 33

The total net expenditures for the maintenance of the Life-Saving Service made during the fiscal year ending June 30, 1879, were therefore as follows:

Life-Saving Service, 1879	\$322,526 47	
Life-Saving Service, 1878	366 57	
Life-Saving Service, 1877	25 32	
	<hr/>	
	322,918 36	
Less repayments to the appropriation, Life-Saving Service, 1878	51 95	
	<hr/>	
Net expenditures		\$322,866 41
Life-Saving Service, contingent expenses, 1879	41,051 94	
Life-Saving Service, contingent expenses, 1878	1,390 94	
Life-Saving Service, contingent expenses, 1877	19 25	
	<hr/>	
	42,462 13	
Less amount of repayments to the appropriations, Life-Saving Service, contingent expenses, 1877 and 1878	1,653 82	
	<hr/>	
Net expenditures		40,808 31
Total net expenditures for the service		<hr/> 363,674 72

The foregoing statement of the net expenditures of the Life-Saving Service for the fiscal year ending June 30, 1879, differs from the expenditures by warrants in the following particulars:

Net expenditures by warrants		\$365,966 04
From which deduct the amount of the following items:		
Differences from expenditures by warrants, as shown in statement on page 110 of the report for 1878, as follows:		
Life-Saving Service, 1878	\$101 52	
Life-Saving Service, contingent expenses, 1878	296 57	
	<hr/>	\$398 09
Amount previously transferred from appropriation Life-Saving Service, 1877, to Establishing life-saving stations, as shown in statement on page 6 of the report for 1877, being a part of item \$175.32 not transferred by warrant until the fiscal year 1879		150 00
Item of expense payable from the appropriation Life-Saving Service, contingent expenses, 1877, not expended by warrant until the fiscal year 1879		34 70
Amounts reappropriated June 14, 1878, and not expended by warrants until the fiscal year 1879, as follows:		
Life-Saving Service, 1875	\$18 00	
Life-Saving Service, contingent expenses, 1875	11 55	
	<hr/>	29 55
Amounts in hands of disbursing clerk June 30, 1879, as follows:		
Life-Saving Service, contingent expenses, 1879	1,669 49	
Life-Saving Service, contingent expenses, 1878	11 03	
	<hr/>	1,680 52
		<hr/> 2,292 86
Less repayment to the appropriation Life-Saving Service, contingent expenses, 1877, not credited by warrant until the fiscal year 1879		1 54
		<hr/> 2,291 32
Total amount of differences		
Net expenditures from the appropriations for the year		<hr/> 363,674 72

There remained standing to the credit of the respective appropriations at the close of the fiscal year ending June 30, 1879, and still available, as heretofore stated, the following balances:

Life-Saving Service, 1879	\$11,680 43
Life-Saving Service, 1878	11,133 61
Life-Saving Service, contingent expenses, 1879	6,948 06
Life-Saving Service, contingent expenses, 1878	255 18

The balances of appropriations, Life-Saving Service, 1877, and Life-Saving Service, contingent expenses, 1877, remaining on hand at the close of the year ending June 30, 1879, were carried to the surplus fund at that date as before stated.

To the foregoing statements of expenditures for the maintenance of the Life-Saving Service may be added the following:

APPROPRIATION—SALARIES OFFICE OF LIFE-SAVING SERVICE.

For compensation of the General Superintendent of the Life-Saving Service	\$4,000 00
For compensation of the Assistant General Superintendent of the Life-Saving Service	2,500 00
	<hr/>
	\$6,500 00

EXPENDITURES.

Compensation of the General Superintendent of the Life-Saving Service	4,000 00
Compensation of the Assistant General Superintendent of the Life-Saving Service	2,500 00
	<hr/>
	6,500 00

LIST OF LIFE-SAVING DISTRICTS AND STATIONS

ON THE

COASTS OF THE UNITED STATES.

(ON AND AFTER DECEMBER 10, 1879.)

LIFE-SAVING DISTRICTS AND STATIONS ON THE COASTS OF THE UNITED STATES.

FIRST DISTRICT.

EMBRACING COASTS OF MAINE AND NEW HAMPSHIRE.

No.	Name.	State.	Locality.	Approximate position.					
				Latitude, north.			Longitude, west.		
				°	'	"	°	'	"
1	West Quoddy Head...	Me...	Carrying Point Cove	44	48	25	66	58	25
2	Cross Island	Me...	Off Machiasport	44	37	28	67	16	20
3	Brown's Island	Me...	Off Jonesborough	44	28	30	67	37	00
4	Little Cranberry Island	Me...	Off Mount Desert						
5	Whitehead Island	Me...	Near Whitehead light	43	58	41	69	07	37
6	Biddeford Pool	Me...	Fletcher's Neck	43	26	32	70	20	08
7	Straw's Point	N. H.	Rye Beach	42	59	31	70	45	00

SECOND DISTRICT.

EMBRACING COAST OF MASSACHUSETTS.

1	Plum Island	Mass	Near Newburyport, 3 miles distant	42	47	05	70	48	41
2	Davis Neck	Mass	Near Annisquam light	42	40	03	70	40	03
3	Scituate	Mass	South end of fourth cliff						
4	Gurnett's	Mass	8 miles northeast of Plymouth	42	00	10	70	35	50
5	Manomet Point	Mass	7 miles southeast of Plymouth	41	55	29	70	32	18
6	Race Point	Mass	$\frac{3}{4}$ mile northeast of Race Point light, Cape Cod.	42	04	12	70	13	58
7	Peaked Hill Bar	Mass	$\frac{2}{3}$ miles northeast of Provincetown, Cape Cod.	42	04	34	70	08	54
8	Highlands	Mass	$\frac{7}{8}$ mile northwest of light, Cape Cod	42	02	47	70	04	05
9	Parment River	Mass	$\frac{3}{4}$ miles south of Highland light	41	59	59	70	00	53
10	Cahoon's Hollow	Mass	$\frac{2}{3}$ miles east of the town of Wellfleet	41	56	38	69	58	40
11	Nausett	Mass	$\frac{1}{2}$ miles south of lights	41	50	29	69	56	20
12	Orleans	Mass	Abrast of Ponchet Island	41	45	31	69	55	31
13	Chatham	Mass	$\frac{1}{2}$ miles south of Chatham light	41	38	57	69	56	34
14	Monomoy	Mass	2 miles north of Monomoy light	41	36	00	69	58	41
15	Surfside	Mass	$\frac{2}{3}$ miles south of the town of Nantucket	41	14	33	70	08	36

THIRD DISTRICT.

EMBRACING COASTS OF RHODE ISLAND AND LONG ISLAND.

1	Narragansett Pier	R. I.	Northern part of the town	41	25	59	71	27	04
2	Point Judith	R. I.	Near light-house	41	21	38	71	28	54
3	Watch Hill	R. I.	Near light-house						
4	New Shoreham	R. I.	Block Island, east side, near landing	41	10	30	71	33	07
5	Block Island	R. I.	Block Island, west side, near Dickens's Point.	41	09	41	71	36	13
6	Montauk Point	N. Y.	At the light	41	04	07	71	51	00
7	Ditch Plain	N. Y.	3 miles southwest of Montauk light	41	02	19	71	54	38
8	Hither Plain	N. Y.	$\frac{1}{2}$ mile southwest of Fort Pond	41	01	33	71	57	26
9	Napeague	N. Y.	Abrast Napeague Harbor	40	59	38	72	02	24
10	Amagansett	N. Y.	Abrast of the town	40	58	05	72	07	24
11	Georgica	N. Y.	One mile south of East Hampton	40	56	35	72	11	19
12	Bridgehampton	N. Y.	2 miles south of town	40	54	06	72	17	41
13	Southampton	N. Y.	$\frac{1}{2}$ mile south of town	40	52	13	72	23	07
14	Shinnecock	N. Y.	3 miles from the head of Shinnecock Bay	40	50	40	72	27	30
15	Tyana	N. Y.	4 miles east of Quogue	40	49	36	72	31	16
16	Quogue	N. Y.	$\frac{1}{2}$ mile south of the village	40	48	23	72	35	41
17	Tanner's Point	N. Y.	$\frac{1}{2}$ miles southwest of Patunk village	40	47	52	72	39	01
18	Moriches	N. Y.	$\frac{2}{3}$ miles southwest of Speonk village	40	46	25	72	42	49

Life-saving districts and stations on coasts of the United States—Continued.

THIRD DISTRICT—Continued.

EMBRACING COASTS OF RHODE ISLAND AND LONG ISLAND.

No.	Name.	State.	Locality.	Approximate position.					
				Latitude, north.			Longitude, west.		
				°	'	"	°	'	"
19	Forge River	N. Y.	3½ miles south of Moriches	40	44	56	72	48	12
20	Smith's Point	N. Y.	Abreast of the point	40	43	51	72	52	20
21	Bollport	N. Y.	4 miles south of the village	40	42	42	72	55	46
22	Blue Point	N. Y.	4½ miles south of Patchogue	40	40	40	73	01	15
23	Lone Hill	N. Y.	4½ miles south of Sayville	40	39	46	73	04	27
24	Point of Woods	N. Y.	5 miles south of Islip	40	38	55	73	08	11
25	Fire Island	N. Y.	East side Fire Island Inlet	40	37	34	73	13	36
26	Oak Island, east end	N. Y.		40	38	15	73	17	39
27	Oak Island, west end	N. Y.		40	37	16	73	22	24
28	Jones's Beach, east end	N. Y.		40	36	27	73	25	20
29	Jones's Beach, west end	N. Y.	6 miles south of South Oyster Bay	40	36	10	73	28	43
30	Short Beach	N. Y.	½ mile east of Jones's Inlet	Not determined.					
31	Meadow Island	N. Y.	Opposite entrance of Jones's Inlet	40	35	55	73	33	41
32	Long Beach, east end	N. Y.	2 miles west of Jones's Inlet	40	35	18	73	35	47
33	Long Beach, west end	N. Y.	Near Lucy's Inlet	40	35	03	73	39	09
34	Hog Island, west end	N. Y.	Near Hog Island Inlet	40	35	22	73	43	50
35	Rockaway Beach	N. Y.	Near the village of Rockaway	40	35	25	73	46	55
36	do	N. Y.	West end	40	34	15	73	51	08
37	Coney Island	N. Y.	Manhattan Beach	40	34	21	73	56	06
38	Eaton's Neck	N. Y.	East side entrance to Huntington Bay, Long Island Sound.	40	57	12	73	23	45

FOURTH DISTRICT.

EMBRACING COAST OF NEW JERSEY.

1	Sandy Hook	N. J.	383 yards east of main light	40	27	42	73	59	24
2	Spermaceti Cove	N. J.	East of the upper end of cove	40	25	39	73	58	50
3	Seabright	N. J.	About a mile south of Highlands Station	40	22	46	73	58	11
4	Monmouth Beach	N. J.	3½ miles south of Highlands Station	40	20	30	73	58	07
5	Long Branch	N. J.	Near Green's Pond	40	18	36	73	58	43
6	Deal	N. J.	Near the town, 328 yards north of Great Pond	40	14	00	73	59	29
7	Shark River	N. J.	Near the mouth of Shark River	40	11	25	74	00	19
8	Wreck Pond	N. J.	2½ miles below Shark River	40	09	20	74	00	56
9	Squan Beach	N. J.	1 mile southeast of Squan village	40	06	52	74	01	43
10	Point Pleasant	N. J.	At the head of Barnegat Bay	40	02	58	74	02	20
11	Swan Point	N. J.	2½ miles below the head of Barnegat Bay	40	01	37	74	03	15
12	Green Island	N. J.	5 miles below the head of Barnegat Bay	39	59	06	74	03	33
13	Tom's River	N. J.	On the beach abreast of its mouth	39	56	15	74	04	30
14	Island Beach	N. J.		39	53	42	74	04	57
15	Forked River	N. J.		39	51	06	74	05	16
16	South end Island Beach	N. J.	North side of Barnegat Inlet	39	48	08	74	05	40
17	Barnegat	N. J.	South side of Barnegat Inlet	39	45	34	74	06	12
18	Loveladies Island	N. J.	On the beach abreast of the island	39	43	47	74	07	01
19	Harvey Cedars	N. J.		39	40	23	74	08	13
20	Ship Bottom	N. J.		39	38	13	74	10	42
21	Long Beach	N. J.		39	35	03	74	13	03
22	Bond's	N. J.		39	31	59	74	15	16
23	Little Egg	N. J.	Near the light north of inlet	39	30	05	74	17	28
24	Little Beach	N. J.	South side of Little Egg Inlet	39	27	23	74	19	28
25	Brigantine	N. J.	5½ miles above Absecon light	39	25	23	74	20	02
26	S. Brigantine	N. J.	2 miles above Absecon light	39	23	20	74	23	08
27	Atlantic City	N. J.	Near Absecon light	39	21	57	74	24	31
28	Absecon	N. J.	3 miles below the light	39	20	45	74	27	27
29	Great Egg	N. J.	6 miles below the light	39	19	02	74	30	51
30	Beazleys	N. J.	South side of the inlet	39	17	10	74	34	30
31	Peck's Beach	N. J.	3½ miles above Corson's Inlet	39	14	47	74	36	29
32	Corson's Inlet	N. J.	Near the inlet, north side	39	12	59	74	38	06
33	Ludlam's Beach	N. J.	3½ miles above Townsend's Inlet	39	09	42	74	40	41
34	Townsend's Inlet	N. J.	Near the inlet, north side	39	07	30	74	42	21
35	Stone Harbor	N. J.	3½ miles above Hereford Inlet	39	03	35	74	44	50
36	Hereford Inlet	N. J.	Near Hereford light	39	00	14	74	46	55
37	Turtle Gut	N. J.	6 miles above Cape Island City	38	58	39	74	50	34
38	Two-Mile Beach	N. J.	4 miles above Cape Island City	38	57	08	74	51	00
39	Cape May	N. J.	2 miles above Cape Island City	38	56	01	74	54	00
40	do	N. J.	Near the light	38	55	50	74	57	36
41	Bay Shore	N. J.	2½ miles west of Cape Island City	38	56	37	74	58	03

Life-saving districts and stations on coasts of the United States—Continued.

FIFTH DISTRICT.

EMBRACING COAST BETWEEN CAPE HENLOPEN AND CAPE CHARLES.

No.	Name.	State.	Locality.	Approximate position.					
				Latitude, north.			Longitude, west.		
				°	'	"	°	'	"
1	Cape Henlopen	Del .....	.....	38	46	38	75	04	43
2	Rehoboth Beach	Del .....	.....	Not determined.					
3	Indian River Inlet	Del .....	.....	38	36	40	75	04	30
4	Ocean City	Md	Just north of town	Not determined.					
5	Green Run Inlet	Md .....	.....	38	03	15	75	13	15
6	Pope's Island	Md .....	.....	Not determined.					
7	Assateague Beach	Va	Abreast of Assateague light.	37	54	10	75	19	35
8	Cedar Inlet	Va	South end of Cedar Island	37	35	10	75	36	20
9	Hog Island	Va	South end of Hog Island	37	26	45	75	41	00
10	Cobb's Island	Va	South end of Cobb's Island	37	17	20	75	46	15
11	Smith's Island	Va	South end of Smith's Island	37	06	20	75	55	00

SIXTH DISTRICT.

EMBRACING COAST BETWEEN CAPE HENRY AND CAPE FEAR.

1	Cape Henry	Va .....	.....	36	55	30	76	00	30
2	Seatack	Va .....	.....	Not determined.					
3	Dam Neck Mills	Va .....	.....	Do.					
4	Little Island	Va .....	.....	Do.					
5	False Cape	Va .....	.....	36	38	15	75	53	00
6	Deal's Island	N. C .....	.....	Not determined.					
7	Old Currituck Inlet	N. C .....	.....	Do.					
8	Jones's Hill	N. C	Currituck Beach	36	22	00	75	49	00
9	Poyner's Hill	N. C .....	.....	Not determined.					
10	Caffey's Inlet	N. C .....	.....	Do.					
11	Paul Gamiel's Hill	N. C .....	.....	Do.					
12	Kitty Hawk	N. C .....	.....	Do.					
13	Kill Devil Hills	N. C .....	.....	Do.					
14	Nag's Head	N. C	8 miles north of Oregon Inlet	35	55	30	75	36	15
15	Tommy's Hummock	N. C .....	.....	Not determined.					
16	Bodie's Island	N. C	$\frac{1}{2}$ mile south of Oregon Inlet	35	47	30	75	32	00
17	Pea Island	N. C .....	.....	Not determined.					
18	Chicomicomico	N. C	5 miles south of New Inlet	35	35	30	75	27	30
19	Cedar Hummock	N. C .....	.....	Not determined.					
20	Little Kinnakeet	N. C .....	.....	35	24	30	75	28	30
21	Big Kinnakeet	N. C	6 miles north of Cape Hatteras light-house.	Not determined.					
22	Creed's Hill	N. C	$4\frac{1}{2}$ miles west of Cape Hatteras light-house.	Do.					
23	Hatteras	N. C	3 miles east of Hatteras Inlet	Do.					
24	Cape Lookout	N. C	Station not yet built .....	.....				
25	Cape Fear	N. C	do .....	.....				

SEVENTH DISTRICT.

EASTERN COAST OF FLORIDA.

1	Thirteen miles north of Indian River Inlet	Fla .....	.....	Not determined.					
2	Gilbert's Bar	Fla	Saint Lucie Rocks	Do.					
3	Orange Grove	Fla .....	.....	Do.					
4	Fort Lauderdale	Fla .....	.....	Do.					
5	Biscayne Bay	Fla .....	.....	Do.					

EIGHTH DISTRICT.

EMBRACING GULF COAST OF UNITED STATES.

No.	Name.	State.	Locality.
1	Sabine Pass	Tex	Station not yet built.
2	Galveston, east end of island	Tex	Do.
3	Galveston, west end of island	Tex	Do.
4	Pass Cavallo	Tex	Do.
5	Aransas Pass	Tex	Do.
6	Brazos Santiago	Tex	Do.

Life-saving districts and stations on coasts of the United States—Continued.

NINTH DISTRICT.

EMBRACING LAKES ERIE AND ONTARIO.

No.	Name.	State.	Locality.
1	Big Sandy Creek	N. Y.	East side of mouth of Big Sandy Creek, Lake Ontario.
2	Salmon Creek	N. Y.	East side of mouth of Salmon Creek, Lake Ontario.
3	Oswego	N. Y.	Entrance of Oswego Harbor, Lake Ontario.
4	Charlotte	N. Y.	Entrance of Charlotte Harbor, Lake Ontario.
5	Buffalo	N. Y.	Entrance of Buffalo Harbor, Lake Erie.
6	Presque Isle	Pa.	Entrance of Erie Harbor, Lake Erie.
7	Fairport	Ohio	Entrance of Fairport Harbor, Lake Erie.
8	Cleveland	Ohio	Entrance of Cleveland Harbor, Lake Erie.
9	Marblehead Point	Ohio	Marblehead Island, near Quarry Docks, Lake Erie.

TENTH DISTRICT.

EMBRACING LAKES HURON AND SUPERIOR.

1	Sand Beach Harbor	Mich.	Lake Huron. Station not yet built.
2	Point aux Barques	Mich.	Near light-house, Lake Huron.
3	Port Austin	Mich.	Lake Huron. Station not yet built.
4	Ottawa Point (Tawas)	Mich.	Near light-house, Lake Huron.
5	Sturgeon Point	Mich.	Do.
6	Thunder Bay Island	Mich.	Do.
7	Middle Island	Mich.	Lake Huron. Station not yet built.
8	Forty-Mile Point	Mich.	Hammond's Bay, Lake Huron.
9	Vermillion Point	Mich.	Lake Superior.
10	Seven miles west of Vermillion Point	Mich.	Do.
11	Two Heart River	Mich.	Near mouth of Two Heart River, Lake Superior.
12	Sucker River	Mich.	Near mouth of Sucker River, Lake Superior.
13	Ship Canal	Mich.	Near mouth of Portage Lake and Lake Superior Ship-Canal, Lake Superior. Station not yet built.

ELEVENTH DISTRICT.

LAKE MICHIGAN.

1	Beaver Island	Mich.	Near light-house.
2	North Manitou Island	Mich.	Near Pickard's wharf.
3	Sleeping Bear Point	Mich.	Station not yet built.
4	Point au Bec Scies	Mich.	Near light-house.
5	Manistee	Mich.	In the harbor.
6	Grand Point au Sauble	Mich.	Near light-house.
7	Ludington	Mich.	In the harbor.
8	Muskegon	Mich.	In the harbor at Port Sherman.
9	Grand Haven	Mich.	Entrance of harbor.
10	Saint Joseph	Mich.	In the harbor.
11	Chicago	Ill.	Do.
12	Grosse Point	Ill.	Evanston, Ill., on Northwestern University grounds.
13	Kenosha	Wis.	In the harbor on Washington Island.
14	Racine	Wis.	In the harbor.
15	Milwaukee	Wis.	Near entrance of harbor.
16	Sheboygan	Wis.	Entrance of harbor.
17	Two Rivers	Wis.	Do.
18	Bayley's Harbor	Wis.	Station not yet built.

TWELFTH DISTRICT.

PACIFIC COAST.

1	Neah Bay	Wash. T.	On Indian reservation.
2	Shoalwater Bay	Wash. T.	Near light-house boat-landing.
3	Cape Disappointment	Wash. T.	Baker's Bay.
4	Cape Arago	Oreg.	Coos Bay, near light-house.
5	Humboldt Bay	Cal.	Near light-house.
6	Bolinas Bay	Cal.	Station not yet built.
7	Golden Gate Park	Cal.	On beach in Golden Gate Park, San Francisco.
8	Point Concepcion	Cal.	Station not yet built.

ABSTRACTS
OF RETURNS OF
WRECKS AND CASUALTIES TO VESSELS
WHICH HAVE OCCURRED ON AND NEAR THE
COASTS AND ON THE RIVERS OF THE UNITED STATES,
AND TO
AMERICAN VESSELS AT SEA AND ON THE COASTS
OF FOREIGN COUNTRIES,
DURING THE
FISCAL YEAR ENDING JUNE 30, 1879.

WRECKS, CASUALTIES, AND COLLISIONS AT HOME AND ABROAD.

REMARKS EXPLANATORY OF THE WRECK-STATISTICS FOR THE YEAR 1878-'79.

The following is the sixth annual statement of wrecks and casualties which have occurred on or near the coasts and on the rivers of the United States, and to American vessels at sea or on the coasts of foreign countries.

The statistics relating to disasters upon our own coasts are compiled from reports obtained and received through the officers of the customs, in compliance with the acts of June 20, 1874, and June 18, 1878.

Those relating to disasters which have occurred to American shipping in foreign waters are derived from reports received from our consular officers abroad and through the courtesy of officers of foreign governments; an interchange of such information having been effected, through the Department of State, with most other maritime nations.

In the preparation of the accompanying tables it has been found advisable, in order to facilitate reference, to make the following general divisions:

I. Disasters occurring on the Atlantic and Gulf coasts of the United States, embracing—

1. All casualties outside of, but in proximity to, the coast-line;
2. All casualties occurring in the bays and harbors adjacent to the coasts named;
3. All casualties occurring in or near the mouths of rivers emptying into the ocean or gulf.

II. Disasters occurring upon the Pacific coast of the United States, including those occurring in adjacent waters, as in the first division.

III. Disasters occurring on the great lakes, embracing—

1. All casualties occurring on Lakes Superior, Michigan, Huron, Saint Clair, Erie, or Ontario, reported by officers of the customs, whether in waters under the jurisdiction of the United States or of Great Britain;
2. All casualties occurring in rivers, straits, &c., connecting the several lakes named;
3. All casualties occurring in the harbors of any of said lakes, or in or near the mouths of rivers emptying into them, within the United States.

IV. Disasters occurring in rivers within the United States, embracing all rivers except those referred to in the foregoing division.

V. Disasters occurring to American shipping at sea or in foreign waters.

The disasters embraced in the foregoing divisions are classified as follows, viz:

1. *Foundering*s—embracing foundering which resulted from the leaking or capsizing of vessels, but not those which resulted from collision, stranding, or striking any sunken wreck, or against piers, snags, or ice.
2. *Stranding*s—embracing disasters resulting from running aground, striking a rock, reef, bar, or other natural object, although the vessel may have foundered as a result of such casualty.
3. *Collisions*—embracing all collisions between vessels only.

4. *Other causes*—embracing disasters resulting from various causes, as follows, viz :

Fire, irrespective of result;

Scuttling, or any intentional damage to vessel;

Collisions with fields or quantities of ice, although vessel may be sunk thereby;

Striking on sunken wrecks, anchors, buoys, piers, or bridges;

Leakage (except when vessel foundered or went ashore for safety);

Loss of masts, sails, boats, or any portion of vessel's equipments;

Capsizing, when vessel did not sink;

Damage to machinery;

Fouling of anchors;

Striking of lightning;

Explosion of boilers;

Breakage of wheels;

Also water-logged, missing, and abandoned vessels.

Since the publication of the annual statement for the fiscal year ending June 30, 1878, information has been received of the occurrence of disasters during that year to 117 American vessels and the loss of 88 lives. The table annexed shows the nature of these casualties and the divisions in which they occurred :

	Foundering.	Strandings.	Collisions.	Other causes.	Total.	Totally lost.	Partially lost.	Lives lost on vessels damaged.	Lives lost on vessels not damaged.	Total number of lives lost.
Atlantic and Gulf coasts	5	7	15	8	35	8	27	2	12	14
Pacific coast			2	6	8	1	7		2	2
Lakes	1	2	5	3	11	2	9	1	2	3
Rivers	1	1	14	12	28	6	22	16	6	22
At sea or in foreign waters		7	6	22	35	8	27	41	6	47
Total	7	17	42	51	117	25	92	60	28	88

Of the 88 lives lost reported above, 20 were lost on the ship *Jean Ingelow*, of Portsmouth, N. H., which sailed from Cardiff, Wales, to Singapore, May 27, 1878, and was last spoken June 12 following, off the Madeira Islands; 13 on the bark *Eureka*, of Boston, which cleared from New York February 16, 1878, bound for Japan, and was found May 16, 1878, in latitude 39° south, longitude 9° east, dismasted, with deck broken up, and abandoned. The crew, having never been heard from, are supposed to have been lost.

Of the remainder, 13 were killed by the explosion of boilers; 12 by the collision of vessels; 9 fell overboard from spars, rigging, &c.; 13 were washed overboard, or lost their lives in gales, hurricanes, &c.; 3 by the running down of small boats; and 5 were accidentally killed on board vessels.

As the foregoing could not properly be included in the report for the fiscal year just closed, it is thought advisable to reprint the general summary table of the previous year, amended so as to include the particulars furnished by the wreck reports mentioned above. The table will be convenient for the purpose of comparison with the corresponding table in the statement of the present year, and is accordingly herewith presented.

Summary of disasters to vessels which occurred on and near the coasts and on the rivers of the United States, and to American vessels at sea and on the coasts of foreign countries, during the fiscal year ending June 30, 1878.

Nature of casualties.	Number of ves- sels.	Aggregate ton- nage.	Wrecks involv- ing total loss.	Casualties in- volving par- tial damage.	Number of lives lost.
Foundering:					
Atlantic and Gulf coasts	51	5,580	39	12	7
Pacific coast	5	216	2	3	.....
Great lakes	11	2,390	9	2	21
Rivers	4	199	1	3	1
At sea or in foreign waters	34	12,292	33	1	46
Total	105	20,677	84	21	75
Strandings:					
Atlantic and Gulf coasts	297	53,950	130	167	249
Pacific coast	41	11,707	19	22	6
Great lakes	109	30,689	30	79	14
Rivers	27	6,485	7	20	.....
At sea or in foreign waters	71	29,814	53	18	12
Total	545	132,605	239	306	281
Vessels collided:					
Atlantic and Gulf coasts	315	83,939	15	300	20
Pacific coast	33	12,223	4	29	4
Great lakes	155	54,661	9	146	8
Rivers	52	17,174	4	48	8
At sea or in foreign waters	70	30,488	5	65	7
Total	625	198,485	37	588	42
Other causes:					
Atlantic and Gulf coasts	215	57,901	20	195	20
Pacific coast	26	11,565	5	21	18
Great lakes	206	60,323	17	189	6
Rivers	66	24,687	28	38	42
At sea or in foreign waters	271	121,847	45	226	175
Total	784	276,323	115	669	260
Grand total	2,059	628,090	475	1,584	*658

RECAPITULATION.

Atlantic and Gulf coasts	878	201,370	204	674	296
Pacific coast	105	35,711	30	75	28
Great lakes	481	148,043	65	416	43
Rivers	149	48,525	40	109	51
At sea or in foreign waters	446	194,441	136	310	240
Total	2,059	628,090	475	1,584	*658

	Atlantic and Gulf coasts.	Pacific coast.	Great lakes.	Rivers.	At sea or in foreign waters.	Aggregate.
Total value vessels involved.	\$13,452,977	\$2,556,850	\$6,071,730	\$2,548,100	\$8,945,538	\$33,575,195
Total value cargoes involved.	5,394,870	1,043,093	2,792,745	1,134,190	10,404,336	20,769,224
Aggregate	18,847,847	3,599,943	8,864,475	3,682,290	19,349,874	54,344,429
Total insurance on vessels ..	2,499,305	827,700	2,160,580	807,216	3,854,345	10,149,146
Total insurance on cargoes ..	2,106,626	107,540	1,831,808	763,900	5,934,636	10,744,510
Aggregate	4,605,931	935,240	3,992,388	1,571,116	9,788,981	20,893,656
Total losses to vessels	2,761,234	455,682	675,109	751,232	3,484,360	8,127,617
Total losses to cargoes	1,041,537	185,059	301,782	506,927	2,720,609	4,755,914
Aggregate	3,802,771	640,741	976,891	1,258,159	6,204,969	12,883,531
Total ton'ge vessels involved.	201,370	35,711	148,043	48,525	194,441	628,090
Total tonnage vessels lost ...	36,559	7,165	13,465	13,857	57,030	128,076

* In addition to the number of lives lost here reported, 120 were lost in cases where no other casualty occurred to the vessels, making the total number of lives lost 778.

As the appended tables include all casualties involving losses as low as \$50, for the purpose of exhibiting their nature, causes, and localities, the character of vessels, loss of life, and other information of importance, the following table of disasters, involving damage amounting to \$500 and upward (damage less than that amount to vessels and cargoes being considered unimportant in a pecuniary sense), is subjoined, the corresponding table for the two previous years being also reprinted for the purpose of comparison.

Fiscal year ending June 30, 1877.

	Amount of losses.															Total.
	\$500 to \$1,000.	\$1,000 to \$2,000.	\$2,000 to \$5,000.	\$5,000 to \$10,000.	\$10,000 to \$20,000.	\$20,000 to \$30,000.	\$30,000 to \$40,000.	\$40,000 to \$50,000.	\$50,000 to \$75,000.	\$75,000 to \$100,000.	\$100,000 to \$200,000.	\$200,000 to \$300,000.	\$300,000 and over.	Unknown.		
Atlantic and Gulf coasts	155	107	119	72	42	13	10	2	8	....	4	....	1	55	588
Pacific coast	4	6	10	2	1	2	1	....	1	....	1	....	2	30	30
Great lakes	29	18	25	9	9	7	....	1	1	1	....	....	11	111	111
Rivers	15	20	28	17	14	2	3	2	3	....	1	....	4	109	109
At sea or in foreign waters	50	53	87	66	53	33	9	15	17	9	11	2	2	33	440	
Total	253	204	269	166	119	57	23	20	30	10	17	2	3	105	1,278	

Fiscal year ending June 30, 1878.

	Amount of losses.															Total.
	\$500 to \$1,000.	\$1,000 to \$2,000.	\$2,000 to \$5,000.	\$5,000 to \$10,000.	\$10,000 to \$20,000.	\$20,000 to \$30,000.	\$30,000 to \$40,000.	\$40,000 to \$50,000.	\$50,000 to \$75,000.	\$75,000 to \$100,000.	\$100,000 to \$200,000.	\$200,000 to \$300,000.	\$300,000 and over.	Unknown.		
Atlantic and Gulf coasts	131	85	87	52	34	9	7	6	5	3	3	2	1	62	487	
Pacific coast	12	16	18	8	12	2	1	.....	.....	1	.....	.....	1	71	71
Great lakes	42	43	47	24	14	4	4	1	1	.....	.....	.....	26	206	206
Rivers	15	13	14	3	9	4	1	3	2	4	1	.....	4	78	78
At sea or in foreign waters	53	51	42	54	41	24	13	6	6	5	10	1	1	35	342	
Total	253	208	208	141	110	43	26	16	14	12	15	3	2	128	1,179	

Fiscal year ending June 30, 1879.

	Amount of losses.															Total
	\$500 to \$1,000.	\$1,000 to \$2,000.	\$2,000 to \$5,000.	\$5,000 to \$10,000.	\$10,000 to \$20,000.	\$20,000 to \$30,000.	\$30,000 to \$40,000.	\$40,000 to \$50,000.	\$50,000 to \$75,000.	\$75,000 to \$100,000.	\$100,000 to \$200,000.	\$200,000 to \$300,000.	\$300,000 and over.	Unknown.		
Atlantic and Gulf coasts	125	119	105	52	33	10	3	2	3	...	4	1	...	49	506	
Pacific coast	14	6	11	2	3	2	...	2	...	2	...	1	...	1	44	
Great lakes	47	37	26	12	5	2	1	...	1	...	1	...	...	21	153
Rivers	15	17	26	8	8	3	1	2	1	2	...	...	...	6	89
At sea or in foreign waters	71	56	78	67	48	28	8	6	10	4	4	3	2	25	410	
Total	272	235	246	141	97	45	13	12	15	8	9	4	3	102	1,202	

The subjoined tables show, by localities, the total number of vessels meeting with casualties, the total value of such vessels and their cargoes, the total losses to both and the total tonnage involved, and the tonnage of vessels totally lost during the fiscal years, 1877-'78 and 1878-'79, with the percentage of increase or decrease of the latter compared with the former.

Total number of vessels involved.

	1877-'78.	1878-'79.	Per cent.
Atlantic.....	843	936	Increase of 11.03 per cent.
Pacific.....	97	75	Decrease of 22.68 per cent.
Great lakes.....	470	408	Decrease of 13.19 per cent.
Rivers.....	121	152	Increase of 25.62 per cent.
At sea or in foreign waters.....	411	523	Increase of 27.26 per cent.
Aggregate.....	1,942	2,094	Increase of 7.83 per cent.

Total value of vessels and cargoes involved.

	1877-'78.	1878-'79.	Per cent.
Atlantic.....	17,975,140	18,229,542	Increase of 1.42 per cent.
Pacific.....	3,337,243	3,393,553	Increase of 1.69 per cent.
Great lakes.....	8,683,875	7,524,006	Decrease of 15.42 per cent.
Rivers.....	3,144,540	2,935,433	Decrease of 6.65 per cent.
At sea or in foreign waters.....	17,937,974	17,193,866	Decrease of 4.15 per cent.
Aggregate.....	51,078,772	49,276,400	Decrease of 3.53 per cent.

Total loss to vessels and cargoes.

	1877-'78.	1878-'79.	Per cent.
Atlantic.....	3,749,280	2,765,180	Decrease of 26.25 per cent.
Pacific.....	532,091	736,341	Increase of 38.39 per cent.
Great lakes.....	968,996	623,314	Decrease of 35.67 per cent.
Rivers.....	1,147,009	700,872	Decrease of 38.90 per cent.
At sea or in foreign waters.....	5,692,523	6,059,160	Increase of 6.44 per cent.
Aggregate.....	12,089,899	10,884,867	Decrease of 9.97 per cent.

Total tonnage of vessels involved.

	1877-'78.	1878-'79.	Per cent.
Atlantic.....	191,702	222,217	Increase of 15.92 per cent.
Pacific.....	30,265	31,132	Increase of 2.86 per cent.
Great lakes.....	144,349	133,298	Decrease of 7.65 per cent.
Rivers.....	38,161	38,909	Increase of 1.96 per cent.
At sea or in foreign waters.....	174,177	184,610	Increase of 5.99 per cent.
Aggregate.....	578,654	610,166	Increase of 5.44 per cent.

Total tonnage of vessels totally lost.

	1877-'78.	1878-'79.	Per cent.
Atlantic.....	35,503	35,217	Decrease of .81 per cent.
Pacific.....	3,590	7,835	Increase of 118.25 per cent.
Great lakes.....	13,197	8,782	Decrease of 33.46 per cent.
Rivers.....	12,736	7,072	Decrease of 44.47 per cent.
At sea or in foreign waters.....	52,007	54,272	Increase of 4.35 per cent.
Aggregate.....	117,033	113,178	Decrease of 3.29 per cent.

From the foregoing tables it will be seen that the total number of casualties in the year 1878-'79 exceeds that of the previous year by 7.83 per cent., the increase having occurred upon the Atlantic and Gulf coasts, the rivers, and at sea, or in foreign waters; while upon the Pacific coast and the lakes there has been a considerable decrease.

On the Atlantic and Gulf coasts, while there has been an increase in the number of casualties and in the tonnage and values involved, there has been a very gratifying decrease in the loss to property, amounting to 26.25 per cent. On the lakes and rivers there has also been a similar decrease in the percentage of loss, while on the Pacific coast and at sea, or in foreign waters, there has been an increase.

The large increase of tonnage totally lost on the Pacific coast during the year is due to the large size of four of the vessels lost, these vessels having a tonnage of 3,882, 1,178, 1,057, and 814, respectively, making an aggregate of 6,931 tons, or 88.46 per cent. of the total tonnage lost.

On the 30th of June, 1879, the total number of registered, enrolled, and licensed vessels, belonging to the United States, were 25,211, with a total tonnage of 4,169,600.60; of this number, 1,996 vessels, having a total tonnage of 610,166, met with casualties during the year, being 7.92 per cent. of the total number.

The following exhibit shows the number of steam and sailing vessels, canal boats, and barges registered, enrolled, and licensed, belonging to the United States on June 30, 1879; the number of each class which have met with disasters during the year, and the ratio of casualties to the number of vessels:

Comparative table.—Casualties to vessels.

Classification.	Number of ves- sels belonging to the United States.	Number of cas- ualties to ves- sels.	Ratio of casu- alties to num- ber of vessels.
Steam-vessels	4,569	379	As 1 to 12.06
Sailing-vessels	17,042	1,574	As 1 to 10.83
Canal-boats	1,206	5	As 1 to 241.20
Barges	2,394	38	As 1 to 63.00
Total	25,211	1,996	As 1 to 12.63

During the year 607 vessels were reported as having met with collisions, but as two vessels were engaged in each collision (though in a few instances three or more collided with each other in gales, &c.), the actual number of casualties of this nature were a little less than one-half that number.

Eighty-five foreign vessels, having an aggregate tonnage of 43,958, met with disasters in American waters during the year. The nationalities of these vessels are given in certain of the accompanying tables.

In addition to the lives lost in the disasters to vessels, which are embraced in the tables, 145 persons perished, by drowning or by accident on board, out of crews employed on 122 different vessels. In these cases neither vessels nor cargoes suffered damage, the persons drowned having been lost overboard or having perished by the capsizing of small boats in which they had left their vessels to attend fishing trawls or for some other purpose. In some instances lives were lost by falling to the deck from aloft and by being struck by spars, tackling, &c., falling or swinging, owing to the giving away of rigging. These vessels are not included in any of the tables except 63 and 64.

The following exhibit shows the number of persons on board vessels suffering casualties, the number of lives lost, the ratio of those lost to the number on board, and the ratio of lives lost to the number of casualties for the last four fiscal years:

Fiscal years.	Number of casualties.	Number of persons on board.	Number of lives lost.	Ratio of lives lost to number on board.	Ratio of lives lost to number of casualties.
1875-'76.....	2, 173	23, 602	*885	As 1 to 26. 6 .	As 1 to 2. 4 .
1876-'77.....	2, 062	28, 139	*817	As 1 to 34. 4 .	As 1 to 2. 5 .
1877-'78.....	1, 942	25, 133	*598	As 1 to 42. 0 .	As 1 to 3. 2 .
1878-'79.....	2, 094	27, 811	*743	As 1 to 37. 43..	As 1 to 2. 82.

* This number is exclusive of lives lost where vessels suffered no damage.

The above statement shows a general and almost constant decrease in the number of lives lost in proportion to the number of persons on board vessels suffering casualty, and a similar decrease in the number of lives lost in proportion to the number of disasters.

This remarkable diminution in the mortality attending shipwreck is undoubtedly referable to the unprecedented agitation of the public mind in this country within the last few years, with respect to marine disasters; which has resulted in protective legislation, involving an increase in the number of life-saving stations, light-houses, beacons, and buoys, and the institution of improved steamboat inspections and regulations for navigation, and has also resulted in valuable inventions for the management of vessels, as well as for the saving of life in case of accident, besides leading ship-owners to exercise greater discrimination in the selection of their officers and equipments, and care for the condition of their ships.

The operation of these influences is better shown in the following table, which is the same as the one above, except that it is confined to our own domain, the disasters occurring at sea and in foreign waters being excluded:

Fiscal years.	Number of casualties.	Number of persons on board.	Number of lives lost.	Ratio of lives lost to number on board.	Ratio of lives lost to number of casualties.
1875-'76.....	1, 808	19, 255	*650	As 1 to 29. 62..	As 1 to 2. 78.
1876-'77.....	1, 525	21, 688	*315	As 1 to 68. 85..	As 1 to 4. 84.
1877-'78.....	1, 531	20, 327	*399	As 1 to 50. 94..	As 1 to 3. 83.
1878-'79.....	1, 571	21, 898	*237	As 1 to 92. 40..	As 1 to 6. 63.

* This number is exclusive of lives lost where vessels suffered no damage.

Thus it appears that upon the coasts and rivers of the United States the loss of life has descended, since the fiscal year ending June 30, 1876, from 1 out of every 29 persons on board vessels suffering disaster to 1 out of every 92 persons, and from 1 out of every 2 such vessels to 1 out of every 6; a reduction of 68 per cent. in the one case and 58 per cent. in the other.

It will be seen that the regular diminution in the ratios from year to year is interrupted in the fiscal year 1877-'78. This is owing to the exceptionally calamitous disasters to the Huron and Metropolis on the North Carolina coast, in which 183 persons perished. It is shown in another part of this report that in one case the Life-Saving Service was inoperant, and in the other crippled, from causes explained.

TABLES.

ATLANTIC AND GULF COASTS.

TABLE 1.—*Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the NUMBER and VALUE of VESSELS and CARGOES and amount of LOSS to same where known.*

Months.	Total value of vessels.		Number of vessels, value unknown.	Total value of cargoes.		Number of cargoes, value unknown.	Loss to vessels.		Loss to cargoes.	
	Number.	Amount.		Number.	Amount.		Number.	Amount.	Number.	Amount.
July	53	\$1,453,469	5	40	\$242,126	5	49	\$64,431	1	8
August	49	700,600	1	32	204,270	3	45	62,561	5	11
September	58	879,776	8	41	256,285	10	52	165,137	13	23
October	190	1,543,975	6	137	521,472	11	184	305,965	12	75
November	65	937,700	12	50	267,014	12	61	58,252	16	23
December	77	1,100,500	4	62	375,772	4	73	149,520	8	35
January	74	1,483,721	2	56	886,709	3	70	279,805	6	28
February	52	1,138,691	1	38	729,573	1	48	106,502	1	14
March	89	574,700	3	65	435,925	4	89	170,417	3	32
April	75	940,500	5	51	484,141	6	71	137,927	1	8
May	48	1,263,050	2	38	422,205	3	47	51,063	3	17
June	51	1,110,900	6	26	186,468	7	49	39,854	8	9
Total	881	13,127,582	55	636	5,101,960	69	838	1,651,452	4	94

* In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 2.

TABLE 2.—*Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the number of VESSELS TOTALLY LOST, the number DAMAGED, aggregate TONNAGE of vessels totally lost, number of PASSENGERS and CREW, and number of LIVES LOST.*

Months.	Number of disasters resulting in total loss to vessels.	Number of disasters resulting in partial damage to vessels.	Whether total or partial loss unknown.	Number of casualties resulting in no damage to vessels.	Total.	Total tons burden of vessels totally lost.	Total number of crew, including master, &c.	Total number of passengers.	Total number of lives lost.
July	13	37	4	4	58	1,543	563	485	2
August	8	37	1	4	50	1,267	440	393	6
September	23	30	7	6	66	3,550	484	941	24
October	47	137	7	5	196	6,497	1,314	565	65
November	13	48	11	5	77	941	508	.....	1
December	20	53	4	4	81	4,238	553	398	10
January	20	50	2	4	76	4,591	603	242	16
February	17	32	1	3	53	3,265	459	68	13
March	17	72	3	.....	92	4,538	522	106	6
April	22	50	5	3	80	3,643	553	428	16
May	13	34	2	1	50	836	510	193	3
June	4	45	3	5	57	308	549	999	.....
Total	217	625	50	44	936	35,217	7,058	4,818	161

TABLE 3.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the number of VESSELS and CARGOES INSURED and UNINSURED, and the AMOUNT of INSURANCE, where known.

Months.	Number of vessels and cargoes reported to be insured and the amount of insurance.					Number of vessels and cargoes reported not insured.		Number of vessels and cargoes, whether insured or not, unknown.		Vessels in ballast.
	Vessels.		Cargoes.		Total amount of insurance.	Vessels.	Cargoes.	Vessels.	Cargoes.	
	Number.	Amount.	Number.	Amount.						
July	18	\$218,529	14	\$47,404	\$285,933	34	20	6	11	18
August	10	40,550	11	47,550	88,100	36	14	4	10	15
September	21	203,092	15	90,333	293,425	34	18	11	18	15
October	40	249,416	62	288,245	537,661	141	54	15	32	48
November	9	26,323	14	17,100	43,423	53	22	15	26	15
December	22	90,800	18	71,660	162,460	52	30	7	18	15
January	14	153,424	17	454,335	607,759	57	29	5	13	17
February	18	184,417	20	534,400	718,817	30	12	5	7	14
March	23	135,750	24	336,550	472,300	58	22	11	23	23
April	14	168,080	16	131,880	299,960	59	24	7	17	28
May	15	427,121	12	14,180	441,301	33	18	2	11	9
June	16	243,000	4	23,240	266,240	33	13	8	16	24
Total	220	2,140,502	227	2,056,877	4,197,379	620	276	96	202	231

TABLE 4.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, distinguishing the NATURE of each casualty.

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered	1	...	1	10	3	4	4	1	4	...	1	...	35
Stranded	22	12	22	78	26	43	24	25	42	26	21	14	355
Collided	26	16	33	70	40	22	19	10	14	26	20	29	325
Capsized .....	...	2	...	1	...	...	...	...	1	2	1	2	9
Damage to hull, rudder, rigging, &c	5	4	1	17	6	8	12	3	18	9	2	4	89
Damage to machinery	1	...	...	1	...	...	2	1	...	...	...	2	7
Dismasted .....	...	1	2	6	...	1	3	...	1	...	...	...	15
Explosion of boiler .....	...	2	2	...	...	...	...	...	1	...	...	...	5
Fire .....	...	...	2	2	1	...	1	4	6	3	...	1	20
Ice .....	...	...	...	...	...	...	6	3	...	...	...	...	9
Sprung a leak	2	6	1	5	...	1	2	1	2	4	1	3	28
Struck by lightning	1	6	...	...	...	...	...	...	1	...	1	...	9
Struck sunken wrecks, buoys, piers, bridges, &c. ....	...	...	1	1	3	1	2	...	5	1	1	2	18
Miscellaneous .....	...	...	1	3	...	...	2	...	1	1	1	1	10
Unknown .....	...	...	...	...	...	...	1	...	1	...	...	...	2
Total	58	50	66	196	77	81	76	53	92	80	50	57	936

TABLE 5.—*Abstract of returns of disasters (excluding collisions) to vessels and cargoes on the ATLANTIC and GULF coasts during the year ending June 30, 1879, distinguishing the CAUSE of each disaster.*

Class and cause of disaster.	Foundings.	Strandings.	Other causes.	Missing vessels.	Total.
CLASS 1.—Causes connected with the weather :					
Calms, currents, and tides		15	5		20
Darkness		7			7
Fog, &c		28	1		29
Gales, hurricanes, &c	13	190	114		317
Heavy seas	4	21	13		38
Lightning			9		9
Total of Class 1	17	261	142		420
CLASS 2.—Causes connected with vessels, equipments, or stowage :					
Defective hull, masts, rigging, &c			4		4
Error in compass or chronometer		4			4
Total of Class 2		4	4		8
CLASS 3.—Causes connected with navigation and seamanship :					
Error of masters, officers, or crew	1	30	3		34
Errors of pilot		8			8
Total of Class 3	1	38	3		42
CLASS 4.—Causes connected with machinery or boilers :					
Damage to machinery			7		7
Explosion of boiler, bursting of steam-pipes, &c			7		7
Total of Class 4			14		14
CLASS 5.—Other causes :					
Absence of light or buoys		8	1		9
Fire			18		18
Ice			9		9
Inevitable accident		6	1		7
Sprung a leak	13	8	11		32
Struck sunken wreck, rock, pier, &c			12		12
Want of pilot		1			1
Want of power in steam-tug, defective tow-lines, &c		1			1
Miscellaneous	1	15	4		20
Unknown	3	13	2		18
Total of Class 5	17	52	58		127
Aggregate	35	355	221		611

TABLE 6.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the number of vessels COLLIDED, and distinguishing the CAUSE of each disaster.

Cause of disaster.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Accidental	2			2	2						2	2	6
Bad management			2	2			2			2			12
Carelessness	2	2	2	6	4	2		2			2	2	28
Darkness				6	6							3	17
Error in judgment		2		2	2	2				2			8
Error of pilot	2		4					2					10
"Fault of other vessel"	4	2	2	2	2		2	2	2	2	4	2	26
Fault of tug towing		4	2		4	2	3						15
Fog, &c	6	2	4								4	2	18
Heavy sea	2				2								4
High winds				10	2	4	4		4	3		4	31
Narrow channel										3			3
Negligence			4	10	2	2	2			2		2	24
Mistook lights										2	2		4
Misunderstanding signals						2	2	4	2			2	2
Tides, currents, &c	2	2	5	4		2	2		2				23
Stress of weather			6	18	2	2			2			2	32
Want of proper lights	2	2			4	3		2	2				13
Unknown	4		2	8	8	5	4		2	4	4	8	49
Total	26	16	33	70	40	22	19	10	14	26	20	29	325

TABLE 7.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the number of vessels and distinguishing their DESCRIPTION.

Description of vessels.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Barges		1		3				3	1	1			9
Barks	2	2	3	2	2	2	1	5	5	1		2	34
Barkentines													2
Brigs	1		4	3	4	1	3	1	4	5	1	2	29
Brigantines				1		1	1						3
Canal-boats			1						1				2
Ferry-boats	1		2	2		2	2	1	1	2			13
Schooners	39	34	42	150	62	60	45	31	69	59	33	32	656
Scows	1	1				1							3
Ships				1	1	1	1		2	1	4		7
Sloops		2	1	10		1	4		2	2			24
Steamers	6	6	11	22	4	8	7	2	7	9	2	13	109
Steamships	3	4		3	2	3	5	2		1	2	5	30
Unknown	1		2		1	1							5
Total	58	50	66	196	77	81	76	53	92	80	50	57	936

TABLE 8.—Abstract of returns of disasters to foreign vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing NATIONALITY and DESCRIPTION, and distinguishing those TOTALLY LOST and those PARTIALLY DAMAGED.

Nationality and rig.	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
Austrian bark																										1	
Austrian brig																										1	
British bark		1						1			1							1		1						3	
British barkentine										1																2	
British brig																										1	
British brigantine																										1	
British schooner										5	1	2	2							2	1	1	5	14		19	
British steamer	1				1	2				2																4	
British steamship										1																4	
British ship													1													1	
Dutch bark																										1	
French brig																										1	
French schooner																										1	
Italian bark																										1	
Norwegian bark	1																									1	
Norwegian brig													1	2												2	
Russian bark																										1	
Russian brig																										1	
Spanish bark																										1	
Spanish brig																										1	
Swedish bark																										1	
Swedish brig																										1	
Total	1	1	1	1	2	4	4	4	10	3	2	6	1	2	3	3	1	2	3	4	2	4	20	36	56	56	
Aggregate	2	2	6	4	10	5	7	5	10	5	7	5	5	7	5	4	4	5	5	4	2	4	20	36	56	56	

TABLE 9.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the TONNAGE and distinguishing the number of those TOTALLY LOST and those PARTIALLY DAMAGED.

Burden of vessels.	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.		
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.			
Not exceeding 50 tons	5	7	2	9	4	4	14	33	5	6	2	9	9	16	5	6	2	10	7	11	7	7	3	10	65	128	193		
Over 50 and not exceeding 100 tons	3	8	2	6	7	7	12	37	6	15	5	11	4	9	5	9	5	15	4	13	3	8	8	9	56	145	201		
Over 100 and not exceeding 200 tons	3	11	2	12	5	12	15	33	2	11	9	17	1	8	1	11	2	25	6	15	3	8	1	9	49	170	219		
Over 200 and not exceeding 300 tons .....	...	...	2	1	3	3	1	2	14	12	1	7	...	5	...	1	3	12	3	9	...	...	...	...	6	14	74	88	
Over 300 and not exceeding 400 tons	1	1	4	2	5	2	13	...	4	4	1	4	3	5	1	3	4	1	2	4	...	...	...	...	2	9	54	63	
Over 400 and not exceeding 500 tons	1	1	2	2	1	2	4	4	2	2	1	3	...	4	3	3	2	1	1	1	...	...	...	...	1	8	22	30	
Over 500 and not exceeding 600 tons	1	1	1	1	1	1	2	2	2	2	1	2	...	1	3	...	1	1	2	...	...	...	...	...	5	4	20	24	
Over 600 and not exceeding 700 tons	1	1	...	...	2	2	1	2	1	1	1	1	...	1	1	...	1	1	1	...	...	...	...	...	1	4	12	16	
Over 700 and not exceeding 800 tons .....	...	...	...	...	1	1	...	...	1	1	1	1	...	1	3	...	1	1	1	...	...	...	...	...	2	1	12	13	
Over 800 and not exceeding 900 tons .....	...	...	2	...	...	1	2	...	2	1	1	2	...	...	...	...	1	...	1	...	...	...	...	...	1	2	8	10	4
Over 900 and not exceeding 1,000 tons .....	...	...	1	...	1	1	1	1	1	...	1	1	...	1	1	...	1	...	1	...	...	...	...	...	1	1	3	4	4
Over 1,000 and not exceeding 1,100 tons .....	...	...	3	...	...	...	1	1	...	...	...	...	1	1	...	1	...	...	1	...	...	...	...	...	1	1	3	4	4
Over 1,100 and not exceeding 1,200 tons .....	...	...	...	...	...	...	1	1	...	1	...	2	...	3	...	2	...	1	...	1	...	...	...	...	1	1	3	4	4
Over 1,200 and not exceeding 1,300 tons .....	...	...	...	...	...	...	1	1	...	1	...	2	...	3	...	2	...	...	...	...	...	...	...	...	1	1	3	4	4
Over 1,300 and not exceeding 1,400 tons	5	...	...	...	2	...	1	1	...	1	...	2	...	2	...	2	...	...	...	2	...	...	...	...	3	24	24	24	24
Over 1,400 tons	3	...	1	...	4	...	1	5	...	10	...	3	...	2	...	2	...	1	...	1	...	...	...	2	1	34	35	35	35
Unknown .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	13	45	8	42	23	43	47	149	13	64	20	61	20	56	17	36	17	75	22	58	13	37	4	53	217	719	936	936	936
Aggregate	53	50	66	196	77	81	76	53	92	80	57	936	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

NOTE.—In the columns of "Partial loss" in this table are included the casualties in which the vessels sustained no damage, for the number of which see appropriate column in Table 2.

TABLE 10.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the number of vessels and distinguishing AGE.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 3 years	5	3	5	8	5	5	2	4	3	5	3	5	53
Over 3 and not exceeding 7 years	11	10	12	29	15	21	17	14	13	11	8	8	174
Over 7 and not exceeding 10 years	9	5	6	35	7	12	8	8	11	11	4	8	124
Over 10 and not exceeding 14 years	7	9	12	31	16	14	15	8	23	17	8	15	175
Over 14 and not exceeding 20 years	8	3	10	33	10	11	14	8	13	12	11	5	143
Over 20 and not exceeding 25 years	1	5	4	17	6	4	5	2	10	6	5	7	72
Over 25 and not exceeding 30 years	8	6	2	10	5	6	3	5	4	6	3	5	63
Over 30 and not exceeding 35 years	2	2	2	7	2	2	3	1	2	2	4	1	28
Over 35 and not exceeding 40 years	2	1	1	6	2	2	2	1	3	3	2	1	16
Over 40 and not exceeding 45 years	2	1	1	5	2	2	1	1	3	2	1	1	14
Over 45 and not exceeding 50 years	1	1	1	2	1	1	1	1	1	1	1	1	3
Over 50 years	1	1	1	2	1	1	1	1	1	1	1	1	3
Unknown	4	2	9	13	8	6	6	3	4	4	4	3	66
Total	58	50	66	196	77	81	76	53	92	80	50	57	936

TABLE 11.—Abstract of returns of disasters to vessels on the ATLANTIC and GULF coasts during the year ending June 30, 1879, showing the number of vessels and distinguishing their CARGOES.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Assorted	1	—	—	2	1	—	1	—	2	2	2	2	11
Ballast	13	15	15	48	15	15	17	14	23	23	9	24	231
Brimstone	1	—	—	—	—	—	—	—	—	—	—	—	1
Coal, &c	12	8	11	38	12	17	7	6	20	20	7	5	163
Coffee, rice, spice, &c	—	1	—	—	—	—	2	1	1	—	—	—	5
Cotton, cotton-seed, &c	—	1	—	—	—	—	2	1	1	2	—	1	8
Fish, fishing outfits, &c	5	1	4	9	2	—	4	6	1	1	7	3	43
Fruit, nuts, &c	—	—	1	1	—	1	1	1	1	—	—	—	5
Grain, flour, &c	—	2	2	2	1	2	1	1	1	1	—	—	13
Guano, &c	—	—	—	4	1	4	—	—	1	—	—	—	10
Hides, &c	—	—	—	—	1	—	—	3	1	—	—	—	5
Ice, &c	2	2	—	3	1	—	—	1	3	1	1	—	14
Iron, iron ore, &c	2	1	1	3	1	1	2	—	—	—	2	1	14
Ivory, rubber, and shells	—	—	—	—	—	1	—	—	—	—	—	—	1
Lime, plaster, sand, &c	2	1	—	8	4	—	1	1	10	2	—	2	31
Logwood	—	—	1	3	—	—	—	—	—	—	—	—	5
Lumber, &c	3	3	4	17	10	9	6	1	10	11	6	3	83
Mahogany, &c	—	—	1	1	—	—	—	—	—	—	—	—	2
Merchandise (general)	3	3	5	13	2	6	4	4	4	5	5	3	57
Nails, chalk, rags, &c	1	—	—	—	1	—	—	—	1	—	—	1	4
Naval stores	—	—	—	—	—	—	2	—	1	—	1	—	4
Oil, &c	1	1	—	—	—	—	—	1	—	—	—	—	3
Oysters	2	—	—	5	2	5	16	4	—	1	—	—	35
Phosphate rock	—	1	—	5	—	1	2	—	—	—	—	—	9
Piling, posts, &c	—	—	—	2	—	1	—	—	—	—	—	—	3
Provisions, &c	—	—	1	3	2	1	—	1	—	1	2	1	12
Railroad ties, &c	—	—	—	—	1	—	—	—	1	1	—	—	3
Salt, &c	—	2	2	3	—	1	1	—	—	—	—	1	10
Shooks, barrels, spokes, &c	—	1	—	2	1	—	—	—	1	1	1	3	10
Stone, brick, &c	2	2	3	7	3	2	—	1	1	1	1	—	21
Sugar, molasses, &c	2	—	3	1	2	—	1	2	3	—	—	—	14
Tobacco, &c	—	—	—	2	—	—	—	—	—	—	—	—	2
Turpentine, &c	1	—	—	—	—	—	1	—	—	—	—	1	3
Wood, bark, &c	1	—	2	2	2	4	1	2	3	2	1	—	20
Miscellaneous	2	2	3	5	2	5	2	1	2	1	3	—	28
Unknown	4	3	7	7	11	4	2	—	3	4	2	6	53
Total	58	50	66	196	77	81	76	53	92	80	50	57	936

TABLE 12.—*Summary—ATLANTIC and GULF coasts.*

Nature of casualties.	Number of vessels.	Total number of tons.		Ballast.	Unknown whether laden or not.	Total loss.	* Partial and unknown loss.	Number of passengers.	Number of crew.	Total on board.	Total number of lives lost.
Foundering	35	4, 095	29	6	.....	24	11	15	180	195	44
Strandings	355	63, 866	281	71	3	149	206	881	2, 267	3, 148	69
Vessels collided	325	105, 580	171	104	50	20	305	3, 319	3, 044	6, 363	9
Other causes	221	48, 676	171	50	.....	24	197	603	1, 567	2, 170	39
Total	936	222, 217	652	231	53	217	719	4, 818	7, 058	11, 876	161

*In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 2.

PACIFIC COAST.

TABLE 13.—*Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the NUMBER and VALUE OF VESSELS and CARGOES and amount of LOSS to same where known.*

Months.	Total value of vessels.		Number of vessels, value unknown.	Total value of cargoes.		Number of cargoes, value unknown.	Loss to ves- sels.		Number of vessels totally lost, amount unknown.	Number of vessels damaged, amount unknown.*	Loss to car- goes.		Number of cargoes totally lost, amount unknown.	Number of cargoes not damaged, or damage unknown.
	Number.	Amount.		Number.	Amount.		Number.	Amount.			Number.	Amount.		
July	3	\$95, 000	...	3	\$30, 600	...	3	\$65, 550	...	...	1	\$12, 000	...	2
August	5	416, 000	...	4	751, 800	...	4	2, 150	...	1	1	25	...	3
September	7	346, 000	...	3	120, 120	1	7	108, 050	...	...	1	120	...	3
October	5	65, 000	...	3	8, 800	...	5	55, 600	...	...	2	2, 300	...	1
November	9	189, 400	...	7	21, 700	...	8	38, 856	...	1	3	3, 550	...	4
December	9	165, 000	1	6	57, 363	1	8	13, 050	...	2	1	20, 000	...	6
January	9	224, 700	...	5	15, 060	...	8	11, 005	...	1	1	1, 000	...	4
February	3	130, 000	...	1	3, 000	...	3	22, 000	...	...	...	...	...	1
March	9	164, 750	...	4	11, 010	...	8	3, 375	...	1	...	...	...	4
April	5	368, 800	...	4	111, 500	...	5	314, 750	...	...	2	56, 750	...	2
May	1	1, 500	...	1	500	...	1	1, 400	...	1	1	40	...	...
June	9	92, 000	...	3	3, 950	1	8	4, 720	...	1	1	50	...	3
Total	74	2, 258, 150	1	44	1, 135, 403	3	68	640, 506	...	7	14	95, 835	...	33

*In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 14.

TABLE 14.—Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the number of VESSELS TOTALLY LOST, the number DAMAGED, aggregate TONNAGE of vessels TOTALLY LOST, number of PASSENGERS and CREW, and number of LIVES LOST.

Months.	Number of disasters resulting in total loss to vessels.	Number of disasters resulting in partial damage to vessels.	Whether total or partial loss unknown.	Number of casualties resulting in no damage to vessels.	Total.	Total tons burden of vessels totally lost.	Total number of crew, including master, &c.	Total number of passengers.	Total number of lives lost.
July	1	2	.....	.....	3	1, 178	45	.....	.....
August	4	4	.....	1	5	.....	138	150	.....
September	4	3	.....	.....	7	1, 297	134	150	.....
October	4	1	.....	.....	5	1, 320	49	1	1
November	2	6	.....	1	9	90	77	150	7
December .....	.....	8	1	.....	10	68	18	.....	.....
January	1	7	.....	1	9	16	52	182	.....
February .....	.....	3	.....	.....	3	.....	55	452	.....
March	1	7	.....	1	9	13	109	27	1
April	1	4	.....	.....	5	3, 882	130	579	14
May .....	.....	1	.....	.....	1	.....	3	.....	.....
June	1	7	.....	1	9	39	58	24	.....
Total	15	53	1	6	75	7, 835	918	1, 733	23

TABLE 15.—Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the number of VESSELS and CARGOES INSURED and UNINSURED, and the AMOUNT OF INSURANCE, where known.

Months.	Number of vessels and cargoes reported to be insured, and the amount of insurance.					Number of ves- sels and car- goes reported not insured.		Number of ves- sels and car- goes, whether insured or not, unknown.		Vessels in ballast.
	Vessels.		Cargoes.		Total amount of insurance.	Vessels.	Cargoes.	Vessels.	Cargoes.	
	Number.	Amount.	Number.	Amount.						
July	2	\$30, 000	1	\$9, 600	\$39, 600	1	1	1	1	1
August	2	8, 800			8, 800	2	3	1	1	3
September	5	102, 500	1	10, 000	112, 500	1	1	1	2	1
October	4	18, 700	2	8, 272	26, 972		1	1		2
November	7	71, 750			71, 750	1	6	1	1	2
December	4	48, 000	2	21, 800	69, 800	5	4	1	1	3
January	3	9, 000			9, 000	6	4		1	4
February	1	1, 500	1	1, 300	2, 800	1		1		2
March	3	19, 900			19, 900	5	4	1		5
April	3	71, 000	1	25, 000	96, 000	2	2		1	1
May						1	1			
June	3	28, 000			28, 000	6	4			5
Total	37	409, 150	8	75, 972	485, 122	31	31	7	8	28

TABLE 16.—*Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, distinguishing the NATURE of each casualty.*

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered	1	1	3	3	3	2	2	1	3	3	1	1	1
Stranded	2	2	4	4	4	6	4	12	4	12	1	4	24
Collided				1									34
Abandoned					2								1
Capsized													12
Damage to hull, rudder, rigging, &c.		1					1		1			4	7
Dismasted							1						1
Struck sunken rock, wreck, &c.		1				1	1						3
Waterlogged				1									1
Miscellaneous									1				1
Total	3	5	7	5	9	10	9	3	9	5	1	9	75

TABLE 17.—*Abstract of returns of disasters (excluding collisions) to vessels and cargoes on the PACIFIC coast during the year ending June 30, 1879, distinguishing the CAUSE of each disaster.*

Class and cause of disaster.	Foundering.	Strandings.	Other causes.	Missing vessels.	Total.
CLASS 1.—Causes connected with the weather:					
Calms, currents, and tides		3			3
Darkness		1			1
Fog, &c.		2			2
Gales, hurricanes, &c.		4	9		13
Heavy sea		6	4		10
Total of class 1		16	13		29
CLASS 2.—Causes connected with vessels, equipments, or stowage:					
Defective masts			1		1
Total of class 2			1		1
CLASS 3.—Causes connected with navigation and seamanship:					
Error of master, officers, or crew		2			2
Error of pilot		2			2
Total of class 3		4			4
CLASS 5.—Other causes:					
Inevitable accident		1			1
Sprung a leak	1				1
Struck sunken wreck, &c.			2		2
Miscellaneous		3			3
Total of class 5	1	4	2		7
Aggregate	1	24	16		41

NOTE.—Class 4 includes disasters arising from causes connected with machinery or boilers. No casualties are reported in this class.

TABLE 18.—*Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the number of vessels COLLIDED, and distinguishing the CAUSE of each disaster.*

Cause of disaster.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Carelessness.....						2						2	4
Darkness.....			2						2				4
Error in judgment.....												2	2
Fog, &c.....	2				2			2				2	6
Heavy sea.....							2						2
High winds.....						2							2
Tides and currents.....					2					2			4
Want of proper lights.....						2	2						4
Unavoidable.....		2	2						2				4
Unknown.....													2
Total.....	2	2	4		4	6	4	2	4	2		4	34

TABLE 19.—*Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the number of vessels and distinguishing their DESCRIPTION.*

Description of vessels.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Barges.....						1							1
Barks.....	2		1							2			5
Barkentines.....				1					1				2
Brigs.....						1				1			2
Ferry-boats.....					1		1	2					4
Schooners.....		4	3	3	6	4	6	1	4	1	1	6	39
Ships.....	1		2	1	1				1				6
Sloops.....					1		1						2
Steamers.....						2	1		3			2	8
Steamships.....		1	1			1				1			4
Yachts.....												1	1
Unknown.....						1							1
Total.....	3	5	7	5	9	10	9	3	9	5	1	9	75

TABLE 20.—*Abstract of returns of disasters to foreign vessels on the Pacific coast during the year ending June 30, 1879, showing NATIONALITY and DESCRIPTION, and distinguishing those TOTALLY LOST and those PARTIALLY DAMAGED.*

	July.	August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.
		Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
Nationality and rig.																										
British ships				1	1	1	1																	2	1	3
Total				1	1	1	1																	2	1	3
Aggregate				2		1																		3		3

TABLE 21.—Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the TONNAGE and distinguishing the number of those TOTALLY LOST and those PARTIALLY DAMAGED.

Burden of vessels.	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Jann-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
Not exceeding 50 tons					2		1		1		1		3		1		1		1		1		1		2		18
Over 50 and not exceeding 100 tons										1		1		2		1		1				1		4		11	14
Over 100 and not exceeding 200 tons										1		4		2				1					4		2		15
Over 200 and not exceeding 300 tons					1		1			1		1		2				1					1		2		13
Over 300 and not exceeding 400 tons												1		1											2		2
Over 400 and not exceeding 500 tons												2		1											1		2
Over 500 and not exceeding 600 tons												1		1											2		3
Over 600 and not exceeding 700 tons												2		2											4		4
Over 700 and not exceeding 800 tons																											3
Over 800 and not exceeding 900 tons																											1
Over 900 and not exceeding 1,000 tons																											1
Over 1,000 and not exceeding 1,100 tons																											1
Over 1,100 and not exceeding 1,200 tons	1				1									1													1
Over 1,200 and not exceeding 1,300 tons																											1
Over 1,300 and not exceeding 1,400 tons																											1
Over 1,400 tons																											1
Unknown																											1
Total	1	2	5	4	3	4	1	2	7		10	1	8		3	1	8	1	4		1	1	8	15	60	75	
Aggregate	3	5	7	5		9					10	9			3	9		5			1	9		75			

NOTE.—In the columns of "Partial loss" in this table are included the casualties in which the vessels sustained no damage, for the number of which see appropriate column in Table 14.

TABLE 22.—Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the number of vessels and distinguishing AGE.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 3 years	1	1	1	3	3	3	3	3	3	1	3	3	17
Over 3 and not exceeding 7 years	1	1	1	3	3	3	1	1	3	1	3	3	12
Over 7 and not exceeding 10 years	1	1	2	1	1	1	1	1	1	1	2	3	10
Over 10 and not exceeding 14 years	1	1	2	2	2	2	2	2	1	1	1	2	14
Over 14 and not exceeding 20 years	1	1	1	2	1	1	1	1	1	1	1	2	9
Over 20 and not exceeding 25 years	1	1	1	1	1	1	1	1	1	1	1	1	6
Over 25 and not exceeding 30 years	1	1	2	1	1	1	1	1	1	1	1	1	6
Over 30 and not exceeding 35 years	1	1	2	1	1	1	1	1	1	1	1	1	6
Over 35 and not exceeding 40 years	1	1	2	1	1	1	1	1	1	1	1	1	6
Over 40 and not exceeding 45 years	1	1	2	1	1	1	1	1	1	1	1	1	6
Over 45 and not exceeding 50 years	1	1	2	1	1	1	1	1	1	1	1	1	6
Over 50 years	1	1	2	1	1	1	1	1	1	1	1	1	6
Unknown	1	1	2	1	1	1	1	1	1	1	1	1	1
Total	3	5	7	5	9	10	9	3	9	5	1	9	75

TABLE 23.—Abstract of returns of disasters to vessels on the PACIFIC coast during the year ending June 30, 1879, showing the number of vessels and distinguishing their CARGOES.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ballast	1	3	2	2	3	4	2	5	1	1	5	28	
Coal	3	1	1	1	1	1	1	1	1	1	1	4	
Fishing outfits	1	1	1	1	1	1	1	1	1	1	1	1	
Flour	1	1	1	1	1	1	1	1	1	1	1	1	
Furs, &c	1	1	1	1	1	1	1	1	1	1	1	1	
Grain	1	1	1	1	1	1	1	1	1	1	1	1	
Lumber	1	1	1	1	1	1	1	1	1	1	1	1	
Merchandise (general)	1	1	1	1	1	1	1	1	1	1	1	1	
Posts	1	1	1	1	1	1	1	1	1	1	1	1	
Provisions	1	1	1	1	1	1	1	1	1	1	1	1	
Produce	1	1	1	1	1	1	1	1	1	1	1	1	
Railroad-ties	1	1	1	1	1	1	1	1	1	1	1	1	
Soda, saltpeter, &c	1	1	1	1	1	1	1	1	1	1	1	1	
Stone	1	1	1	1	1	1	1	1	1	1	1	1	
Tea, &c	1	1	1	1	1	1	1	1	1	1	1	1	
Wine	1	1	1	1	1	1	1	1	1	1	1	1	
Wood	1	1	1	1	1	1	1	1	1	1	1	1	
Miscellaneous	1	1	1	1	1	1	1	1	1	1	1	1	
Unknown	1	1	1	1	1	1	1	1	1	1	1	1	
Total	3	5	7	5	9	10	9	3	9	5	1	9	75

TABLE 24.—Summary—PACIFIC coast.

Nature of casualties.	Number of vessels.	Total number of tons.	Laden.	Ballast.	Unknown whether laden or not.	Total loss.	Partial and unknown loss.*	Number of passengers.	Number of crew.	Total on board.	Total number of lives lost.
Foundering	1	346	1	5	10	1	1	4	4	4	14
Strandings	24	10,250	19	15	1	2	32	594	293	887	14
Vessels collided	34	18,529	18	15	1	2	32	1,112	503	1,615	9
Other causes	16	2,007	8	8	3	3	13	27	118	145	9
Total	75	31,132	46	28	1	15	60	1,733	918	2,651	23

*In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 14.

GREAT LAKES.

TABLE 25.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the NUMBER and VALUE of VESSELS and CARGOES and amount of LOSS to same where known.*

Months.	Total value of vessels.		Number of vessels, value unknown.	Total value of cargoes.		Number of cargoes, value unknown.	Loss to vessels.		Number of vessels totally lost, amount unknown.	Number of vessels damaged, amount unknown.*	Loss to cargoes.		Number of cargoes totally lost, amount unknown.	Number of cargoes not damaged, or damage unknown.
	Number.	Amount.		Number.	Amount.		Number.	Amount.			Number.	Amount.		
July.....	37	\$437,500	1	20	\$78,505	1	34	\$23,400	.....	4	5	\$5,945	.....	16
August.....	42	1,024,400	1	27	337,678	3	36	120,637	.....	7	2	20,100	.....	28
September.....	85	1,037,400	.....	64	315,452	2	80	60,480	.....	5	24	7,841	.....	42
October.....	100	1,495,450	.....	68	675,925	6	89	102,397	.....	11	30	39,805	.....	44
November.....	40	480,000	1	30	213,475	2	36	125,017	.....	5	10	62,775	.....	22
December.....	10	129,250	.....	8	106,694	.....	8	3,360	.....	2	1	1,000	.....	7
January.....	3	50,250	.....	1	12,000	.....	3	3,941	.....	.....	1	1,242	.....	.....
February.....	3	5,100	.....	1	2,500	.....	3	350	.....	.....	1	500	.....	.....
March.....	4	37,500	.....	2	1,300	.....	4	1,725	.....	.....	.....	.....	.....	2
April.....	14	50,800	.....	10	11,260	1	13	8,035	.....	1	4	395	.....	7
May.....	42	657,933	2	23	150,409	6	33	12,664	.....	11	5	1,920	.....	24
June.....	21	184,200	2	10	29,075	4	17	19,785	.....	6	.....	.....	.....	14
Total.....	401	5,589,733	7	264	1,934,273	25	356	481,791	.....	52	83	141,523	.....	206

*In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 26.

TABLE 26.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of VESSELS TOTALLY LOST, the number DAMAGED, aggregate TONNAGE of vessels totally lost, number of PASSENGERS and CREW, and number of LIVES LOST.*

Months.	Number of disasters resulting in total loss to vessels.	Number of disasters resulting in partial damage to vessels.	Whether total or partial loss unknown.	Number of casualties resulting in no damage to vessels.	Total.	Total tons burden of vessels totally lost.	Total number of crew, including master, &c.	Total number of passengers.	Total number of lives lost.
July.....	3	31	.....	4	38	541	371	378	.....
August.....	1	35	.....	4	43	1,595	401	.....	2
September.....	7	73	.....	4	85	912	693	111	.....
October.....	10	79	.....	7	100	1,425	856	62	.....
November.....	8	28	.....	5	41	3,693	314	11	5
December.....	.....	3	.....	.....	10	.....	74	1	.....
January.....	.....	3	.....	.....	3	.....	8	.....	.....
February.....	1	3	.....	.....	3	278	3	.....	.....
March.....	1	3	.....	.....	4	158	21	35	.....
April.....	1	12	.....	1	14	36	80	1	1
May.....	.....	33	.....	5	6	.....	376	135	.....
June.....	2	15	.....	2	23	224	147	32	.....
Total.....	34	322	20	32	408	8,782	3,344	766	19

TABLE 27.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of VESSELS and CARGOES INSURED and UN-INSURED, and the AMOUNT OF INSURANCE, where known.*

Months.	Number of vessels and cargoes reported to be insured, and the amount of insurance.					Number of vessels and cargoes reported not insured.		Number of vessels and cargoes, whether insured or not, unknown.		Vessels in ballast.
	Vessels.		Cargoes.		Total amount of insurance.	Vessels.	Cargoes.	Vessels.	Cargoes.	
	Number.	Amount.	Number.	Amount.						
July	21	\$217, 000	11	\$65, 400	\$282, 400	17	10	.....	.....	17
August	10	100, 500	10	109, 074	210, 174	23	11	10	9	13
September	30	395, 000	20	156, 103	551, 103	53	35	2	11	19
October	48	468, 200	28	158, 978	627, 178	47	29	5	17	26
November	20	186, 500	13	187, 350	373, 850	19	15	2	4	9
December	3	45, 000	4	98, 860	143, 860	7	3	.....	1	2
January	2	10, 700	1	12, 000	22, 700	1	.....	.....	.....	2
February	1	2, 000	.....	.....	2, 000	2	1	.....	.....	2
March .....	.....	.....	.....	.....	.....	3	2	1	.....	2
April	1	2, 000	.....	.....	2, 000	12	10	1	1	3
May	21	227, 000	7	105, 360	332, 360	17	15	6	7	15
June	6	53, 000	3	16, 000	69, 000	11	7	6	4	9
Total	163	1, 706, 900	97	909, 785	2, 616, 685	212	138	33	54	119

TABLE 28.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, distinguishing the NATURE of each casualty.*

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered	3	1	2	2	1				1			1	11
Stranded	5	4	10	32	15	3		1		4	2	4	80
Collided	17	19	16	30	16	4					28	15	145
Capsized		1										1	2
Damage to hull, rudder, rigging, &c	8	6	35	21	2	2				3	6	1	84
Damage to machinery	2	1	3	1	1						1		9
Dismasted			2	2									4
Explosion											1		1
Fire	1	1	3	2	2		1	1		2	1		14
Ice						1	1		2				4
Sprung a leak	2	3	4	4			1			1			15
Struck by lightning		2	1								1	1	5
Struck wharf, bridge, pier, &c		5	3	4	2			1	1	3	1		20
Waterlogged			5		1								6
Miscellaneous			1	2	1					1	3		8
Total	38	43	85	100	41	10	3	3	4	14	44	23	408

TABLE 29.—*Abstract of returns of disasters (excluding collisions) to vessels and cargoes on the GREAT LAKES during the year ending June 30, 1879, distinguishing the CAUSE of each disaster.*

Class and cause of disaster.	Foundering.	Strandings.	Other causes.	Missing vessels.	Total.
CLASS 1.—Causes connected with the weather:					
Current			1		1
Darkness		5	1		6
Fog, &c		4			4
Gales, hurricanes, &c	4	38	71		113
Heavy sea	2	7	30		39
Lightning			5		5
Total of Class 1	6	54	108		168
CLASS 2.—Causes connected with vessels, equipments, or stowage:					
Defective hull, rigging, &c			4		4
Error in compass		1			1
Total of Class 2		1	4		5
CLASS 3.—Causes connected with navigation and seamanship:					
Error of masters, officers, or crew	1	6	1		8
Error of pilot		4	6		10
Total of Class 3	1	10	7		18
CLASS 4.—Causes connected with machinery or boilers:					
Damage to machinery, boiler, &c			8		8
Total of Class 4			8		8
CLASS 5.—Other causes:					
Accidental		1	2		3
Absence of buoy		2			2
Fire			10		10
Ice			4		4
Sprung a leak	4	1	6		11
Struck sunken rock, log, &c		1	6		7
Want of power in steam-tug		1			1
Miscellaneous		5	11		16
Unknown		4	6		10
Total of Class 5	4	15	45		64
Aggregate	11	80	172		263

TABLE 30.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of vessels COLLIDED, and distinguishing the CAUSE of each disaster.*

Cause of disaster.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Accidental	3		12										5
Bad management	12	12	12	12	12	12						2	14
Carelessness	12	12	12	12	12						4	2	14
Darkness			12									3	7
Dragged anchors		4		12	12							4	10
Drifting	4				12						12		8
"Fault of other vessel"		4	12	12									10
Fault of tug towing	4			8	8	12					8		30
Fog											4	12	6
Heavy sea			12										12
Mistayed			12	12									12
Misunderstanding signals		3		12									5
Negligence	12		12		12						12		8
Stress of weather		12		4							4		10
Want of proper lights													2
"Unavoidable"			12	12	12							12	6
Unknown		12	12								12		6
Total	17	19	16	30	16	4					28	15	145

TABLE 31.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of vessels and distinguishing their DESCRIPTION.*

Description of vessels.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Barges		3	3	2	3				1		2		14
Barks	1			12	2			1	1				7
Canal-boats	1												1
Ferry-boats	1	1											2
Schooners	21	24	67	70	29	9	1	1		12	28	13	275
Scows	1		1	3							1	1	7
Sloops													1
Steamers	12	14	13	21	6	1	12	1	2	2	13	8	95
Steamships	1			2									3
Yachts			1										1
Unknown		1			1								2
Total	38	43	85	100	41	10	3	3	4	14	44	23	408

TABLE 32.—Abstract of returns of disasters to foreign vessels on the GREAT LAKES during the year ending June 30, 1879, showing NATIONALITY and DESCRIPTION, and distinguishing those TOTALLY LOST and those PARTIALLY DAMAGED.

Nationality and rig.	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
British barges.....																						1				1	1
British ferry-boats.....																						1				1	1
British schooners.....	3	1		1		6			1													3			1	16	17
British scows.....																						1				1	1
British steamers.....				2																		1				1	2
Total.....	3	2	3	3	6	1	2														5			1	21	22	22
Aggregate.....	3	2	3	3	6	3															5					22	

TABLE 33.—Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the TONNAGE and distinguishing the number of those TOTALLY LOST and those PARTIALLY DAMAGED.

Burden of vessels.	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
Not exceeding 50 tons.....		4		5	4	3	4	1	1							1	1	1	1	1	5	1	2	6	29	35	
Over 50 and not exceeding 100 tons.....		4		3	13	2	1	1	1							1	1	3	3	2	2	2	5	7	36	43	
Over 100 and not exceeding 200 tons.....		1	6	7	14	1	15	1	10				1	1			1	6	6	4	4	5	6	7	64	70	
Over 200 and not exceeding 300 tons.....		1	7	8	16	2	11	1	9			3	1	1			2	3	11	1	5	5	6	6	76	82	
Over 300 and not exceeding 400 tons.....		6	6	1	16	3	17	1	4			1	1	1			1	4	6	60	4	3	4	4	60	64	
Over 400 and not exceeding 500 tons.....		4	4	1	3	3	7	2	1			1	1	1			1	2	21	21	4	4	2	2	19	21	
Over 500 and not exceeding 600 tons.....		4	4	1	5	2	4	2	1			1	1	1			1	4	16	16	3	3	1	1	17	18	
Over 600 and not exceeding 700 tons.....		1	1	3	3	3	6	1	1			1	1	1			1	4	16	16	3	3	1	1	17	18	
Over 700 and not exceeding 800 tons.....		1	1	3	3	1	1	1	2			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 800 and not exceeding 900 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 900 and not exceeding 1,000 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 1,000 and not exceeding 1,100 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 1,100 and not exceeding 1,200 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 1,200 and not exceeding 1,300 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 1,300 and not exceeding 1,400 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Over 1,400 tons.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Unknown.....		1	1	1	1	1	1	1	1			1	1	1			1	8	18	18	1	1	1	1	8	8	
Total.....	3	35	1	42	7	78	10	90	8	33	10	10	3	3	1	2	1	3	1	13	44	2	21	34	374	408	
Aggregate.....	38	43	85	100	41	10	3	3	4	14	23	408															

NOTE.—In the columns of "Partial loss" in this table are included the casualties in which the vessels sustained no damage, for the number of which see appropriate column in Table 26.

TABLE 34.—Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of vessels and distinguishing AGE.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 3 years	3	5	3	3	2	—	1	—	—	—	1	—	18
Over 3 and not exceeding 7 years	7	6	12	34	2	6	—	—	—	1	15	4	93
Over 7 and not exceeding 10 years	10	14	19	12	2	—	—	—	3	—	10	5	84
Over 10 and not exceeding 14 years	6	11	15	24	9	2	—	2	—	—	9	7	90
Over 14 and not exceeding 20 years	6	2	12	12	2	—	1	—	—	—	5	3	45
Over 20 and not exceeding 25 years	5	3	19	13	2	1	1	1	—	—	3	2	58
Over 25 and not exceeding 30 years	—	—	2	2	2	—	—	—	—	1	—	—	7
Over 30 and not exceeding 35 years	1	1	—	—	1	—	—	—	—	—	—	—	5
Over 35 and not exceeding 40 years	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 40 and not exceeding 45 years	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 45 and not exceeding 50 years	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 50 years	—	—	—	—	—	—	—	—	—	—	—	—	—
Unknown	—	1	1	—	1	1	—	—	1	—	1	2	8
Total	38	43	85	100	41	10	3	3	4	14	44	23	408

TABLE 35.—Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of vessels and distinguishing their CARGOES.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ashes	1	—	—	1	—	—	—	—	—	—	—	—	2
Assorted	—	—	1	—	—	—	—	—	—	—	2	1	4
Ballast	17	13	19	26	9	2	2	2	2	2	15	9	119
Coal	10	2	16	11	1	1	—	—	—	—	6	2	49
Fish	—	—	—	—	—	—	—	—	—	—	—	—	1
Flour, &c	—	1	—	3	—	—	—	1	—	—	—	1	6
Fruit	—	—	—	1	—	—	—	—	—	—	—	—	1
Grain	4	5	9	14	10	3	1	—	—	—	3	—	49
Hay	—	—	—	1	—	—	—	—	—	—	—	—	1
Iron, iron ore, &c	—	4	1	6	1	—	—	—	—	—	1	1	14
Lime, brick, &c	1	—	—	—	—	—	—	—	—	—	—	—	2
Lumber, timber, &c	2	8	20	14	11	2	—	—	—	4	6	3	70
Machinery	—	—	—	1	—	—	—	—	—	—	—	—	1
Merchandise (general)	2	2	3	4	3	1	—	—	1	—	2	1	19
Railroad ties	—	—	—	—	—	—	—	—	—	4	3	—	9
Salt	—	2	4	3	1	—	—	—	—	—	—	—	10
Shingles, &c	—	—	—	1	—	—	—	—	—	—	—	—	1
Staves, &c	—	1	1	—	—	—	—	—	—	—	—	—	2
Stone, &c	1	—	—	3	1	—	—	—	—	—	—	—	6
Wood	—	2	5	3	2	—	—	—	1	2	1	1	17
Miscellaneous	—	—	1	2	—	1	—	—	—	—	—	—	4
Unknown	—	3	2	4	2	—	—	—	—	1	5	4	21
Total	38	43	85	100	41	10	3	3	4	14	44	23	408

TABLE 36.—*Abstract of returns of disasters to vessels on the GREAT LAKES during the year ending June 30, 1879, showing the number of vessels and distinguishing the LAKES and CONNECTING RIVERS on which they occurred.*

Localities.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Lake Erie	8	8	12	19	9	3	.....	.....	1	.....	2	2	64
Lake Huron	4	7	13	9	6	1	.....	.....	.....	.....	1	1	42
Lake Michigan	10	20	52	50	20	4	1	3	2	14	3	14	220
Lake Ontario	7	1	6	5	2	1	.....	.....	.....	.....	2	1	25
Lake Superior	1	1	.....	6	.....	.....	.....	.....	.....	.....	1	2	11
Lake Saint Clair .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Straits of Mackinac .....	.....	3	.....	4	1	1	.....	.....	.....	.....	.....	.....	9
Detroit River	7	2	.....	1	.....	.....	1	.....	.....	.....	4	.....	15
Niagara River .....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	3
Saint Clair River	1	1	2	5	2	.....	1	.....	1	.....	2	2	17
Welland Canal .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Total	38	43	85	100	41	10	3	3	4	14	44	23	408

TABLE 37.—*Summary—GREAT LAKES.*

Nature of casualties.	Number of vessels.	Total number of tons.	Laden.	Ballast.	Unknown whether laden or not.	Total loss.	Partial and unknown loss.*	Number of passengers.	Number of crew.	Total on board.	Total number of lives lost.
Foundering	11	3,118	7	4	.....	9	2	.....	75	75	.....
Strandings	80	20,809	60	20	.....	19	61	63	567	630	7
Vessels collided	145	54,800	71	51	23	2	143	440	1,299	1,739	4
Other causes	172	54,571	126	44	2	2	168	263	1,403	1,666	8
Total	408	133,298	264	119	25	34	374	766	3,344	4,110	19

* In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 26.

RIVERS.

TABLE 38.—*Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the NUMBER and VALUE OF VESSELS and CARGOES and amount of LOSS to same where known.*

Months.	Total value of vessels.		Total value of cargoes.		Loss to vessels.		Loss to cargoes.		Number of cargoes totally lost, amount unknown.	Number of cargoes not damaged, or damage unknown.
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.		
July	5	\$50,600	3	\$7,500	5	\$35,270	2	\$5,200	.....	1
August	20	468,550	1	10 18,637	3	17 27,840	4	2,225	.....	11
September	11	236,500	6	19,370	1	10 8,985	1	2,035	.....	3
October	25	236,900	2	13 50,515	2	24 76,655	3	8,040	.....	10
November	10	63,650	7	11,501	10	50,785	4	850	.....	3
December	16	131,700	1	10 333,920	1	15 58,250	2	116,810	.....	5
January	20	297,300	1	7 221,590	1	20 52,645	1	40,565	.....	4
February	7	81,500	.....	5 70,600	7	67,300	4	70,000	.....	1
March	9	87,700	4	70,000	9	39,550	2	2,500	.....	2
April	9	61,300	3	4,550	9	24,412	2	500	.....	1
May	6	37,800	4	4,450	6	5,225	.....	.....	.....	4
June	9	338,300	5	31,000	8	7,230	1	.....	.....	5
Total	147	2,091,800	5	77 843,633	8	140 454,147	12	246,725	.....	50

* In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 39.

TABLE 39.—Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the number of VESSELS TOTALLY LOST, the number DAMAGED, aggregate TONNAGE of vessels totally lost, number of PASSENGERS and CREW, and number of LIVES LOST.

Months.	Number of disasters resulting in total loss to vessels.	Number of disasters resulting in partial damage to vessels.	Whether total or partial loss unknown.	Number of casualties resulting in no damage to vessels.	Total.	Total tons burden of vessels totally lost.	Total number of crew, including master, &c.	Total number of passengers.	Total number of lives lost.
July.....		5			5		93	48	2
August.....	3	14	2	2	21	83	178	648	5
September.....	12	8		1	11	84	67		4
October.....	7	17	2	1	27	951	219	55	12
November.....	4	6			10	549	113	45	
December.....	8	7	1	1	17	1,520	265	155	5
January.....	4	16	1		21	571	270	76	
February.....	5	2			7	1,650	119	35	
March.....	4	5			9	1,416	107	31	
April.....	1	2			9	248	87	6	
May.....		6			6		53	19	6
June.....		8		1	9		185	387	
Total.....	38	102	6	6	152	7,072	1,756	1,505	34

TABLE 40.—Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the number of VESSELS and CARGOES INSURED and UNINSURED, and the AMOUNT of INSURANCE, where known.

Months.	Number of vessels and cargoes reported to be insured, and the amount of insurance.					Number of ves- sels and car- goes reported not insured.		Number of ves- sels and car- goes, whether insured or not, unknown.		Vessels in ballast.
	Vessels.		Cargoes.		Total amount of insurance.	Vessels.	Cargoes.	Vessels.	Cargoes.	
	Number.	Amount.	Number.	Amount.						
July.....	1	\$7,000	1	\$3,000	\$10,000	4	1	.....	1	2
August.....	9	63,000	4	8,100	71,100	9	5	3	4	8
September.....	1	2,500	1	10,000	12,500	9	5	1	1	4
October.....	5	70,050	6	21,700	91,750	20	6	2	3	12
November.....	1	2,000	3	8,550	10,550	9	2	.....	2	3
December.....	7	77,000	4	315,000	392,000	9	4	1	3	6
January.....	4	23,200	3	161,000	184,200	16	2	1	3	13
February.....	3	35,600	3	63,000	98,600	4	1	.....	1	2
March.....	4	38,700	1	57,000	95,700	5	2	.....	1	5
April.....	3	13,500	2	3,500	17,000	6	1	.....	.....	6
May.....	3	16,500	1	100	16,600	3	3	.....	.....	2
June.....	3	54,000	3	11,000	65,000	5	1	1	1	4
Total.....	44	403,050	32	661,950	1,065,000	99	33	9	20	67

TABLE 41.—Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, distinguishing the NATURE of each casualty.

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered	1			4		1		1			1		8
Stranded	1	3	1	7	2	4	2					2	22
Collided		12	7	8	2	4	2			2		2	39
Capsized									1		1		1
Damage to hull, rudder, rigging, &c.				1					1			1	3
Damage to machinery							1				1		2
Explosions		2											2
Fire	2	1		1	1	3		4	3	2	1		18
Ice						2	14	2	1				19
Snagged, &c.	1	1	2	1	4	3	1		5	1	1		20
Sprung a leak												1	1
Struck by lightning		1											1
Struck wharf, bridge, pier, &c.		1	1	4			1			1	2	1	11
Struck sunken wreck					1				1				3
Unknown				1						1		1	2
Total	5	21	11	27	10	17	21	7	9	9	6	9	152

TABLE 42.—Abstract of returns of disasters (excluding collisions) to vessels and cargoes on the RIVERS of the United States during the year ending June 30, 1879, distinguishing the CAUSE of each disaster.

Class and cause of disaster.	Foundering.	Strandings.	Other causes.	Missing vessels.	Total.
CLASS 1.—Causes connected with the weather:					
Calms, currents, &c.			1		1
Darkness		1	1		2
Fog, &c.			1		1
Gales, hurricanes, &c.	3	7	7		17
Heavy seas	1				1
Lightning			1		1
Total of Class 1	4	8	11		23
CLASS 2.—Causes connected with vessels, equipments, or stowage:					
Defective hull, masts, rigging, &c.			2		2
Total of Class 2			2		2
CLASS 3.—Causes connected with navigation and seamanship:					
Error, &c., of masters, officers, or crew		1			1
Errors of pilot			1		1
Total of Class 3		1	1		2
CLASS 4.—Causes connected with machinery or boilers:					
Damage to machinery			1		1
Explosions of boilers, bursting of steam-pipes, &c.			2		2
Total of Class 4			3		3
CLASS 5.—Other causes:					
Absence of buoy		1			1
Fire			18		18
Freshet, ice, &c.		5	19		24
Sprung a leak	1	2	1		4
Struck sunken wreck, rock, snag, &c.	1	1	25		27
Want of power in tug towing		1			1
Miscellaneous	1	2	2		5
Unknown	1	1	1		3
Total of Class 5	4	13	66		83
Aggregate	8	22	83		113

TABLE 43.—Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the number of vessels COLLIDED, and distinguishing the CAUSE of each disaster.

Cause of disaster.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Accidental		2				2							4
Darkness		2		2									4
"Fault of other vessel"		4	2										6
Fault of tug towing				2									4
Foggy and thick weather										2			2
High winds				4		2	2						8
Mistake in lights		2											2
Mismanagement			2										2
Misunderstanding signals			2										2
Narrow channel		2											2
Want of proper lights					2								2
Total	12	7	8	2	4	2				2		2	39

TABLE 44.—Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the number of vessels and distinguishing their DESCRIPTION.

Description of vessels.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Barges			1	1		1						3	6
Barks		1		1			1						3
Brigs							1						1
Canal-boats		2											2
Ferry-boats				1									1
Schooners	1	9	3	10	4	1		1		4	1		34
Ships				1									1
Sloops	1		1	4	2	3			1		1		13
Steamers	3	8	5	9	4	12	18	6	8	5	4	5	87
Steamships		1	1				1					1	4
Total	5	21	11	27	10	17	21	7	9	9	6	9	152

TABLE 45.—Abstract of returns of disasters to foreign vessels on the RIVERS of the United States during the year ending June 30, 1879, showing NATIONALITY and DESCRIPTION, and distinguishing those TOTALLY LOST and those PARTIALLY DAMAGED.

Nationality and rig.	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
British bark.....	1
British ship.....	1
British steamer.....	1
German bark.....	1
Total.....	4
Aggregate.....	4

TABLE 46—Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the TONNAGE and distinguishing the number of those TOTALLY LOST and those PARTIALLY DAMAGED.

	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.	
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	
Burden of vessels.																										
		1	3	1	2	4	4	4	2	3	2	2	3	3	1	1	1	1	4	2	2	2	2	17	28	45
		1	1	2	2	1	1	1	1	2	1	3	2	3	2	1	1	1	1	2	2	2	2	4	18	24
		2	2	3	2	2	1	1	1	1	1	2	2	3	2	1	1	1	1	1	1	1	2	4	20	24
																								3	11	14
																								4	9	13
																								3	7	10
																								4	9	13
																								3	7	10
																								1	2	2
																								1	1	1
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																							1	1	1	
																							1	1	1	

NOTE.—In the columns of "Partial loss" in this table are included the casualties in which the vessels sustained no damage, for the number of which see appropriate column in Table 39.

TABLE 47.—*Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the number of vessels and distinguishing AGE.*

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 3 years.....	3	2	1	1	1	2	4	1	2	...	...	1	18
Over 3 and not exceeding 7 years.....	1	7	3	7	3	2	5	2	1	3	2	3	39
Over 7 and not exceeding 10 years.....	...	4	2	3	1	3	4	...	2	1	3	...	23
Over 10 and not exceeding 14 years.....	...	4	1	7	2	3	3	1	2	2	1	4	29
Over 14 and not exceeding 20 years.....	...	1	2	1	1	2	3	1	2	1	...	1	15
Over 20 and not exceeding 25 years.....	1	1	...	3	...	...	...	...	...	1	...	...	6
Over 25 and not exceeding 30 years.....	...	1	2	2	1	1	...	1	...	...	...	...	8
Over 30 and not exceeding 35 years.....	...	...	...	2	...	...	...	...	...	...	...	...	2
Over 35 and not exceeding 40 years.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Over 40 and not exceeding 45 years.....	...	...	...	...	...	2	1	...	...	...	...	...	3
Over 45 and not exceeding 50 years.....	...	...	...	...	...	1	...	...	...	...	...	...	1
Over 50 years.....	...	...	...	...	...	1	2	1	...	1	...	...	8
Unknown.....	...	1	...	1	1	1	2	1	...	1	...	...	8
Total.....	5	21	11	27	10	17	21	7	9	9	6	9	152

TABLE 48.—*Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, showing the number of vessels and distinguishing their CARGOES.*

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ballast.....	2	8	4	12	3	6	13	2	5	6	2	4	67
Coal.....	1	5	2	5	...	...	1	...	...	...	...	...	14
Cotton, &c.....	1	...	...	...	...	...	1	3	2	1	...	...	8
Fish and oysters.....	...	...	...	...	1	...	1	1	...	1	...	...	4
Grain, &c.....	...	1	2	2	1	...	...	...	...	...	1	1	8
Lumber, &c.....	...	2	1	1	...	...	...	...	...	...	1	...	5
Merchandise (general).....	1	2	1	1	1	3	2	...	2	1	...	2	16
Salt, &c.....	...	1	...	...	...	1	1	...	...	...	...	...	3
Sugar, rice, &c.....	...	...	...	...	2	...	1	1	...	...	...	...	4
Stone, sand, &c.....	...	...	...	1	...	1	...	...	...	...	2	1	5
Wood.....	...	...	...	1	...	1	...	...	...	...	...	...	2
Miscellaneous.....	...	...	1	2	2	4	...	...	...	...	...	1	10
Unknown.....	...	2	...	2	...	1	1	...	...	...	...	...	6
Total.....	5	21	11	27	10	17	21	7	9	9	6	9	152

TABLE 49.—*Abstract of returns of disasters to vessels on the RIVERS of the United States during the year ending June 30, 1879, distinguishing the RIVERS on which they occurred.*

Rivers.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Arkansas.....									2				2
Atchafalaya (Louisiana).....						1							1
Bayou Bartholomew (Louisiana).....										1			1
Bayou Sale (Louisiana).....						1							1
Big Sandy (Kentucky).....							1						1
Blackwater (Florida).....		1											1
Buffalo Bayou (Texas).....					1								1
Calcasieu (Louisiana).....											1		1
Cape Fear (North Carolina).....						2							2
Chattahoochee (Alabama).....	1						1					1	3
Clinch (Tennessee).....							2						2
Connecticut.....		2								1	1	1	5
Cumberland (Kentucky).....						1							1
Delaware.....	1	7	4	17			5	1					35
Elk (Virginia).....							1						1
Guyandotte (Virginia).....							1						1
Hudson.....			3	2		4		1				2	13
James.....				1						1			2
Kanawha (Virginia).....							1						1
Kennebec.....				1									1
Kentucky.....							1						1
Little (Connecticut).....												1	1
Little (Louisiana).....								1					1
Menomonee (Wisconsin).....												1	1
Mississippi.....	2	1		1	5	5	1	2	2	1		2	22
Missouri.....			1	1									2
Mokelumne (California).....				1									1
Napa (California).....				1									1
Ohio.....		1		1		1	6		1			1	11
Ouachita (Louisiana).....								1					1
Pasquotank (North Carolina).....									1				1
Potomac.....		3	1			1				2			7
Rappahannock.....						1							1
Red (Louisiana).....		1					1		1				3
Roanoke.....									1	1			2
Saginaw.....		1							1				2
Salt (Kentucky).....										1			1
Schuylkill.....				3							1		4
Saint John's (Florida).....										1	1		2
Saint Lawrence.....	1	3			2								6
Thames (Connecticut).....		1											1
Yazoo (Mississippi).....								1					1
York (Virginia).....					2								2
Total.....	5	21	11	27	10	17	21	7	9	9	6	9	152

TABLE 50.—*Summary—RIVERS.*

Nature of casualties.	Number of vessels.	Total number of tons.	Laden.	Ballast.	Unknown whether laden or not.	Total loss.	Partial and unknown loss.*	Number of passengers.	Number of crew.	Total on board.	Total number of lives lost.
Foundering.....	8	1,083	3	5		3	5	39	67	106	18
Strandings.....	22	3,850	14	8		2	20	98	181	279	
Vessels collided.....	39	14,910	19	14	6	3	36	451	384	835	6
Other causes.....	83	19,066	43	40		30	53	917	1,124	2,041	10
Total.....	152	38,909	79	67	6	38	114	1,505	1,756	3,261	34

*In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 39.

AT SEA OR IN FOREIGN WATERS.

TABLE 51.—*Abstract of returns of disasters to American *vessels AT SEA or in FOREIGN WATERS during the year ending June 30, 1879, showing the NUMBER and VALUE of VESSELS and CARGOES and amount of LOSS to same where known.*

Months.	Total value of vessels.			Total value of cargoes.			Loss to ves-			Loss to car-		
	Number.	Amount.	Number of vessels, value unknown.	Number.	Amount.	Number of cargoes, value unknown.	Number.	Amount.	Number of vessels totally lost, amount unknown.	Number.	Amount.	Number of cargoes totally lost, amount unknown.
July	31	\$1,362,900	4	24	\$854,581	8	29	\$242,617	6	13	\$164,600	19
August	37	502,500	4	34	644,465	5	37	205,285	4	16	183,315	23
September	57	1,346,400	1	45	1,825,853	2	56	673,700	2	31	918,062	17
October	77	1,112,200	1	64	1,283,878	4	77	653,968	1	32	712,358	1
November	25	263,800	2	18	119,750	4	25	71,075	2	8	37,330	1
December	72	989,800	2	62	1,054,661	4	70	327,312	4	34	192,540	32
January	57	880,354	6	44	526,240	11	58	406,498	3	27	221,291	2
February	38	233,491	2	24	161,887	13	37	130,422	3	10	39,600	10
March	45	502,719	1	37	540,407	6	43	129,985	3	24	47,604	19
April	37	916,053	2	30	920,971	3	36	199,158	3	16	113,634	17
May	12	151,700	...	10	412,176	...	11	58,505	1	5	32,216	5
June	9	213,300	1	7	373,800	3	8	26,885	2	4	271,200	6
Total	497	8,475,197	26	399	8,718,669	64	487	3,125,410	136	220	2,933,750	14
												229

* In the totals of casualties presented in the following thirteen tables are included, in order to show the whole number of vessels in collision, sixteen foreign vessels which have collided with American vessels at sea or in foreign waters during the year.

† In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 52.

TABLE 52.—*Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS during the year ending June 30, 1879, showing the number of VESSELS TOTALLY LOST, the number DAMAGED, aggregate TONNAGE of vessels totally lost, number of PASSENGERS and CREW, and number of LIVES LOST.*

Months.	Number of disasters resulting in total loss to vessels.	Number of disasters resulting in partial damage to vessels.	Whether total or partial loss unknown.	Number of casualties resulting in no damage to vessels.	Total.	Total tons burden of vessels totally lost.	Total number of crew, including master, &c.	Total number of passengers.	Total number of lives lost.
July	11	18	4	2	35	3,313	485	167	.....
August	11	26	4	.....	41	3,621	445	194	32
September	29	27	1	1	58	9,813	657	150	68
October	31	46	1	.....	78	11,130	837	69	72
November	7	18	2	.....	27	1,397	195	1	27
December	21	49	2	2	74	6,334	610	30	51
January	19	39	4	1	63	5,419	532	22	39
February	19	18	2	1	40	2,661	404	.....	154
March	13	30	1	2	46	2,222	408	1	41
April	15	21	2	1	39	5,311	391	34	22
May	3	8	.....	1	12	1,608	126	10	.....
June	3	5	2	.....	10	1,443	110	35	.....
Total	182	305	25	11	523	54,272	5,200	713	506

TABLE 53.—Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS during the year ending June 30, 1879, showing the number of VESSELS and CARGOES INSURED and UNINSURED, and the AMOUNT OF INSURANCE where known.

Months.	Number of vessels and cargoes reported to be insured and the amount of insurance.					Number of ves- sels and car- goes reported not insured.		Number of ves- sels and car- goes, whether insured or not, unknown.		Vessels in ballast.
	Vessels.		Cargoes.		Total amount of insurance.	Vessels.	Cargoes.	Vessels.	Cargoes.	
	Number.	Amount.	Number.	Amount.						
July	18	\$157, 200	15	\$501, 625	\$658, 825	13	7	4	10	3
August	22	182, 800	20	367, 135	549, 935	13	6	6	13	2
September	39	381, 545	30	1, 306, 906	1, 688, 451	14	5	5	13	10
October	47	423, 449	38	717, 100	1, 140, 549	29	13	2	17	10
November	10	56, 100	8	33, 300	89, 400	11	2	6	12	5
December	45	395, 350	32	520, 309	915, 659	24	8	5	26	3
January	35	394, 226	22	243, 771	637, 997	18	6	10	27	8
February	34	150, 257	24	145, 900	296, 157	4	3	2	10	3
March	29	188, 872	17	154, 100	342, 972	16	6	1	20	3
April	24	577, 160	17	184, 265	761, 425	12	6	3	10	6
May	7	65, 500	6	243, 786	309, 286	3	2	2	3	2
June	3	110, 000	3	290, 600	400, 600	5	1	2	6	....
Total	313	3, 082, 459	231	4, 708, 797	7, 791, 256	162	65	48	167	60

TABLE 54.—Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS during the year ending June 30, 1879, distinguishing the NATURE of each casualty.

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered	1	4	6	15	3	6	7	14	5	3	1	2	67
Stranded	11	2	20	9	3	11	13	2	2	4	3	....	80
Collided	12	8	6	2	4	4	6	4	2	12	....	4	64
Abandoned .....	....	1	....	3	....	2	2	3	....	4	....	....	16
Capsized .....	....	....	1	1	....	2	2	....	1	....	....	....	7
Damage to hull, rudder, rigging, &c.	5	15	12	29	7	32	18	13	23	9	2	1	166
Damage to machinery .....	....	....	....	....	1	2	....	....	....	1	....	....	4
Disasted .....	....	3	2	6	1	....	1	....	....	....	1	....	14
Fire .....	....	....	2	1	....	3	....	....	2	2	....	....	10
Ice .....	....	3	1	....	....	....	1	....	....	....	....	....	4
Never heard from .....	....	3	....	1	2	....	1	....	....	1	....	....	12
Sprung a leak	2	....	5	4	5	3	4	2	2	1	3	2	33
Struck by lightning	3	1	....	....	....	....	....	....	....	....	....	....	4
Struck sunken wreck, pier, &c.	1	....	....	....	....	1	....	....	....	....	....	1	3
Waterlogged .....	....	....	....	....	1	....	....	....	....	....	....	....	1
Miscellaneous .....	....	1	2	3	....	8	5	2	4	2	1	....	28
Unknown .....	....	....	....	4	....	....	3	....	2	....	1	....	10
Total	35	41	58	78	27	74	63	40	46	39	12	10	523

TABLE 55.—*Abstract of returns of disasters (excluding collisions) to American vessels AT SEA or in FOREIGN WATERS, during the year ending June 30, 1879, distinguishing the CAUSE of each disaster.*

Class and cause of disaster.	Foundering.	Strandings.	Other causes.	Missing vessels.	Total.
CLASS 1.— <i>Causes connected with the weather.</i>					
Calms, currents, and tides.....		11			11
Fog, &c.....		6			6
Gales, hurricanes, &c.....	50	38	234		322
Heavy sea.....	2	3	25		30
Lightning.....			4		4
Total of Class 1.....	52	58	263		373
CLASS 2.— <i>Causes connected with vessels, equipments, or stowage.</i>					
Defective hull, masts, rigging, &c.....			3		3
Error in compass.....		1			1
Total of Class 2.....		1	3		4
CLASS 3.— <i>Causes connected with navigation and seamanship.</i>					
Errors of masters, officers, or crew.....		3			3
Errors of pilot.....		4			4
Total of Class 3.....		7			7
CLASS 4.— <i>Causes connected with machinery or boilers.</i>					
Damage to machinery.....			4		4
Total of Class 4.....			4		4
CLASS 5.— <i>Other causes.</i>					
Absence of proper lights.....		1			1
Fire.....			8		8
Ice.....			4		4
Spontaneous combustion.....			1		1
Sprung a leak.....	8	3	4		15
Struck sunken rock, wrecks, &c.....		3	3		6
Miscellaneous.....		2	5		7
Unknown.....	7	5	5	12	29
Total of Class 5.....	15	14	30	12	71
Aggregate.....	67	80	300	12	459

TABLE 56.—*Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS, during the year ending June 30, 1879, showing the number of vessels COLLIDED, and distinguishing the CAUSE of each disaster.*

Cause of disaster.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Accidental										2			2
Bad management		2											2
Carelessness					4								4
Darkness	2							2					4
Error in judgment		2											2
"Fault of other vessel"													2
Fog, &c.	2		6							2			10
High winds	2					2				4		2	8
Stress of weather								2					2
Tides, currents, &c.		2								2			4
"Unavoidable"	2	2				2	2	2	2				13
Unknown	2	2		2		2	2	2	2			2	14
Total	12	8	6	2	4	4	6	4	2	12		4	64

TABLE 57.—*Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS, during the year ending June 30, 1879, showing the number of vessels and distinguishing their DESCRIPTION.*

Description of vessels.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Barks	6	12	11	14	2	7	2	3	6	7	2	2	74
Barkentines			1	1		1	1	1					5
Brigs	5	8	6	8	1	2	3	2	5	2	3		50
Schooners	15	14	34	49	20	56	40	31	32	27	6	5	329
Ships	5	3	2	1	1	4	8	1	1	1	1	1	29
Steamers	1	2		2	1	1	3		2			2	15
Steamships	2		4	3		3	1			1			14
Unknown	1	2			2			2					7
Total	35	41	58	78	27	74	63	40	46	39	12	10	523

TABLE 58.—*Abstract of returns of disasters to American vessels At Sea or in FOREIGN WATERS during the year ending June 30, 1879, showing the TONNAGE and distinguishing the number of those TOTALLY LOST and those PARTIALLY DAMAGED.*

Burden of vessels.	July.		August.		Septem-ber.		October.		Novem-ber.		Decem-ber.		Janu-ary.		Febru-ary.		March.		April.		May.		June.		Total.		Aggregate.	
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.		
Not exceeding 50 tons	2	5	1	2	2	5	7	5	1	1	8	5	1	3	1	1	1	1	1	1	1	1	1	1	7	6	13	
Over 50 and not exceeding 100 tons	1	2	2	4	8	2	8	14	4	8	5	15	8	15	10	6	3	5	3	4	3	3	1	2	46	45	86	
Over 100 and not exceeding 200 tons	1	2	3	5	7	6	2	11	2	2	2	6	4	6	1	3	2	6	2	2	1	2	1	2	25	49	74	
Over 200 and not exceeding 300 tons	4	1	3	7	4	3	2	9	4	1	10	3	3	3	2	3	3	3	2	4	1	2	1	2	23	46	69	
Over 300 and not exceeding 400 tons	1	1	2	2	1	3	6	1	2	2	3	4	1	2	1	4	1	4	1	2	1	1	1	1	14	22	36	
Over 400 and not exceeding 500 tons	1	2	2	2	1	2	1	3	1	1	5	1	2	1	1	1	1	1	1	3	1	1	1	1	6	16	22	
Over 500 and not exceeding 600 tons	1	1	2	2	1	2	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	9	11	
Over 600 and not exceeding 700 tons	1	1	1	1	1	1	1	1	1	1	4	1	2	1	2	1	1	1	1	1	1	1	1	1	5	7	12	
Over 700 and not exceeding 800 tons	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	3	5	8	
Over 800 and not exceeding 900 tons	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	3	5	5	
Over 900 and not exceeding 1,000 tons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	7	
Over 1,000 and not exceeding 1,100 tons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4	
Over 1,100 and not exceeding 1,200 tons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	
Over 1,200 and not exceeding 1,300 tons	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	15	20
Over 1,300 and not exceeding 1,400 tons	1	5	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	16	
Over 1,400 tons	3	3	3	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	16	16	
Unknown	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Total	11	24	11	30	29	29	31	47	7	20	21	53	19	44	19	21	13	33	15	24	3	9	3	7	182	341	523	
Aggregate	35	41		58		78		27		74		63		40		46		39		12		10		523				

NOTE.—In the columns of "Partial loss" in this table are included the casualties in which the vessels sustained no damage, for the number of which see appropriate column in Table 52.

TABLE 59.—*Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS during the year ending June 30, 1879, showing the number of vessels and distinguishing AGE.*

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 3 years	2	2	3	5	...	10	4	5	2	5	1	1	40
Over 3 and not exceeding 7 years	7	9	17	16	6	28	17	3	12	6	2	3	126
Over 7 and not exceeding 10 years	6	4	5	11	4	7	11	5	7	6	2	1	69
Over 10 and not exceeding 14 years	9	8	16	18	7	16	13	14	17	7	3	...	123
Over 14 and not exceeding 20 years	4	8	7	8	3	6	11	7	4	5	2	...	65
Over 20 and not exceeding 25 years	3	1	3	5	1	1	1	3	2	3	...	2	25
Over 25 and not exceeding 30 years	1	5	6	7	3	4	3	...	1	5	1	...	36
Over 30 and not exceeding 35 years .....	...	...	...	3	1	1	...	1	1	2	1	1	11
Over 35 and not exceeding 40 years .....	...	...	...	2	...	...	...	...	...	...	...	...	2
Over 40 and not exceeding 45 years .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Over 45 and not exceeding 50 years .....	...	...	...	2	...	...	...	...	...	...	...	...	2
Over 50 years	3	4	1	1	2	1	3	2	...	...	...	2	19
Unknown .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	35	41	58	78	27	74	63	40	46	39	12	10	523

TABLE 60.—*Abstract of returns of disasters to American vessels AT SEA or in FOREIGN WATERS during the year ending June 30, 1879, showing the number of vessels and distinguishing their CARGOES.*

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Assorted	1	3	...	4	...	1	1	...	...	...	...	1	11
Ballast	3	2	10	10	5	8	...	3	3	6	2	...	60
Chemicals, &c .....	...	1	...	1	1	...	8	...	3	...	...	...	3
Coal, &c	4	2	5	5	2	8	4	1	4	6	1	1	43
Coffee, spices, &c	1	1	2	...	...	3	...	...	...	1	...	...	8
Cotton and cotton goods .....	...	...	...	...	...	1	...	...	...	1	2	...	4
Fish, fishing outfits, &c	2	1	3	6	...	2	2	23	2	3	...	...	44
Fruits, nuts, &c .....	...	...	1	...	...	2	1	...	1	...	...	...	5
Furs, skins, &c .....	...	...	...	...	...	1	...	...	2	...	...	...	4
Grain, flour, &c .....	...	1	4	2	2	1	1	1	1	1	...	...	14
Guano, &c	2	1	...	2	1	2	4	1	2	...	...	...	15
Ice .....	...	...	...	1	...	...	...	...	1	2	...	...	4
Iron, iron ore, &c .....	...	1	1	1	...	2	...	...	1	...	...	1	8
Lime, plaster, stone, &c .....	...	1	...	1	...	...	...	...	1	1	1	...	6
Logwood	1	...	...	4	1	3	8	...	1	1	...	...	19
Lumber, timber, &c	3	1	5	12	5	7	7	3	5	5	3	1	57
Malt liquors .....	...	...	...	1	...	...	...	...	...	...	...	...	1
Mahogany .....	...	...	2	...	...	1	...	...	...	...	...	...	3
Merchandise (general)	6	7	8	7	2	12	6	2	2	3	...	2	57
Oil, whalebone, and ivory	1	5	2	6	...	...	2	2	1	...	...	...	19
Petroleum .....	...	...	3	...	...	...	...	...	...	...	...	...	3
Phosphates .....	...	...	...	2	...	...	3	...	1	...	...	...	6
Provisions, &c	1	3	...	1	2	6	...	...	...	...	...	...	13
Rice, &c .....	...	1	...	1	...	...	...	...	1	...	...	...	2
Rubber .....	...	...	...	...	...	...	...	...	1	...	...	...	1
Salt, &c	2	...	2	...	1	3	2	...	1	1	...	...	12
Shooks, staves, &c .....	...	...	...	...	...	1	1	...	1	2	...	...	5
Sugar, molasses, &c	3	2	6	9	1	5	7	2	8	2	2	2	49
Tobacco, &c .....	...	...	...	2	...	...	...	...	...	...	...	...	2
Wood .....	...	...	...	...	...	...	...	...	2	...	...	...	2
Wool	1	1	...	...	...	...	...	...	...	...	...	...	1
Miscellaneous	1	3	3	...	1	3	3	...	3	...	1	...	18
Unknown	4	4	1	1	2	2	3	2	1	2	...	2	24
Total	35	41	58	78	27	74	63	40	46	39	12	10	523

TABLE 61.—*Summary*—AT SEA or in FOREIGN WATERS.

Nature of casualties.	Number of vessels.	Total number of tons.	Laden.	Ballast.	Unknown whether laden or not.	Total loss.	Partial and unknown loss.*	Number of passengers.	Number of crew.	Total on board.	Total number of lives lost.
Foundering	67	17,331	60	7	.....	66	1	71	610	681	312
Strandings	80	30,499	65	15	.....	57	23	136	863	999	21
Vessels collided	64	38,024	30	10	24	6	58	445	722	1,167	2
Other causes	312	98,756	284	28	.....	53	259	61	3,005	3,066	171
Total	523	184,610	439	60	24	182	341	713	5,200	5,913	506

* In this column are included the casualties in which no damage was sustained by the vessels, for the number of which see appropriate column in Table 52.

TABLE 62.—GENERAL SUMMARY.

Nature of casualties.		Number of vessels.	Aggregate tonnage.	Laden.	Ballast.	Unknown whether laden or not.	Wrecks involving total loss.	Casualties involving partial and unknown damage.	Number of passengers.	Number of crew.	Total on board.	Number of lives lost.
Foundering:												
Atlantic and Gulf coasts		35	4, 095	29	6	.....	24	11	15	180	195	44
Pacific coast		1	3, 346	1	.....	.....	.....	1	4	4	4	4
Great lakes		11	3, 118	7	.....	.....	9	2	75	75	75	18
Rivers		8	1, 083	3	5	.....	3	5	39	67	106	18
At sea or in foreign waters		67	17, 331	60	7	.....	66	1	71	610	681	312
Total.		122	25, 973	100	22	.....	102	20	125	936	1, 061	374
Strandings:												
Atlantic and Gulf coasts		355	63, 866	281	71	3	149	206	881	2, 267	3, 148	69
Pacific coast		24	10, 250	19	5	.....	10	14	594	293	887	14
Great lakes		80	20, 809	60	20	.....	19	61	63	567	630	7
Rivers		22	3, 850	14	8	.....	2	20	98	181	279	7
At sea or in foreign waters		80	30, 499	65	15	.....	57	23	136	863	999	21
Total.		561	129, 274	439	119	3	237	324	1, 772	4, 171	5, 943	111
Vessels collided:												
Atlantic and Gulf coasts		325	105, 580	171	104	50	20	305	3, 319	3, 044	6, 363	9
Pacific coast		34	18, 529	18	15	1	1	32	1, 112	503	1, 615	4
Great lakes		145	54, 800	71	51	23	2	143	440	1, 299	1, 739	6
Rivers		39	14, 910	19	14	6	3	36	451	384	835	2
At sea or in foreign waters		64	38, 024	30	10	24	6	58	445	722	1, 167	2
Total.		607	231, 843	309	194	104	33	574	5, 767	5, 952	11, 719	21
Other causes:												
Atlantic and Gulf coasts		221	48, 676	171	50	.....	24	197	603	1, 567	2, 170	39
Pacific coast		16	2, 007	8	.....	.....	.....	13	27	118	145	9
Great lakes		172	54, 571	126	44	.....	4	168	263	1, 403	1, 696	8
Rivers		83	19, 066	43	40	2	30	53	917	1, 124	2, 041	10
At sea or in foreign waters		312	98, 756	284	28	.....	53	259	61	3, 005	3, 066	171
Total.		804	232, 076	632	170	2	114	690	1, 871	7, 217	9, 088	237
Grand total		2, 094	610, 166	1, 480	505	109	486	1, 008	9, 535	18, 276	27, 811	*743

RECAPITULATION.

Atlantic and Gulf coasts.....	936	222, 217	652	231	53	217	719	4, 818	7, 058	11, 876	161
Pacific coast.....	75	31, 132	46	23	1	15	60	1, 733	918	2, 651	23
Great lakes.....	408	133, 298	264	119	25	34	374	766	3, 344	4, 110	19
Rivers.....	152	38, 909	79	67	6	38	114	1, 505	1, 756	3, 261	34
At sea or in foreign waters.....	523	184, 610	439	60	24	182	341	713	5, 200	5, 913	506
Total.....	2, 004	610, 166	1, 480	505	109	486	1, 608	9, 535	18, 276	27, 811	*743
		Atlantic and Gulf coasts.	Pacific coast.	Great lakes.	Rivers.	At sea or in foreign waters.				Aggregate.	
Total value vessels involved.....		\$13, 127, 582	\$2, 258, 150	\$5, 589, 733	\$2, 091, 800	\$8, 475, 197				\$31, 542, 462	
Total value cargoes involved.....		5, 101, 960	1, 135, 403	1, 934, 273	843, 633	8, 718, 669				17, 733, 838	
Aggregate.....		18, 229, 542	3, 393, 553	7, 524, 006	2, 935, 433	17, 193, 866				49, 276, 400	
Total insurance on vessels.....		2, 140, 592	409, 150	1, 706, 900	403, 050	3, 082, 459				7, 742, 061	
Total insurance on cargoes.....		2, 056, 877	75, 972	909, 785	661, 950	4, 708, 797				8, 418, 381	
Aggregate.....		4, 197, 379	485, 122	2, 616, 685	1, 065, 000	7, 791, 256				16, 155, 442	
Total losses to vessels.....		1, 651, 452	640, 506	481, 791	454, 147	3, 125, 410				6, 353, 306	
Total losses to cargoes.....		1, 113, 728	95, 835	141, 523	246, 725	2, 933, 750				4, 531, 561	
Aggregate.....		2, 765, 180	736, 341	623, 314	700, 872	6, 059, 160				10, 884, 867	
Total tonnage vessels involved.....		222, 217	31, 132	133, 298	38, 909	184, 610				610, 166	
Total tonnage vessels lost.....		35, 217	7, 835	8, 782	7, 072	54, 272				113, 178	

* In addition to the number of lives lost here reported, 145 lives were lost in cases where no other casualty occurred to the vessels, making the total number of lives lost 888.

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, and to American Vessels at Sea or in Foreign Waters, involving LOSS OF LIFE, during the year ending June 30, 1879, in four divisions, viz: (1) Founderings; (2) Strandings; (3) Collisions; and (4) Casualties from other causes; showing in each case, when known, the DESCRIPTION of the VESSEL and the CARGO, the number of LIVES LOST, and the DATE and PLACE of disaster, &c.*

(1) FOUNDERINGS.

Date of disaster.	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether result- ing in total or partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.
1878.									
Aug. 3	Echo.....	American brig.....	207	Baltimore, Md.....	Demerara, B. G.....	Total.....	General.....	10	At sea.
Sept. 19	S. L. Burns.....	American schooner.....	173	St. Thomas, W. I.....	Arecbin, Hayti.....	do.....	Unknown.....	7	Do.
19	Antelope.....	American bark.....	184	New York.....	Demerara, B. G.....	do.....	General.....	12	Do.
	American Eagle.....	American schooner.....	57	do.....	Galveston, Tex.....	do.....	Salt.....	10	Do.
Oct. 8	Anna E. Glover.....	do.....	299	Georgetown, S. C.....	Guadeloupe, W. I.....	do.....	Lumber &c.....	7	Do.
	Anna Leland.....	do.....	139	Bangor, Me.....	New York.....	do.....	Lumber.....	5	Do.
12	Isaac Rich.....	do.....	222	Philadelphia, Pa.....	Gardiner, Me.....	do.....	Coal.....	4	Off Bass River, West Dennis, Mass.
13	Clara Smith.....	do.....	259	Kempt, N. S.....	Baltimore, Md.....	do.....	Plaster.....	1	Near Cross Rip light-ship, Vine- yard Sound.
18	George E. Thatcher.....	do.....	504	Boston, Mass.....	Africa.....	do.....	General.....	1	At sea.
23	Mary L. Tice.....	do.....	124	South Amboy, N. J.....	Middletown, Conn.....	do.....	Coal.....	2	3 miles east of New Haven light, Conn.
23	Express.....	American steamer.....	603	Baltimore, Md.....	Washington, D. C.....	do.....	General merchant- disc.....	17	Off Hooper's Strait, Chesapeake Bay.
23	Buckeye.....	American schooner.....	52	Wilmington, Del.....	Bombay Hook, Del.....	do.....	Ballast.....	5	1 mile from Fort Delaware, Delaware River.
23	Monitor.....	American bark.....	474	Cuba.....	New York.....	do.....	Sugar.....	4	Lat. 35° 20' long. 74° 30' W.
23	Estrella Bright.....	American schooner.....	38	Bombay Hook, Del.....	Wilmington, Del.....	do.....	Sand.....	3	Opposite New Castle, Del. near New Jersey shore, Delaware River.
23	Henry Allen.....	do.....	209	Philadelphia, Pa.....	Savannah, Ga.....	do.....	Coal.....	6	Off Hatteras, N. C.
24	Van Schaick.....	American barge.....	150	Rondout, N. Y.....	New York.....	Partial.....	do.....	4	Hudson River off Yonkers, N. Y.
	Albert Thomas.....	American schooner.....	400	Baltimore, Md.....	Savannah, Ga.....	Total.....	Phosphate.....	5	Off Cape Hatteras, N. C.
	Annie Freeman.....	do.....	83	Booth Bay, Me.....	Baracoa, Cuba.....	do.....	Ballast.....	7	At sea.
Nov. 10	Georgia.....	do.....	128	New York.....	Castine, Me.....	do.....	Coal.....	5	Off Saco, Maine.
	Ocean Pearl.....	do.....	196	Hakodate.....	San Francisco, Cal.....	do.....	Sulphur.....	8	At sea.
Dec. 9	Highlander.....	do.....	98	Bangor, Me.....	Provincetown, Mass.....	do.....	Brick, hay, and lumber.....	4	Off Isles of Shoals.
10	National.....	American steamer.....	72	Charleston, S. C.....	Georgetown, S. C.....	do.....	Naval stores.....	7	Entrance to Georgetown Har- bor, S. C.
10	Emily B. Souder.....	do.....	779	New York.....	San Domingo.....	do.....	General merchant- disc.....	38	Off Cape Hatteras, N. C.
18	Katy Smith.....	do.....	9	In New York Harbor.....	do.....	Partial.....	Ballast.....	1	Jersey City, N. J.

1879.	Adamantine	American schooner	Potomac River oyster beds.	Baltimore, Md	Total	Oysters	10
Jan. 2	Gwendolen	do	Gloucester, Mass.	Grand Bank, N. F.	do	Ballast	Off Smith's Island, Chesapeake Bay.
—	J. C. Rogers	do	New York	Grand Bank, N. F.	do	Coal	At sea.
Feb.	Lottie F. Babson	do	Gloucester, Mass.	George's Bank, N. F.	do	Fish	Do.
—	Annie Hooper	do	do	do	do	do	Do.
—	Otis D. Dana	do	do	do	do	do	Do.
—	Jacob Bacon	do	do	do	do	do	Do.
—	Mary Carlisle	do	do	do	do	do	Do.
—	Morning Star	do	do	do	do	do	Do.
—	John Dove	do	do	do	do	do	Do.
—	Sea Queen	do	do	do	do	do	Do.
—	Annie Linwood	do	do	do	do	do	Do.
—	George B. Loring	do	do	do	do	do	Do.
—	Maud and Effie	do	do	do	do	do	Do.
—	Joshua Sanborn	do	do	do	do	do	Do.
—	Mary Low	do	do	do	do	do	Do.
—	Anna D. Torrey	American brig	Pensacola, Fla.	Boston, Mass.	do	Lumber	Do.
Mar. 30	Vine Oak	American schooner	Hatteras, N. C.	New Bern, N. C.	Partial	Ballast	Off Cape Hatteras, N. C.
31	Ligure	do	Trenton, Me.	Bridgeport, Conn.	Total	Lumber	3 miles north of Hatteras Inlet, N. C.
31	H. H. Scavy	do	Perth Amboy, N. J.	Boston, Mass.	do	Coal	Near Long Shoal, Vineyard Sound.
31	Calista	do	Portsmouth, N. H.	New York	do	Lime	Do.
Apr. 2	Bennington	do	Boston, Mass.	Havana, Cuba.	do	Ice	Lat. 38° 4' N., long. 65° 31' W.
May 24	Ramus	American steamer	Leesburg, La.	Lake Charles, La.	Partial	Ballast	4 miles below Lake Charles, Calcasieu River, La.

Totals: Vessels, 47; tonnage, 7,670; total losses, 43; partial losses, 4; lives lost, 378.

(2) STRANDINGS.

1878.	H. C. Bunker	American schooner	Wilmingon, N. C.	Jeremie, Hayti.	Total	Ballast	1
Sept. 4	Ponvert	American brig	Cow Bay, Cape Breton Island	Santiago de Cuba,	do	Coal	14 miles below Santiago de Cuba.
5	Monte Christo	American schooner	Cienfuegos, Cuba	New York	do	Sugar and molasses	Sandy Cay, near Grand Bahama.
6	Alexander Nickels	American brig	do	Boston, Mass.	do	Sugar	14 miles south of New River, Fla.
7	Hattie Rose	American schooner	Old Harbor, Jamaica.	New York	do	Sugar and logwood	15 miles south of Cape Canaveral, Fla.
11	Sévre	French brig	Tampico, Mexico	Havre, France	do	General merchandise.	30 miles north of Indian River Inlet, Fla.
12	Lookout	American ship	Shanghai, China	Port Townsend, Wash.	do	Ballast	Kutsino Island, off Japan.
13	Pearl	American steamer	Cleveland, Ohio	Buffalo, N. Y.	Partial	Fruit and merchandise.	Beach, east of Grand River, Ohio, Lake Erie.

*Two of these were lost at sea.

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, &c.—Continued.*
(2) STRANDINGS—Continued.

Date of disaster.	Name of vessel	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether result- ing in total or partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.
1878.									
Sept. 20	Lieut.-General U. S. Grant	American schooner	156	Pentwater, Mich.	Chicago, Ill.	Total	Wood	2	Near Pentwater Pier, Lake Michigan.
29	S. F. Seabury	American schooner	221	Azuza, San Domingo	Boston, Mass.	Total	Sugar, honey, and wood.	1	Crooked Island, Bahamas.
Oct. 12	Union	do	118	River Herbert, Nova Scotia.	New York	do	Piles	8	Sankaty Head light-house, Nantucket, Mass.
12	Etta A. Simpson	do	315	Bath, Me.	Baltimore, Md.	Partial	Ice	8	Hawes Shoal, Vineyard Sound.
23	A. S. Davis	American ship	1,400	Callao, Peru	Hampton Roads	Total	Guano	19	1½ miles from Life-saving Station No. 2, Cape Henry, Va.
23	H. F. Potter	American schooner	212	Fernandina, Fla.	New York	Partial	Lumber	2	Five-Mile Beach, N. J.
23	William G. Boulton	American steamer	47	Philadelphia, Pa.	Delaware Breakwater	Total	Ballast	2	Off Reedy Island, Delaware River.
23	Mary A. Hood	American schooner	380	Charleston, S. C.	Baltimore, Md.	Partial	Phosphate rock	1	Hatteras Shoals, N. C.
23	Sarah Clark	do	164	Jacksonville, Fla.	New York	Total	Lumber	2	Peck's Beach, N. J.
Nov. 1	Australia	do	171	Muskegon, Mich.	Chicago, Ill.	Partial	do	1	North of north pier, Grand Haven, Mich., Lake Michigan.
1	L. C. Woodruff	American bark	549	Chicago, Ill.	Buffalo, N. Y.	Total	Corn	3	1 mile north of White Lake Harbor, Lake Michigan.
Dec. 10	H. W. Race	American schooner	80	Hampton Roads	New York	Partial	Oysters	1	Atlantic City, N. J.
22	Nimbus	do	60	Gloucester, Mass.	Fishing	Total	Fish	2	Entrance of Cape Negro Harbor, Nova Scotia.
22	James A. Potter	do	349	Pensacola, Fla.	Boston, Mass.	Partial	Lumber	1	Amagansett, Long Island.
1879.									
Jan. 13	Thomas M. Reed	American ship	1,517	San Francisco, Cal.	Liverpool, England	Total	Wheat, silver and copper ore.	2	Freshwater Bay, West Milford, Wales.
14	Don Quixote	American brig	426	New York	Limerick, Ireland	do	Petroleum	4	Near Galway, Ireland.
19	Helen A. Hoyt	American schooner	392	Charleston, S. C.	Weymouth, Mass.	do	Phosphate rock	4	Hatteras Shoals, N. C.
Feb. 5	Wyandank	American sloop	16	do	Fishing Banks	do	Ballast	5	Pumpkin Hill Breakers, Charleston Harbor, S. C.
11	Hawthorne	American bark	706	Singapore	Boston, Mass.	do	Spices, rattan, &c.	3	Shoals off Nantucket, Mass.
26	David H. Tolck	American schooner	446	Sagua, La Grande	New York	do	Sugar	7	7 miles south of Barnegat, N. J.
Apr. 1	Emma G. Edwards	do	201	Philadelphia, Pa.	Boston, Mass.	do	Coal	5	Tuckernuck Shoal, Vineyard Sound.
4	Sarah J. Fort	do	208	Hoboken, N. J.	do	do	do	2	Near Provincetown, Mass.
18	Odeon	do	43	Rockland, Me.	do	do	Lime	3	Cohasset Rocks, Mass.

Apr. 19	Great Republic	American steamship.	3, 882	San Francisco, Cal	Astoria, Oreg	do	General merchan- dise.	14	Sand Island, Oreg., mouth of Columbia River.
May 6	Zina	American schooner .	91	Boston, Mass	Machias, Me.	Total	General	1	Eastern Egg Rock, near Moose- a-Bec light, Me.
18	Louise	American st. launch.	2	In use on Harlem River .....	.....	Nodam- age.	Ballast	3	Little Hall Gate, N. Y.
27	Blanche Porter	American steamer ..	130	New Orleans, La	Grand Isle, La	Total	General merchan- dise.	1	Westside Bayou Lafourche, La.

Totals: Vessels, 35; tonnage, 15,414; total losses, 27; partial losses, 7; no damage, 1; lives lost, 114.

(3) COLLISIONS.

1878.	Kremlin	American brig	327	Cienfuegos, Cuba	Boston, Mass	Total	Sugar	2	Near South Shoal light-ship, Nantucket, Mass.
July 9	Lafayette	American steamer	33	Albany, N. Y.	To meet tow	Nodamage	Ballast	1	Denio's Point Cross-over, Hudson River, N. Y.
Aug. 13	"Scow"	American scow	Unk'wn	In New York Harbor		do	do	3	Off Blackwell's Island, N. Y.
24	Grace Murray	American schooner	254	Careville, Mich	Chicago, Ill	Partial	Lumber	1	12 miles north of Presque Isle, Lake Huron.
24	Helen Mar	do	60	Camden, Me	New York	Total	Lime	1	Off Oldfield Point, Long Island Sound.
30	E. C. Chapman	American sloop	9	Charleston, S. C	Fishing	do	Ballast	2	10 miles off Charleston light.
Sept. 17	Josephine Lawrence	American schooner	88	Milwaukee, Wis	Muskegon, Mich	Nodamage	Brick	1	Muskegon Lake, Mich.
26	Warren Gates	do	74	Rondout, N. Y	Niantic, Conn	Partial	Coal	1	Off Yonkers, N. Y., Hudson River.
Oct. 1	General Franz Siegel	American steamer	90	In bay and harbor of New York		do	Tobacco	1	New York Harbor.
2	Emma C. Hutchinson	American schooner	737	Cleveland, Ohio	Chicago, Ill	do	Coal	1	Mouth of Detroit River.
12	Frauces Coffin	do	98	Hoboken, N. J	Boston, Mass	Total	do	1	Off Canal Flats, Vineyard Haven, Mass.
26	Union	American steamer	38	In Chicago Harbor		Partial	Ballast	1	Mouth of Chicago River, Lake Michigan.
Nov. 20	Poland	American barge	180	Bay City, Mich	Cleveland, Ohio	do	Lumber	1	Mouth of Saginaw River, Lake Huron.
23	Riverdale	American schooner	62	Newport, R. I.	Gloucester, Mass	Total	Fish and outfits	1	Off Thatcher's Island, Mass.
Dec. 1	Cotton Valley	American steamer	402	New Orleans, La	Shreveport, La	do	General merchandise	5	Branger Point, below Donaldsonville, Mississippi River.
1879.									
Apr. 26	City of Rio Janeiro*	do	3, 548	St. Thomas, West Indies.	New York	Partial	do	12	Lat., 38° 35' north; long., 73° 20' west.
May 31	Charles S. Rogers	American schooner	142	Elizabethport, N. J.	Boston, Mass	Total	Iron water-pipe	1	4 miles from Highland light, Cape Cod, Mass.

* In collision with Norwegian bark Velocity.

*In collision with Norwegian bark Velocity.

Totals: Vessels, 17; tonnage, 6,142; total losses, 7; partial losses, 7; no damage, 3; lives lost, 26.

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, &c.*—Continued.

(4) OTHER CAUSES.

Date of disaster.	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether resulting in total or partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.	Nature of casualty.
1878, July 2	Capitol City	Am. str.	897	Saint Louis, Mo.	Memphis, Tenn.	Partial	Cotton, hides, &c.	2	Memphis, Tenn.	Fire.
5	Ann Twibill	Am. sch.	118	Georgetown, D. C.	Philadelphia, Pa.	No damage	Coal	1	Maryland Point, Potomac River.	Knocked overboard, by fore-boom, in a squall.
7	Charlie Morton	do	317	Harvey, New Brunswick.	Crook Haven, Ireland.	do	Deals	1	Lat. 43° 19' N., long. 48° 10' W.	Knocked overboard; jib- ing fore sail.
9	German	do	80	South Point, Mich.	Detroit, Mich.	do	Cedar posts	1	Off Lakeport, Mich., Lake Huron.	Taking in sail in squall; fell overboard.
12	San Diego	do	39	Sitka, Alaska	Fishing, hunting, and trading.	do	Walrus oil and ivory.	7	Port Moller, Alaska	Capsized in a canoe.
13	Hayes	do	194	San Francisco, Cal.	Umpqua, Oreg.	do	Railroad ties	1	Lat. 42° 38', long. 125° 30', off Cape Blanco.	Fell overboard.
16	John Hancock	do	148	Russian Gulch, Cal.	Vallejo, Cal.	do	Lumber	1	Off Shag Rock, San Francisco Bay.	Knocked overboard by fore-boom.
26	John Somes	do	137	Portland, Me.	New York.	do	Wheat	1	Between Sandy Hook and West Bank.	Do.
31	M. W. Page	do	750	Chicago, Ill.	Buffalo, N. Y.	do	Ballast	1	Between Racine and Mil- waukee, Wis., Lake Michigan.	Fell off rail.
Aug. 3	Brilliant	Am. str.	184	Pomeroy, Ohio	Louisville, Ky.	Partial	Ballast	5	Head of Gallipolis Island, Ohio River.	Explosion of boiler.
7	William A. Delaney.	Am. sch.	15	Currituck Co., N. C.	Baltimore, Md.	No damage	Melons	1	Between Craney Island and Old Point, Va.	Fell overboard in dodg- ing fore-boom.
8	Glen Cuyler	do	49	Manitowoc, Wis.	Ellison's Bay, Wis.	Partial	Ballast	1	Ellison's Bay, Wis.	Knocked overboard by main-boom.
8	Anna Faght	do	10	Detroit, Mich.	Port Huron, Mich.	No damage	do	1	1 mile above S. E. Bend, Saint Clair River.	Knocked overboard by main-boom.
9	Samuel Stanton	do	32	New York	Towing through Hell Gate.	Partial	do	1	College Point, Long Isl- and.	Explosion of boiler.
9	Girofle Girofla	Am. catamaran.	Unk'n.	Putneyville, N. Y.	Oswego, N. Y.	No damage	do	1	Sodus Point, N. Y.	Trying to swim ashore.
10	Smith and Post	Am. sch.	212	Charlotte, N. Y.	Detroit, Mich.	do	Coal	1	Off Deal's Point, Lake Huron.	Fell overboard from rig- ging.
13	Alexander G. Cat- tell.	Am. str.	42	New York Bay and Harbor.		do	Ballast	1	Hoboken, N. J.	Bursting fine of boiler.

14	E. Henderson	.....do	6	New York Bay and Harbor.	Jersey City, N. J.	Partial	2	Near Factoryville, Staten Island, N. Y.	Explosion of boiler.
16	Hebe	Am. sloop	66	South Norwalk, Conn.	Colusa, Cal.	do	1	Off the Battery, New York S. of Brothers Island, San Pablo Bay,	Capsized.
17	Constance	Am. str.	148	Dublin, Ireland	Sydney, Cape Breton, Philadelphia, Pa.	No damage	1	Lat. 53° 19' N., long. 13° 41' W.	Fell overboard while drawing water.
18	Charlie Morton	Am. sch.	317	Bilbao, Spain	Petaluma, Cal.	do	1	Lat. 35°, long. 61°	Knocked overboard by stay-sail sheet.
19	S. V. Merrick	Am. brig.	335	San Francisco, Cal.	San Francisco, Cal.	do	1	Petaluma, Cal.	Fell overboard while drawing sail.
24	Pilot	Am. str.	146	San Buenaventura, Cal.	San Francisco, Cal.	No damage	1	San Buenaventura, Cal.	Fell overboard.
24	San Buenaventura	Am. sch.	180	San Francisco, Cal.	Sacramento, Cal.	do	1	Sacramento River, above Rio Vista, Cal.	Fell overboard at night.
26	Julia	Am. str.	520	St. John's, Antigua	New York	do	13	At sea	Struck by crank; fell into crank-pit.
—	Columbia	Am. bark.	305	Porto Bello, United States of Colombia	Baltimore, Md.	Total	8	do	Missing.
—	Ocean Pearl	Am. sch.	125	Milwaukee, Wis.	anistee, Mo.	do	1	do	Do.
Sept. 2	John A. Dix	Am. str.	530	San Francisco, Cal.	Crescent City, Cal.	Partial	1	Milwaukee, Wis.	Fire.
2	Robert Emmet	Am. sch.	34	San Francisco, Cal.	anistee, Mo.	No damage	1	At sea, 150 miles W. of Point Conception.	Knocked overboard by main-boom.
2	Elvenia	do	148	San Francisco, Cal.	anistee, Mo.	do	1	Lat. 39° 41' N., long. 124° W.	Knocked overboard by jib-boom.
2	Alice Strong	Am. str.	79	Cleveland, Ohio	anistee, Mo.	do	1	Kelley's Island, Lake Erie.	Fell overboard while scrubbing vessel.
5	Reliance	do	338	Fernandina, Fla.	anistee, Mo.	Partial	4	2 miles below Saint Mary's River.	Explosion of boiler.
8	Nadine	do	34	Saint Charles, Mo.	anistee, Mo.	Total	3	Missouri River, 1 mile above mouth.	Boat struck snag and 3 men jumped overboard.
10	Mary	Am. sch.	82	Pike's Pier	anistee, Mo.	do	4	25 miles from Chicago.	Water-logged; heavy sea.
13	Yankee Blade	do	226	Ogdensburg, N. Y.	anistee, Mo.	No damage	1	Lake Michigan.	Fell overboard.
16	Boaz	do	127	Grand Traverse, Mich.	anistee, Mo.	do	1	Off Sekirk Point, Ontario, Lake Erie.	Do.
22	Henry D. May	do	278	Portland, Me.	anistee, Mo.	do	1	South Manitou Harbor, Lake Michigan.	Fell overboard while drawing water.
23	S. T. Baker	do	261	Baltimore, Md.	anistee, Mo.	Total	7	Off Shinnecock, Long Island.	Missing.
28	Adelphi	Am. str.	643	South Norwalk, Conn.	anistee, Mo.	Partial	15	Gregory's Point, Conn.	Explosion of boiler.
29	Monitor	Am. bkne.	236	San Francisco, Cal.	anistee, Mo.	No damage	1	Off Point Arena, Cal.	Fell from fore-yard, struck anchor, and fell overboard.
30	Arcadia	Am. steam ship.	387	Kingston, Jamaica	anistee, Mo.	do	1	At sea	Fell down main hatch.
	Teekaleet	Am. bark.	717	New York	anistee, Mo.	Total	12	do	Missing.

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, &c.*—Continued.

(4) OTHER CAUSES—Continued.

Date of disaster.	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether result of partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.	Nature of casualty.
1878. Sept.—	William H. Besse	Am. bark	1, 027	Shanghai, China	Cardiff, Wales	No damage	Coal	1	Shanghai Harbor, China	Jumped overboard to swim ashore and was drowned.
Oct. 1	Jessie Nickerson	Am. schr	185	San Francisco, Cal.	Trinidad, Cal	.....do	General mer- chandise.	1	Trinidad Head, Cal	Fell overboard; derrick striking the rigging shook him off.
1	Bestie Everding	.....do	74	In harbor, San Francisco, Cal.	.....	.....do	Ballast	1	San Francisco Harbor, Cal.	Fell from wharf while taking in stern-lie.
2	Free Trade	Am. bkne.	340	Port Townsend, Wash.	Sydney, N. S. W.	Total	Lumber	1	Quilleyute Rocks, Wash.	Died from exposure.
4	Palos	Am. schr	53	Sullivan, Mo	Boston, Mass	.....do	.....do	1	Off Cape Cod, Mass	Disrupted in a gale.
5	Americus	Am. brig	396	Denia, Spain	Philadelphia, Pa.	No damage	Raisins	1	Lat. 36° 1', long. 65° 9'	Fell overboard from end of main-boom.
7	Philadelphia	Am. str.	1, 464	Milwaukee, Wis.	Erie, Pa	.....do	Corn	1	10 miles SE. of Point Au Pelee, Lake Erie.	Knocked overboard by fore-sheet.
7	Hattie	Am. brig.	300	Seville, Spain	Cow Bay, Cape Breton Island.	Partial	Ballast	1	Lat. 41° 30', long. 40°	Washed overboard.
7	Sarah E. Kennedy	.....do	400	New York	Fishing Banks.	No damage	General	1	Lat. 37° 45', long. 14° 24'	Knocked overboard by gaff in a gale.
9	Josie M. Calder-wood.	Am. schr	91	Gloucester, Mass.	Gibraltar	.....do	Fish	2	Western Bank, New-foundland.	Capizing of dory.
10	Belle Brown	.....do	218	Chicago, Ill.	Bark River	.....do	Ballast	1	10 miles S. of Manitowoc, Wis., Lake Michigan.	Knocked overboard while jibing mainsail.
10	Henry R. Congdon	.....do	374	Alexandria, Va	Providence, R. I.	.....do	Coal	1	8 miles S. W. of Montauk, L. I.	Lost overboard.
12	Sarah	Am. bark.	128	New Bedford, Mass	Whaling voyage.	Total	Outfits and provisions.	21	20 miles S. W. of Mar's Land.	Capized.
12	Evelyn	Am. sch	106	Two Rivers, N. S.	New York	.....do	Piling	5	Off Chatham, Cape Cod, Mass. (supposed).	Missing.
13	Mary Story	.....do	64	Gloucester, Mass.	George's Bank, Newfoundland.	Partial	Fish	1	George's Bank, New-foundland.	Washed overboard.
15	Maggie Thompson	Am. sch.	156	White Lake, Mich.	Chicago, Ill	No damage	Lumber	2	25 miles S. W. of White Lake, Lake Michigan.	Knocked overboard by jibing of fore-boom.

15	D. F. Edwards	Am str	19	In Chicago Harbor, Ill.	.....do	Ballast	1	1/2 mile from entrance to Chicago Harbor, Lake Michigan.	Fell overboard while drawing water.
15	Callao	Am. brig	446	Philadelphia, Pa.	Total	Cass oil	1	Lat. 38° 30' long. 50°	Knocked overboard by main-sail.
16	Samuel Welsh	Am. bg'ne	506	New York	No damage	Crude petroleum	1	Lat. 40° 12' N., long. 28° 32' W.	Lost overboard in hurricane.
17	Mattie A. Hand	Am. sch	499	Georgetown, D. C.	.....do	Coal	1	Portland Harbor, Me	Knocked against the rail by boom-tackle.
20	A. P. Nichols	.....do	300	Petoskey, Mich	.....do	Wood	1	10 miles W. of North Manitou, Lake Michigan.	Knocked overboard by main-boom.
20	Catharine Sudden	Am. bkne	387	Port Gamble, Wash.	.....do	Lumber	1	10 miles from Port Townsend, Wash.	Knocked overboard by stay-sail boom.
22	Wyoming	Am. sch	197	Saint Mary, Hayti	Partial	Logwood	2	20 miles N. of Cape Lookout.	Washed overboard.
23	Salmon Washburn	.....do	89	Newport, R. I.	No damage	Ballast	1	Above Stratford, Conn., Long Island Sound.	Knocked overboard by parting of masts.
23	J. W. Everman	Am. str	692	Philadelphia, Pa.	.....do	General merchandise	1	Delaware Bay	Washed overboard.
23	Virgen de las Nieves	Sp. bark	366	Havana, Cuba	Total	Unknown	2	2 1/2 miles S. of Orange Grove, Fla.	Lost in heavy gale.
26	Four Brothers	Am. sch	198	Manistee, Mich	No damage	Lumber	1	Near Point Grosse, Lake Michigan.	Knocked overboard by fore-boom in a gale.
26	Abby Bacon	Am. bark	516	Malaga	.....do	Fruits	1	At sea	Lost overboard.
28	Champion	Am. sch	586	Buffalo, N. Y.	.....do	Ballast	1	6 miles from Buffalo, Lake Erie.	Fell overboard in letting go anchor at night.
28	Edwin Rowe	Am. brig	231	Ciudad, Bolivar	.....do	Coffee, hides, &c	1	At sea	Lost overboard.
30	John Kilderhouse	Am. sch	561	Cleveland, Ohio	Partial	Coal	1	20 miles S. W. of South Fox Island, Lake Michigan.	Washed overboard.
Oct. —	Cunard	.....do	75	Port Mulgrave, N. S.	Total	Fish	15	At sea	Missing.
Nov. 1	Belle	.....do	135	Fire Island, N. Y.	Partial	Fish scrap	1	40 miles S. E. of Cape May, N. J.	Washed overboard.
1	Frank Barker	.....do	50	New York	No damage	Flour and corn	1	Nantucket Shoals	Fell overboard from main-boom.
2	Express	Am. str	95	San Francisco, Cal.	No damage	General merchandise	1	1/2 mile south of Napa, Cal	Killed by crank in engine.
	Ketchum	.....do	187	Chicago, Ill	.....do	.....do	1	Jacksonport, Wis., Lake Michigan.	Fell of block.
	Emma A. Walsh	.....do	25	Dredging grounds, Chesapeake Bay	.....do	Ballast	1	Off Wade's Point, Eastern Bay, Md.	Capazing of yawl.
8	Pilot's Bride	Am. sch	194	Porto Rico, West Indies.	.....do	Sugar	1	Lat. 38°, long. 73°	Fell overboard from boom.
9	Clarice	Am. bark	183	Edgartown, Mass	.....do	Outfits and provisions.	1	Lat. 39°, long. 65°	Fell overboard while reefing fore-sail.
11	Momento Mori	Am. sch	47	Rappahannock River, Va.	.....do	Wood	1	Near Point-o-Peak, Chesapeake Bay.	Fell overboard, parting of filler rope.
18	I. W. Parker	Am. brig	380	Unknown	.....do	Unknown	1	North Sea	Unknown.
22	Laura Pike	Am. sch	146	San Francisco, Cal.	Partial	General merchandise	7	On Humboldt Bar	Capazed.

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, &c.—Continued.*

(4) OTHER CAUSES.

Date of disaster.	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether resulting in total or partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.	Nature of casualty.
1878, Nov. 24	Henry C. Winship.	Am. sch.	497	Schiedam, Holland	Baltimore, Md.	No damage	Ballast	1	Lat. 44° 55', long. 22° 15'	Lost overboard by sudden lurch of vessel.
25	J. D. Farquharson	do	40	Greensborough, Md.	do	do	Wheat and corn.	1	Thomas Point Light, Chesapeake Bay.	Knocked overboard by main-boom.
29	Mary E. Perew	do	338	Chicago, Ill.	Buffalo, N. Y.	do	Wheat.	1	Lake Huron	Washed overboard.
30	Speedwell	Br. sch.	180	do	Toronto, Canada.	do	Ballast	1	Near Oswego, N. Y., Lake Ontario.	Fell from rigging to deck, intoxicated.
30	Gatherer	Am. sch.	96	Cutler, Me.	Western Banks, Newfoundland.	do	Fish	2	Western Banks, Newfoundland.	Lost in a dory.
—	Anna W. Collins.	do	143	Hayti	New York	Total	Logwood	6	At sea	Missing.
—	Cygnat	do	28	Hakodate, Japan.	San Francisco, Cal.	do	Furs	7	do	Do.
—	Charles Fobes	Am. bark	534	Callao, Peru	New York	No damage	Guano	1	Off Cape Horn	Fell overboard from rigging.
—	Winged Hunter.	Am. ship	1,294	Liverpool, England.	do	do	Soda ash and block tin.	2	North Atlantic	Lost overboard in heavy gale.
Dec. 1	Alice E. Getty.	Am. str.	39	Muskegon, Mich.	Manitowoc, Wis.	do	Ballast.	1	Manitowoc Bay, Wis.	Struck by tow-line and knocked overboard.
6	Tonawanda	Am. ship	1,504	Liverpool, England	Mobile, Ala.	Partial	General	1	25 miles S. W. of Jamaica, West Indies.	Fell from yard to deck, yard breaking.
9	Fannie W. Johnston.	Am. sch.	266	Philadelphia, Pa.	Charleston, S. C.	No damage	Coal	1	Off Cape Roman, S. C.	Washed overboard.
9	Mary F. Chisholm	do	74	Shelburne, Nova Scotia.	Fishing	do	Fish	2	Lahore Banks	Capsizing of dory.
11	Fly	do	22	Baltimore, Md.	Dredging grounds.	do	Ballast	1	Entrance to Craighill Channel, Chesapeake Bay.	Fell overboard; intoxicated.
12	Electra	Am. str.	1,567	Providence, R. I.	New York	do	General merchandise.	1	Off Horton's Point, Long Island.	Scalded; slight rupture of boiler.
14	Mathilde Kranz	Am. sch.	751	New York	Marseilles, France	Partial	General	1	Lat. 35° N., long. 68° W.	Washed overboard.
15	Cayenne	do	88	Boston, Mass.	Cayenne, South America.	No damage	do	1	At sea	Do.
19	Snuggler	do	68	Grand Manan, New Brunswick.	Gloucester, Mass.	do	Fish	1	Off Isles of Shoals	Fell overboard from jib-boom.
21	William Marshall.	do	306	Philadelphia, Pa.	Matanzas, Cuba.	Partial	General	1	Off Cape Hatteras, N. C.	Knocked overboard by boom in a gale.
22	Joseph Wilde.	do	289	New York	Cienfuegos, Cuba.	do	Cooperage	1	At sea	Lost overboard.

24	Orvus	Am. bark.	485	Round Pond, Me.	Hull, England	.....do	Fish-scrap	1	400 miles W. of Scilly Is- lands.	Washed overboard.
24	C. W. Lewis	Am. sch.	322	New York	Port Royal, S. C.	.....do	Railroad iron	1	Off Frying Pan Shoals, N. C.	Fell overboard in gale.
24	Emma No. 2	Am. str.	287	Mobile, Ala.	Montgomery, Ala.	No damage	Unknown	1	Near Duncan's Bend, Alabama River.	Fell overboard.
25	William Cobb	Am. bkue.	425	Pensacola, Fla.	Philadelphia, Pa.	.....do	.....do	1	At sea	Lost overboard in gale.
30	Isaac Solomon	Am. sch.	23	Mill Creek, Md.	Dredging grounds, Chesapeake Bay.	.....do	Ballast	1	Near mouth of Patuxent River, Md.	Fell overboard while jumping from yawl to schooner.
1879.										
Jan. 2	John Proctor	do	499	Boston, Mass.	Baltimore, Md.	Partial	.....do	2	25 miles S. E. of Sandy Hook, N. J.	Capsized.
3	Girard Chestnut	do	29	At work on dredg- ing grounds, Chesapeake Bay.	.....do	.....do	Oysters	1	Eastern Bay, Ches- apeake Bay, Md.	Frozen.
3	Adam Bowly	do	114	Hayti, West In- dies	.....do	No damage	Logwood and coffee.	1	Near coast of Hayti, West Indies.	Lost overboard.
3	I. W. Parker	Am. brig.	380	Cow Bay, Cape Breton Island.	St. Thomas, West Indies.	No damage	Unknown	1	At sea	Unknown.
3	Index	Am. sch.	334	Savannah, Ga.	Philadelphia, Pa.	.....do	Lumber	1	Lat. 37°, long. 73°	Washed from bowsprit in gale.
4	Addie E. Sleeper	Am. bkue.	591	Aspinwall, Cen- tral America.	New York	Partial	Old iron	3	Off Highlands, N. J.	Disasted in gale.
4	Grace Andrews	Am. sch.	568	St. George's, Ber- muda.	Montevideo, South America.	.....do	Lumber	1	At sea	Washed overboard in gale.
5	Estella	do	50	Yarmouth, Nova Scotia.	Antigua, West Indies.	Total	Unknown	3	Off Cadiz, Spain	Capsized and abandoned.
13	Edwin J. Palmer	do	197	Tampico, Mexico.	New York	Partial	General	1	At sea	Lost overboard in gale.
15	Henrietta	do	180	Portland, Me.	Ponce, Porto Rico.	.....do	Shooks and heading.	1	do	Knocked overboard by force-board in hurricane.
16	Hattie Weston	do	103	Inagua, Bahamas	New York	No damage	Unknown	1	do	Lost overboard.
18	Adelaide	Am. bark.	391	Rio de Janeiro, Brazil.	Baltimore, Md.	Partial	Coffee	1	Off Potomac River, Chesapeake Bay.	Jumped overboard; cause not known.
23	Alice G. Wenson	Am. sch.	64	Shelburne, Nova Scotia.	Grand Banks, Newfoundland.	No damage	Fish	2	Grand Banks, New- foundland.	Went out to attend trawls; now storm came on; never heard of after.
23	Jacob A. Stamler	Am. ship.	1,000	Havre, France	New York	.....do	Ballast	1	At sea	Lost overboard in gale.
26	Garrett P. Wright	Am. sch.	99	York River, Va.	.....do	.....do	Oysters	1	Chesapeake Bay	Lost overboard from jib- boom.
27	Geneva	Am. bark.	464	Montevideo, South America.	.....do	.....do	Unknown	1	At sea	Fell overboard while furling sail.
Feb. 9	Charlie Miller	Am. sch.	60	Baltimore, Md.	New Haven, Conn	Total	Oysters	5	do	Missing.
15	Edward A. Horton	do	196	Cedar Keys, Fla.	New York	No damage	Unknown	1	Off Cape May, N. J.	Knocked overboard by chain boom.
16	William H. Oakes	do	66	Boston, Mass.	Fishing	.....do	Ballast	1	Boston Bay	Fell from mast-head.
17	John Mason	Am. brig.	71	Gloucester, Mass.	.....do	.....do	Fish	1	Grand Banks, New- foundland.	Capsizing of dory.
22	Serene	Am. bark.	208	Ponce, Porto Rico.	Boston, Mass.	.....do	Sugar, &c.	1	At sea	Knocked overboard by main sheet.
			550	Baltimore, Md.	Rio de Janeiro, Brazil.	Partial:	Flour and lard	3	Off Cape Hatteras, N. C.	Washed overboard in gale.

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, &c.—Continued.*

(4) OTHER CAUSES.

Date of disaster	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether result or partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.	Nature of casualty.
1879. Feb. 25	Pilot.....	Am. str.....	146	San Francisco, Cal.	Petaluma, Cal.	No damage	General merchandise.	1	Point San Pedro, San Francisco Bay, Cal.	Foot caught in bight of hawser, died next day.
25	Alexandria.....	Am. sch.....	95	New York.....	Boston, Mass.	do	Coal.	1	Near Boston Light.	Lost overboard in gale.
26	Sidney P. Smith.....	Am. str.....	83	Unknown.....	Unknown.....	do	Unknown.....	1	Coosa River, Ala.	Slipped off guard into the river.
Mar. 2	William H. Foye.....	Am. sch.....	70	Gloucester, Mass.	Western Banks, Newfoundland.	do	Fish.....	1	Western Banks, Newfoundland.	Capsizing in dory.
2	Los Angeles.....	Am. str.....	483	Eureka, Cal.	San Francisco, Cal.	Partial.	Produce.....	1	Humboldt Bar, Cal.	Washed overboard by sea.
6	J. J. Clark.....	Am. sch.....	70	Gloucester, Mass.	Boston, Mass.	No damage	Fish.....	1	Off Highland Light, Cape Cod.	Do.
7	J. W. Peaseley.....	do.....	105	Vineyard Haven, Mass.	St. John's, Newfoundland.	Total.	General.	5	Near Sable Island (supposed).	Missing.
14	Mary E. Donivan.....	do.....	16	San Francisco, Cal.	Fishing.	No damage	Ballast.....	1	Near Point Bonita, Cal.	Fell overboard from rigging.
23	Eva E. Hemming.....	do.....	63	Baltimore, Md.	Patuxent River.....	do	do.....	1	Off Locust Point, Baltimore Harbor.	Knocked overboard by waves.
25	Abbie Frankford.....	do.....	70	Provincetown, Mass.	Tangier Sound, Va.	do	do.....	1	Oak Grove, Vineyard Haven, Mass.	Washed off bowsprit.
25	Hattie S. Clark.....	do.....	71	Gloucester, Mass.	Fishing.....	do	Outfits and fish.	4	Bass Harbor, Me.	Upsetting of small boat.
27	Ellen J. McKinnon.....	do.....	70	San Francisco, Cal.	Trading and fishing grounds, Chester River.	Total.	General merchandise.	10	At sea, off southern coast of Oregon.	Capsized.
29	Swan.....	do.....	43	Baltimore, Md.	Drifting grounds, Chester River.	No damage	Ballast.....	1	Off Fort Carroll, Md.	Fell overboard while drawing water.
30	Ella.....	Am. ferry-boat.....	9	In Baltimore Harbor.	do.....	do	do.....	1	Off Locust Point, Baltimore Harbor.	Blown overboard.
31	D. Ellis.....	Am. sch.....	88	Portsmouth, N. H.	New York.....	do	Lime.....	1	Englestown, Mass., outer harbor.	Knocked overboard by boom, in jibing in gale.
31	Francis R. Baird.....	do.....	343	Cardenas, Cuba.	do.....	Partial.	Sugar, &c.....	3	Lat. 33° 50', long. 74° 25'.	Washed overboard with bulwarks.
31	Nellie F.....	do.....	106	Machias, Me.	Boston, Mass.	No damage	Lumber.....	1	Salem, Mass., outer harbor.	Knocked overboard by fore-boom in gale.
—	Ida E. Baker.....	do.....	64	Gloucester, Mass.	Western Banks, Newfoundland.	Total.	Fish, salt, and stores.	12	At sea.....	Missing.

Apr. 3	Mary A. Donigh	.....do	15	In harbor, Annapolis, Md.	.....	Partial	Ballast	4	Off Hackett's Point, Chesapeake Bay.	Capsized in gale.
3	Geo. W. Sweeney	Am. bkne	680	Galveston, Tex	Boston, Mass	No damage	Cotton and iron	1	Fell overboard from top-sail yard in gale.	
7	Lizzie Madison	Am. sch	132	Cuffey's Cove, Cal	San Pedro, Cal	do	Railroad ties	1	Knocked overboard by fore-boom.	
10	Glad Tidings	.....do	183	Alnapsee, Wis	Chicago, Ill	Partial	.....do	1	Washed overboard.	
17	J. W. Doane	.....do	617	In Chicago Harbor	.....	No damage	Corn	1	Fell from fore-top cross-trees to deck.	
17	Grace C. Hadley	.....do	67	Gloucester, Mass	George's Bank, Newfoundland	Partial	Fish and out-fis.	1	Shipped a sea; man died from injuries received.	
17	Curlew	Am. str	33	In Boston Harbor	.....	do	Ballast	2	Rupture of boiler; scalded.	
17	Ferris S. Thompson	Am. bark	531	San Francisco, Cal	New York	No damage	General	1	Washed overboard.	
18	J. W. Sawyer	Am. sch	116	Port Antonio, Jamaica	do	do	Unknown	1	Lost overboard.	
22	Reading R. R. No. 72	Am. barge	114	New York	Philadelphia, Pa	do	Ballast	1	Fell overboard hauling in tow-line.	
—	Andrew Leighton	Am. sch	84	Gloucester, Mass	Grand Bank, Newfoundland	Partial	Fish	2	Went out in dory, fog came on, and they were never heard from.	
—	William Thompson	.....do	84	do	Fishing voyage	Total	Fish	14	Missing.	
May 2	P. I. Nevins	Am. str	40	In New York Harbor	.....	No damage	Ballast	1	Scalded by escaping steam.	
3	Favorite	.....do	79	Seattle, Wash. Ter	Port Townsend, Wash. Ter.	do	.....do	1	Lost overboard; supposed to have committed suicide.	
8	Josie	.....do	238	Unknown	Unknown	do	Unknown	1	Fell overboard while stepping from boat to barge.	
14	J. W. Brown	Am. sch	166	Jacksonport, Wis	Chicago, Ill	do	Cedar posts	1	Washed overboard.	
19	William B. Ogden	.....do	298	Escanaba, Mich	Ashtabula, Ohio	do	Iron ore	1	Fell overboard	
21	Helen Pratt	.....do	212	Bay City, Mich	Tonawanda, N. Y	do	Lumber	1	Fell overboard from fore cross-trees.	
24	Maggie M. Rivers	.....do	282	New York	Baltimore, Md	do	Ballast	1	Fell from staging on side of vessel.	
25	Aquidneck	Am. brig	358	In Saint Illa River, Ga.	.....	do	Lumber	2	Capsized of small boat.	
June 4	Eagle Wing	Am. sch	279	Cleveland, Ohio	Detroit, Mich	do	Coal	1	Fell overboard.	
6	Nellie Walker	Am. catamaran	Unkn	Unknown	Unknown	do	Unknown	2	Capsized.	
10	Paul Seavey	Am. sch	237	Bangor, Me	Machias, Me	do	General	1	Fell from cross-trees to deck.	
11	Inter-Ocean	Am. str	1,069	Buffalo, N. Y	Chicago, Ill	do	Ballast	1	Fell down hatch (supposed).	
11	Virginia	Am. sloop	8	Baltimore, Md	Curtis Creek, Md	do	.....do	1	Fell overboard trying to dodge main boom.	

TABLE 63.—*Wrecks and Casualties on and near the Coasts and on the Rivers of the United States, &c.—Continued.*

(4) OTHER CAUSES.

Date of disaster.	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether resulting in total or partial loss.	Nature of cargo.	Number of lives lost.	Place of disaster.	Nature of casualty.
1879. June 13	George Appold ...	Am. steamship.	1,456	Baltimore, Md.	Boston, Mass.	No damage	General mdse.	1	Offmouth Rappahannock River, Chesapeake Bay.	Fell down hatch.
27	David Macy	Am. sch. ..	193	Michigan City, Ind.	Grand Haven, Mich.	do	Ballast	1	9 miles off Michigan City, Lake Michigan.	Fell overboard.
29	Frank F. Curling .	Am. ship .	2,201	New York	San Francisco, Cal.	Total	Unknown	1	Off Cape Horn	Washed overboard.

Total: Vessels, 177; tonnage, 49,623; total losses, 22; partial losses, 36; no damage, 119; lives lost, 370.

TABLE 64.—*Summary of Wrecks and Casualties on or near the Coasts and on the Rivers of the United States, and at Sea or in Foreign Waters, during the year ending June 30, 1879, involving loss of life.*

Nature of casualties.	Number of vessels.	Tonnage.	Total loss.	Partial loss.	No damage to vessels.	Number of lives lost.
Foundering.....	47	7, 670	43	4	.....	378
Strandings.....	35	15, 414	27	7	1	114
Vessels collided.....	17	6, 142	7	7	3	26
Other causes.....	177	49, 623	22	37	118	370
Total.....	276	78, 849	99	55	122	888

NOTE.—In this table are included 145 lives lost in cases where no damage was sustained by the vessel or cargo meeting with such casualty; for example, seamen lost overboard in gales, falling from masts and rigging, knocked overboard by spars, drowned by upsetting of small boats, &c., shown in division "(4) Casualties from other causes," Table 63.

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded during the last ten years.*

ATLANTIC AND GULF COASTS.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Absecom, N. J.....	1	.....	1	.....	.....	3	2	.....	.....	.....	7
Addison, Me.....	1	.....	.....	.....	1
Ajax Reef, Fla.....	1	.....	.....	.....	.....	.....	1
Alden Rock, Portland, Me.....	1	.....	.....	.....	2
Allen Island, Penobscot Bay.....	1	.....	.....	.....	.....	1
Amagansett, Long Island (near L. S. S. No. 10).....	2	2
Amazeen Island, N. H.....	1	.....	.....	.....	.....	1
American Shoal Reef, Fla.....	1	.....	.....	.....	2	.....	3
Annisquam Light, Mass (¾ mile east from).....	1	.....	.....	1
Aransas, Tex.....	2	1	1	.....	1	.....	1	1	.....	1	8
Asbury Beach, N. J.....	1	.....	1
Ash Island, Me. (Muscle Ridge Channel).....	1	.....	1
Assateague Beach, Va. (off).....	2	.....	2
Assawaman Inlet, Va.....	1
Asylum Bridge, R. I.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Atlantic City, N. J.....	1	2
Atlanticville, N. J.....	1	.....	.....	1
Avery's Rock, Mass.....	1	.....	.....	1	.....	.....	2
Back Beach, Me.....	1
Back River (mouth of), Chesapeake Bay.....	1	.....	.....	.....	.....	1
Bailey Island, Me.....	1	.....	.....	1	.....	2
Baker Island Bar, Mount Desert, Me.....	2	.....	.....	.....	3
Bang's Island, Me.....	1	.....	.....	1	.....	.....	1	2
Bantam Ledge, Penobscot Bay, Me.....	1	1	2	3
Barnegat, N. J.....	2	2	2	.....	3	2	1	1	1	.....	15
Barnegat Inlet, N. J.....	2	1	.....	.....	4
Barnegat Inlet, N. J., (7 miles south of).....	1	.....	.....	1
Barnegat Light, N. J., (4 miles south of).....	1	.....	.....	1
Barnegat Light, N. J., (6 miles south of).....	1	1
Barnegat Shoals, N. J.....	1	1
Bar Harbor, Mount Desert, Me.....	1	.....	.....	1
Bar Ledge, Petit Manan, Me.....	1	.....	.....	1
Bar Neck Sands, Talbot County, Md.....	1	.....	.....	1
Barred Harbor, Cape Cod.....	1	.....	.....	1
Barrett's Point, N. Y.....	1	.....	.....	.....	.....	1
Barter Island, Southeast Bay, Me.....	1	.....	.....	.....	.....	.....	1
Bartlett Reef, Conn.....	1	.....	.....	.....	2	2	5
Bass Island, Cape Porpoise, Me.....	2	.....	.....	.....	2
Bass River Breakwater, Cape Cod.....	1	.....	.....	.....	.....	1	.....	.....	2
Bakeman Point, R. I.....	1	.....	.....	.....	.....	.....	.....	.....	1
Bating Hollow Beach, L. I.....	1	.....	.....	1
Battery Point, Black Rock, Conn.....	1	.....	.....	1
Bayou Lafourche, La.....	1	.....	1
Bayou Reef, South Pass, La.....	1	.....	.....	.....	.....	1
Bay Shore, N. J.....	1	.....	.....	.....	.....	.....	.....	1
Bay View, Cape Ann, Mass.....	1	.....	.....	.....	.....	1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Beach Island, Me.....					1						1
Beach Point, Truro, Mass.....							1				1
Beacon Ledge, Portsmouth.....								2			2
Bear Point, near Addison, Me.....							1				1
Bearse's Shoal, Cape Cod.....					1						1
Beaufort, N. C.....								1			1
Beaufort Bar, N. C.....			1			2					3
Beaufort Reef, N. C.....							1				1
Beaufort, S. C.....					1			1			2
Beaver Tail Rock, R. I.....	1	2	1		1	1	1	1			8
Bedloe's Island Reef, New York Bay.....									1		1
Beermore Ledge, Cape Ann.....							1				1
Biddeford Pool, Me.....					1						1
Billingsgate Shoal, Cape Cod Bay.....									2		2
Birch Point, Sheepscot River, Me.....								1			1
Birch Point, Wiscasset River, Me.....							1				1
Bird Island, near Bolivar Light, Tex.....									1		1
Bishop and Clerk's Shoals, Mass.....						1		2		1	4
Black Head, Me (off).....									1		1
Black Island, Me.....						1					1
Black Ledge, New London, Conn.....							1	1			2
Black Rock, Block Island, R. I.....				1					1		2
Black Rock, Conn.....							2	1			3
Black Rock, Newburyport, Mass.....									1		1
Blackwell's Island, N. Y.....					1				1		2
Block Island, R. I.....						4	3	1	3		11
Block Island, R. I. (northwest part of).....									1		1
Block Island, R. I. (west side).....									4		4
Block Island, R. I. (northeast end of).....									1		1
Block Island, R. I. (southeast point of).....								2	1		4
Block Island, R. I. (southwest shore of).....									2		2
Bloody Point, Kent Island, Md.....								1			1
Blue Hill Bay, Me.....			1								1
Blue Rock, R. I.....	1								1		2
Bluff Island, Saco Bay, Me.....							1				1
Bodkin Bar, Chesapeake Bay.....					1						1
Bodkin Point (southeast bar) Chesapeake Bay.....								1			1
Body Island Light, N. C.....					1						1
Bogue Inlet, Swansborough, N. C.....								1			1
Bogue Island.....								1			1
Boisbubert Island, Me.....						1					1
Bolivar Beach, Tex.....							1				1
Bolivar Point, Tex.....		1									1
Bombay Hook, Delaware Bay.....								1	1		2
Bonds, N. J. (½ mile north of L. S. S. 22, district No. 4).....							1				1
Boon Island, Me.....				1	1						2
Booth Bay, Me.....	1			1	1				1		4
Boston Neck, R. I.....					1						1
Bowdoinham Bar, Me.....									1		1
Bower's Beach, Delaware Bay.....									1		1
Brace Cove Point, Cape Ann.....									1		1
Brandywine Shoals, Delaware Bay.....					2	3	1	1		2	9
Branford Reef, Long Island Sound.....								1	1		2
Brant Island Shoal, Pamlico Sound.....							1				1
Brant Point, Cape Cod.....											1
Brazos Bar, Tex.....			1				1		1	3	6
Brazos de Santiago, Tex.....						4				1	5
Breaking Ledge, Me.....						1					1
Brenton Reef, R. I.....				1	1			1			4
Brewster, Mass.....									1		1
Brewster's Beach, Mass.....		1									1
Brewster Breakwater, Mass.....									1		1
Brewster Island (outer point), Mass.....									1		1
Brewster's Reef, Fla.....					1						1
Bridgehampton Beach, Long Island.....								1			1
Bridgeport, Conn.....								1			1
Brigadier Island, Penobscot Bay, Me.....									1		1
Brigantine, N. J.....	3	2		2	6	1	2	1	1	3	21
Brimstone Point, N. J.....									1		1
Broad Creek (mouth of), Calibogue Sound, S. C.....										1	1
Broadkill River (mouth of), Del.....									1		1
Browney Island (entrance to Englishman's Bay), Me.....							1				1
Brown Ledges, Penobscot Bay.....						1				2	3
Buckarce Shoals, Va.....					1						1
Buckle's Island Harbor, Me.....							1				1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Bullock's Point, R. I.	1										1
Bull Rock, Boston Bay					1						1
Bull Rock, Carver Harbor, Me.									1		1
Bull's Island (shoal off), S. C.										1	1
Bunker's Ledge, Me.					1						1
Burnt Island, Seal Harbor, Me.										2	2
Buzzard's Bay (Middle Ledge), Mass.									1		1
Calcasieu Bar, La.										1	1
Calf Island, Boston Harbor								2			2
Campobello Beach, Eastport, Me.							1				1
Caney Creek, Tex.						1					1
Cape Ann, Mass.		1						1	1		3
Cape Arundel, Me.						1					1
Cape Canaveral, Fla.			1								1
Cape Canaveral, Fla. (15 miles south of)										1	1
Cape Charles, Va.					1					1	2
Cape Cod (back of)								1			1
Cape Cod, Mass. (precise locality not stated)	1	1		1							3
Cape Cod Light (5 miles south of)									1		1
Cape Elizabeth, Me.					1	1	2	1			5
Cape Fear, N. C.											1
Cape Fear River, N. C. (mouth of)						2	1	1	1		5
Cape Florida Light-house								1			1
Cape Hatteras, N. C.			1	2	2		1	2		1	9
Cape Hatteras, N. C. (4 miles south of)										1	1
Cape Hatteras, N. C. (20 miles north of)								1			1
Cape Hatteras, N. C. (30 miles south-southwest of)							1				1
Cape Henlopen, Del.					5	1	5	5		1	17
Cape Henlopen, Del. (7 miles south of)									1		1
Cape Henry, Va.						3		6	2	2	13
Cape Henry, Va. (4 miles south of L. S. S. No. 1)							1				1
Cape Lookout, N. C.	3		1	1	1	2	1				9
Cape Lookout (½ mile west of light)										1	1
Cape Lookout (2 miles southwest of light)										1	1
Cape May, N. J.				3	1	2		1		2	9
Cape May, Hereford Light, N. J.							1				1
Cape May Steamboat Landing, N. J.							1				1
Cape Poge, Mass.					2		1	1		2	6
Cape Porpoise, Me.			1			1					2
Cape Romain, S. C.							1				1
Cape Romano, Fla.										1	1
Cape San Blas, Fla.							1		1		2
Cape Small Point, Me.					1						1
Captain's Island, Long Island Sound									1		1
Caroline Shoal, N. C.					1						1
Carson's Inlet, N. J.				1							1
Carter's Bar, Va.	1						1				2
Carysfort Reef, Fla.						1					1
Cash's Reef, East River, N. Y.							1				1
Castle Hill, R. I.								1			1
Cathance Bar, Kennebec River (near mouth of)										1	1
Cedar Island, Va.					1		1				2
Cedar Keys, Fla.		1		1					1		3
Cedar Point, Chesapeake Bay										1	1
Cedar Tree Neck, Vineyard Sound						1					1
Chandeleur Island Light, La.						1					1
Chandeleur Island Light, La. (4 miles southeast of)							1				1
Chandeleur Island Light, La. (14 miles southwest of)								1			1
Chappaquiddick Point, Martha's Vineyard										1	1
Charles Island, Conn.						1					1
Charleston Bar, S. C.					1	1					2
Charleston Harbor, S. C.							2				2
Charlotte, N. Y.										1	1
Charlotte Harbor, Fla.									1		1
Chatham Bar, Cape Cod		2	1	6	2		5		2	1	19
Chatham, Mass.						1			1		2
Chebeag Island, Me.							1	1			2
Cherrystone Inlet, Va.								1			1
Cherrystone Light, Va. (5 miles above)								1			1
Chester River, Md. (mouth of), Chesapeake Bay							1				1
Chincoteague, Va.	1	1			1			1			3
Chincoteague, Va. (15 miles north)							1				1
Chincoteague Shoals, Va.							1	1		1	3
Choptank River, Md. (mouth of)										1	1
Cincinnati Bar, N. J.						1					1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
City Island, Long Island								1	1	2	4
Clapboard Island, Me							1				1
Clark Island, Me						1				1	2
Clark Island, Portsmouth, N. H.							1		1		2
Clay Head, Block Island Sound										1	1
Clear Water, Fla.				1							1
Clement's Cove, Me					1						1
Cliff Shore, Mass					1						1
Clinton Point, Long Island Sound			1								1
Coaster's Harbor Island, R. I.	2										2
Cobb's Island, Va		1						1	1	1	4
Cobscook Bay, Me								1			1
Cohasset Rocks, Mass										1	1
Cold Spring Inlet, N. J.			1	1	2	2	1	6	2	1	20
Collins Beach, Delaware Bay										1	1
Common Flats, Cape Cod, Mass.					1					4	5
Conanicut, R. I.	2			2		1				1	6
Conch Reef, Fla.								2			2
Coney Island, N. Y.				1				1			2
Copps' Island, Conn						1		1			2
Coral Reef, Fla.				1							1
Core Sound, N. C.						1					1
Cove Point, Chesapeake Bay (near)							1	1			2
Cow's Shoal, Stamford, Conn. (off)									1		1
Cox Head, Me.							1				1
Cox's Shoal, N. J.				1							1
Crab Meadow, Long Island Sound				1							1
Crabtree Point, North Haven, Me.				1				1			2
Cranberry Island, Me							2	1	2		5
Cranberry Island Light, Petty Pan Reef, Me							1				1
Crane's Neck Point, Long Island									1		1
Crocker's Reef, Fla.					1						1
Cross Island, Me		2			2						4
Cross Island, Machias Bay, Me										1	1
Crow Shoal, Delaware Bay										2	2
Cuckolds, Me					2						2
Cumberland Island, Ga.					1						1
Currituck Inlet, N. C.	1	1		2	2	1					7
Currituck Light, N. C. (3 miles south of)									1		1
Curtis Island, off Stony Creek, Conn							1				1
Cushing's Island, Portland Harbor								1			1
Cutler, Me	1	2			1				1		5
Cuttyhunk Island, Mass.			2			2	3	3	2	1	13
Cuttyhunk Light ($\frac{1}{2}$ mile southwest of)								1			1
Damiscove Island, Me							1				1
Davis Neck, Mass.						2					2
Davis Shoal, Florida Reef						2					2
Davis Straits, Herring Gut, Me								1			1
Dawson Shoal, (near Watchapreague Inlet), Va.					1		1	1	3		6
Deal Beach, N. J.							2	1	2	1	6
Dearmon Ledge, near Gloucester, Mass.								1			1
Decros Point, Tex.							1				1
Deer Island, Me.						1					1
Deer Island Point (2 miles north of Eastport), Me.									1		1
Deer Island Shore Ledge, Me.							1				1
Deer Island Thoroughfare (rock in), Me.										1	1
Delaware Breakwater, Del.		2	1		1	2	2	1	2	3	14
Dennis, Cape Cod, Mass.							1				1
Dennisport Bar, Mass.									1		1
Despair Island, Narragansett Bay								1			1
Devil's Back, Boston Harbor								1			1
Diamond Reef, Cape Hatteras (off) N. C.									1		1
Dicken's Point, Block Island, R. I.		1								1	2
Dighton, Mass.		1									1
Dix Flat, Mass.						1					1
Doboy Sound (south breaker), Ga.							1				1
Dogfish Ledges (entrance to Cross Island Narrows) Me.										1	1
Dog Island, Saint Croix River (mouth of), Passa-									1		1
maquoddy Bay											
Dread Ledge, Mass.					1					1	1
Drinkwater Point, Me									1		1
Duck Island, Mass.						1				1	2
Duck Key, Fla.								1			1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Duck Ledge, Me						1					1
Dumpling Rock, Buzzard's Bay, Mass							1				1
Dutch Island, R. I.					1			1	1	3	8
Duxbury Beach, Mass.									1		1
Eastern Bay, Chesapeake Bay									1		1
Eastern Egg Rock, near Moos-a-bee Light, Me.									1		1
East Bank, Sandy Hook (off)								1			1
East Chop, Vineyard Haven						2		1			4
East Orleans, Mass. (1 mile south of L. S. S.)									1		1
Eastport, Me. (Broad Cove)									1		1
East Rockaway Bar, Long Island								1			1
Eaton's Neck, Long Island, N. Y.					1					3	4
Edgartown (outer flats), Mass.									1		2
Edgartown Harbor (near light-house)									1		2
Egg Island, Altamaha Sound, Ga.					1					1	3
Egg Rock, near Browney Island, Me										1	1
Elbow Reef, Fla.					1						1
Eldridge's Shoal, Vineyard Sound							1				1
Elihu's Island, Pawcatuck Bay, R. I.							1				1
Elizabethport Bar, N. J.							1				1
Emery's Point, Me.					1						1
Falkner's Island, Long Island Sound							1			1	2
Fall River, Mass.							3				4
Falmouth, Mass. (near)									1		1
Falmouth Flats, Mass.										1	1
False Cape, Va.						2			1		4
Fargo River, Long Island, N. Y.				1							1
Far Rockaway, Long Island							1				1
Fawn Bar, Boston Bay					1			1			2
Fenwick's Island, Md.							1	2	1		4
Fenwick's Island, Md. (3 miles south of)								1			1
Fenwick's Island, Md. (10 miles south of)							1				1
Fenwick's Island Light (7 miles north of)									1		1
Fernandina Bar, Fla.						1					1
Fire Island, Long Island, N. Y.				2	1	2	3			2	10
Fire Island, near Northport, Penobscot Bay							1				1
Fire Island Light, Long Island, N. Y. (5 miles east of)							1		1		2
Fire Island Light, Long Island, N. Y. (8 miles east of)							1	1			2
Fire Island Light, Long Island, N. Y. (15 miles east of)								1			1
Fisher's Island, Long Island Sound	2				3	1	1		1	1	9
Fisherman's Inlet, Chesapeake Bay								1			1
Fisherman's Island, Me					1		1				2
Fisherman's Island, near Jonesport, Me									1		1
Fishing Bay, Chesapeake Bay									1		1
Fishing Island, N. H.						1					1
Fishing Point, near Chincoteague, Va.									1		1
Five Mile Beach, Cape May								1			2
Flander's Bay, Long Island						1					1
Flatty Creek Bar, Albemarle Sound									1		1
Fletcher's Neck, Me.						1					1
Flogger's Shoal, Delaware Bay						1	1				2
Flood Rock, Hell Gate, N. Y.								1	1		2
Florida Reef, Fla.		2			1			1	1		5
Flye Island Light-house, Me. (1½ miles northwest of)							1				1
Folly Island, Cape Porpoise, Me							1				1
Fort Green, R. I.							1				1
Fort Independence, Boston Harbor									1		1
Fort Island, Me.					1						1
Fort Macon, N. C.						1		1			2
Fort Pickens Point, Fla.										1	1
Fort Point Rock, Gloucester Harbor, Mass								1			1
Fort Pond Bay, Long Island, N. Y.					1						1
Fort Preble, Cape Elizabeth, Me.							1				1
Fort Taylor, Fla.						1					1
Fowey Rocks, Fla.									1		1
Fox Island, Me. (northern head of)							1				1
Franklin Light, Me.						1					1
French Reef, Fla.				1		1				1	3
Freshwater Cove, Mass.						1					1
Frisbee Ledge, Me.					1						1
Frying Pan Shoals, N. C.		1							2		3
Gallop's Island, Boston Harbor						1				1	2
Galveston, Tex.		3	2		2	1	1	1	2		11
Galveston, Tex. (7 miles west of)								1			1
Galveston Island, Tex. (east end of)							3				3

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Gangway Rock (off Watch Hill), R. I.							1				1
Gardiner's Bay, N. Y.						1					1
Gardiner's Island, Long Island Sound								1			1
Gardiner's Point, Long Island Sound									1		1
Gay Head, Martha's Vineyard			1					1			2
George's Island, Boston Harbor						1		1			2
George's Island, Me.				1							1
Georgetown Bay, S. C.			3								3
Georgetown (outer bar), S. C.					1		2		1		3
Gerrish Island, Portsmouth Harbor, N. H.							1				1
Gilbert's Bar, Fla.					1						1
Gilgo Inlet Bar (12 miles west of Fire Island), L. I.									1		1
Gloucester, Mass.							3		2	2	8
Glover Rock, Me.								1			1
Goat Island, Cape Porpoise, Me.							2		1		3
Goat Island Point, Me.							1				1
Goat Island, R. I.					1						1
Good Harbor Beach, Mass.						1					1
Goose Falls, Brookville, Me.								1			1
Goose Island, Long Island Sound							1				1
Goose Rocks, Kennebunkport, Me.										1	1
Goshen Beach, Long Island Sound										1	1
Goshen Reef, Long Island Sound						1	2	1			4
Grace Point, Block Island, R. I.				1							1
Graves, Boston Harbor						3					3
Gray's Ledge, Me.					1						1
Great Bay Light, N. J.					1						1
Great Egg Harbor, N. J.			1		1		1		1		4
Great Egg Harbor, 1 mile below Anchorage Point.										1	1
Great Fawn Bar, Boston Bay									1		1
Great Head (1 mile from Cutler), Me.									1		1
Great Island Shoal, Portsmouth, N. H.								1			1
Great Ledge, Mass.					1						1
Great Rock, near Seaconnett, R. I.							1				1
Great Point, Nantucket		1	3		1				1	2	8
Great Point, Nantucket (2 miles from)											1
Great Pond, N. J.						1					1
Grecian Shoals, Fla.					1						1
Greenbury Point, Chesapeake Bay										1	1
Green Island, Boston Harbor						1					1
Green Island Ledge, Me.				1				1			2
Green Island Reef, Casco Bay							1	1			2
Green's Pond, Long Branch, N. J.								1			1
Green Run (3 miles north-northeast from), Md.									1		1
Green Run Beach, Md.										1	1
Green Run Inlet, Md.						1		1	1		3
Greenport, N. Y.									1		1
Grindstone Ledge (Muscle Ridge Channel), Me.									1		1
Guilford, Conn.						1					1
Gull Rock, Long Island Sound					1						1
Gull Rock, Newport Harbor, R. I.						2					2
Gull Rock, Pamlico Sound								1			1
Gurnet, Mass.								1			1
Guy's Ledge, Me.					1						1
Halibut Point, Rockport, Mass.									2		2
Hallet's Point, Hell Gate, N. Y.								2			2
Hampton Bar, Va.							1	1			2
Hampton Beach, N. H.									1		1
Hampton Roads, Va.								1			1
Handkerchief Shoal, Mass.						2				1	3
Harbor Island, Me.							1				1
Harbor Island Bar, N. C.										1	1
Harding's (entrance to Boston Harbor)							1				1
Harding's Beach, Cape Cod Bay							1				1
Hart Island, Long Island Sound			1		2	1	2	2			8
Harwich Bar, Mass.							1				1
Harwichport, Mass.							1				1
Haskell Island, Me.							1				1
Hatchett's Reef, Long Island Sound										1	1
Hatchett's Point (1 mile west of) Conn.								1			1
Hatteras Inlet, N. C.							2	4	3		9
Hatteras Light, N. C. (8 miles north of)							1				1
Hatteras Light, N. C. (20 miles north of)								1			1
Hatteras Shoal, N. C.									2	1	4
Hatteras Swash, N. C. (2 miles from Inlet Light)							1				1
Hawes' Shoal, Vineyard Sound								1		1	2

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Hawkins' Point, Chesapeake Bay						1					1
Hay Island Ledge, Seal Harbor, Me									1	1	2
Head Harbor Island, Me					1				1		2
Hedge Fence Shoal, Mass						2	1	2	1	1	7
Hell Gate, N. Y	3			2	4	6	3		2		20
Hell Gate (Steep Rock), N. Y								1			2
Hempstead, Long Island, N. Y					1						1
Hen and Chickens Reef, Del			1						1		2
Henry Point, Me										1	1
Hereford Inlet, N. J					3	1	2				6
Hereford Light (6 miles northeast of), N. J										1	1
Heron Point (west of Whitehead), Me									1		1
Herring Bay, Chesapeake Bay						2			1		3
Herring Gut, Me	1							2	1		4
Highland Light, Cape Cod					1			1			2
Highland Light, N. J. (3 miles from)							1				1
Highlands, N. J	1					1					2
Hillsborough Inlet, Fla								1			1
Hillsborough River, Fla					1						1
Hill's Point, Chesapeake Bay					1						1
Hodgdon Cove, Tremont, Me							1				1
Hodgdon's Ledge, Me								1			1
Hodgdon's Point, Me										1	1
Hodge's Bar, Swan Point, Chesapeake Bay (near)									1		1
Hog Island, Va	3		1	3	3		3	2			15
Hog Island Ledge, Me										1	1
Hog's Back, East River, N. Y										1	1
Holland Point, Chesapeake Bay								1			1
Holland's Island Point, Chesapeake Bay										1	1
Holmes' Hole, Mass					1	1				2	4
Hooper's Ledge, Herring Gut Harbor, Me									1		1
Hooker's Island, Chesapeake Bay										1	1
Hope Island, R. I			1								1
Horn Island, Mississippi Sound							1		1		2
Horn Point, Wicomico River (mouth of), Va								1			1
Horse's Race, Boston Bay					1						1
Horseshoe Shoal, Chesapeake Bay									1		1
Horseshoe Shoal, Nantucket Sound	1									1	2
Horton's Point, N. Y				1		1					2
Horton's Point, N. Y. (3 miles east of)							1			1	2
Horton's Point, N. Y. (7 miles west of)								2			2
Horton's Point, N. Y. (10 miles west of)							1				1
Horton's Point, N. Y. (12 miles west of)								1			1
Hough's Beach, Gloucester Harbor, Mass							1				1
Hunting Island, S. C				1				1			2
Huntington Neck, Long Island Sound						1					1
Hyannis, Mass							2	1			3
Hypocrites, Townsend Harbor, Me								1	1		2
Indianola, Tex		1		1			1				3
Indianola, Tex. (7 miles southwest of)							5				5
Indianola, Tex. (2 miles west of)							1				1
Indianola, Tex. (2 miles southwest of)							2				2
Indianola, Tex. (7 miles south of)							3				3
Indian Point, Cape Rosier, Penobscot Bay, Me								1			1
Indian River (30 miles north of), Fla										1	1
Indian River Inlet, Fla	1	1									2
Ingraham Point, Me					1						1
Inlet Shoals, N. J						2					2
Inman Bar, Nantucket		1									1
Ipswich Bar, Mass					2	4			1	1	8
Island Bank, N. J						1					1
Island Ledge, Mass							1				1
Isles of Shoals, N. H							1	1			2
Jabez Rock, Guilford Harbor, Conn								1			1
Jackson's Creek, Va								1			1
Jamaica Island, Kittery, Me							1				1
James Ledges, Wickford, R. I							1				1
Jameson Point, Me						1					1
Jerry's Point, N. H					1						1
Jewell's Island Reef, Me								1			1
Joe Flogger, Delaware Bay								1			1
Johnson's Point Reef, St. Mary's River (mouth of), Ga										1	1
Jones' Beach, Long Island, N. Y						3			1		4
Jones' Hill, N. C. (near L. S. S. No. 4, district 6)							1				1
Jones' Inlet, Long Island, N. Y		1	1			1		2		3	8
Jonesport, Me	1	3	4	3					1		12

TABLE 35.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Jupiter Light, Fla	4	1	1								6
Jykil Island, Ga								1			1
Jykil Spit, Brunswick, Ga (near)									1		1
Kegs Ledge, Muscongus Bay, Me								1			1
Kennebunkport, Me									1		1
Kent Island, Chesapeake Bay									1		1
Kent Island Narrows, Md. (2 miles from)									1		1
Kent Point, Eastern Bay, Md									1		1
Kettle Bottom Rocks, R. I.	1	1									2
Key West, Fla. (18 miles northwest of)								1			1
Key West, Fla. (18 miles northeast of)									1		1
Key West, Fla., southwest Point Quicksand							1				1
Key West Harbor, Fla								1		1	2
Key West Island, eastern beach								1			1
Killpond Shoal, Mass				2	1						3
Kinnekeet, N. C.											2
Kingfish Shoal, Fla						1					1
Kittery, Me. (ledge near)									1		1
Kittery Point, Me							2				2
Kittyhawk, N. C.								1			1
Knowlton's Beach, Rockport, Mass							2				2
Lambert's Cove, Vineyard Sound							1				1
Lane's Island, Me						1					1
Lane Island, Penobscot Bay, Me									1		1
Lantern's Point, near New Shoreham Breakwater, R. I									1		1
Last Island, Gulf of Mexico						1					1
Lattimer's Reef, Long Island Sound						1			1		2
Leete's Reef, Conn								1	1		2
Leighton's Point, Pembroke, Me								1			1
Lewes, Del					2		1	3	1	3	10
Lewistown, Del							1		1		2
L'Homme à Dieu Shoal, Vineyard Sound					1		2		2		5
Libby Island, Me			1				2				3
Little Beach, N. J					1				1		2
Little Cove Point, Chesapeake Bay									1		1
Little Cranberry Island, Me						1					1
Little Cumberland Island, Ga					1						1
Little Egg Harbor, N. J	1		3		1		4			3	12
Little Egg Harbor Bar, N. J									1		1
Little Gull Island, Long Island Sound							1				1
Little Inlet, Long Island Sound							1				1
Little Island, Vineyard Haven, Mass					1						1
Little Moriches Beach, Long Island, N. Y.						1					1
Little Mud Thoroughfare, N. J										1	1
Little River Island, Me. (near light-house)							1				1
Little Round Shoal, Mass				1							1
Little Spoon Island, Me								1			1
Lloyd's Neck, Long Island						1		1			2
Lobster Rocks, Beverly Harbor, Mass								1			1
Lobster Rock, Saco Bay, Me										1	1
Lockwood's Folly, N. C.						1	1				2
Londoner, The (near Thatcher's Island), Mass									1		1
Loggerhead Reef (south point of), Florida Reefs									1		1
Long Beach, 6 miles east of Cape Ann Harbor, Mass										1	1
Long Beach Shoal, N. J			1								1
Long Branch, N. J	1			1		1	3				6
Long Island, Boston Harbor								1			1
Long Island coast, precise locality not stated	4	2	1				1				8
Long Island Harbor Head, Islesborough, Me							1				1
Long Island Sound, precise locality not stated				6							6
Long Land Shoal, Long Island Sound								1			1
Long Ledge, Seal Harbor, Me									1		1
Long Point, Cape Cod										2	2
Long Point, Spruce Head Island, Penobscot Bay										1	1
Long Shoal, Nantucket								2	1		3
Lookout Shoals, N. C. (northeast point of)									1		1
Lovell's Island, Boston Harbor						1					1
Love Ladies' Island, N. J										1	1
Lowell's Point, Me					2						2
Lower Clapboard Island Ledge, Me							1				1
Lower Hell Gate, Me.					1						1
Lowe's Point, Chesapeake Bay										1	1
Lnbec Narrows (Gun Rock), Me							1		1		2
Ludington Reef, New Haven Harbor, Conn							1				1
Ludlam's Beach, N. J								1	1	1	3
Lunging Island, Isles of Shoals, N. H.							1				1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Lynn Haven Bay, Va.					1		1	1	1		4
Machias, Me.							1				1
Machiasport, Me.	1						2				3
Machipungo Shoal, Va.								1			1
Magothy River (mouth of), Chesapeake Bay									1		1
Main Inlet Bar, N. C. (2½ miles northeast of)								1			1
Mamaroneck, N. Y. (near)										1	1
Mansfield Ledge, Me. (entrance to Deer Island Thor-											
oughfare)							1				1
Marblehead, Mass.	2									1	3
Marblehead Neck, Mass.							1				1
Mark Island Ledge, Penobscot Bay					1		1				2
Marsh Bank Bar, off Harwich, Mass.							1				1
Marshall's Island, Me.										1	1
Marquesas, Fla.					1	1	1	2			5
Matagorda, Tex. (10 miles southwest of)							2				2
Matagorda, Tex. (17 miles east of)							1				1
Matagorda, Tex. (7 miles south-southeast of)							1				1
Matagorda, Tex., near Half Moon Reef Light							1				1
Matagorda Bay, Tex.				1	2		1				4
Matagorda Bayou, Tex.							1				1
Matagorda Island, Tex.							3		2	1	6
Matagorda Peninsula, 6 miles from mouth of Cane											
Creek							1				1
Matinic Island, Me.									1	1	2
Matinicock Point, Long Island								1			1
Mayport Beach, Fla.										1	1
Menanktesuck Point, Conn.					1						1
Merwin's Point, Conn.								1			1
Metompkin's Inlet, Va.								1			1
Metompkin Shoal, Va.									1		1
Micomit Rip, Mass.					1						1
Middle Ground, Chesapeake Bay									1	1	2
Middle Reef, near Woolsey's Point, L. I.								1			1
Milk Island, Mass.					1	1					2
Milk Creek Flats, Hampton Roads							1				1
Misham Point, Mass.				1							1
Mispillion Creek, Del.					1						1
Mispillion Light (¾ mile south of)										1	1
Mobile, Ala. (3 miles south-southwest of)									1		1
Molasses Reef, Fla.								1			1
Monhegan Island, Me. (southwest point of)							1				1
Monmouth Beach, N. J.								1			1
Monomoy Beach, Cape Cod										1	1
Monomoy Point, Cape Cod		1					1	2			4
Montauk Point, Long Island	1								1		2
Montauk Point (west of light)										1	1
Moos-a-bee Light, Mistake Island, Me.						1		1			2
Moos-a-bee Reach, entrance to Englishman's Bay, Me.							1				1
Moose Island, Booth Bay Harbor, Me.						1					1
Moriches, L. I. (2½ miles east of L. S. S. No. 18)										1	1
Morris' Cove, New Haven Harbor, Conn.						1		1			2
Morris' Island, S. C. (lower end of)									1		1
Mount Desert, Me.		1									1
Mount Desert Rock, Me.										1	1
Munroe's Island, Penobscot Bay, Me.								1			1
Muscle Ridges, Me.						1					1
Muscle Ridge Channel (entrance to), Me.							1				1
Muskeget Island, Nantucket Sound										2	2
Muskeget Island (1 mile northeast of)										1	1
Muskeget Shoal, Nantucket Sound	1				1						2
Musquito Bar, Fla.							1				1
Musquito Inlet, Fla.		1	2					1	1		6
Musquito Inlet (3 miles north of)										2	2
Musquito Inlet (7 miles north of)										1	1
Musquito Inlet, Fla. (4 miles south of)										1	1
Musquito Island, Me.						1					1
Mustang Island, Tex.					1						1
Myrtle Island Beach, Va.								1			1
Mystic, Mass.						1					1
Nag's Head, N. C.			1						1	1	3
Nancy Ledge, Lubec, Me.										1	1
Nantucket, Mass.	1	1	1	2		4					9

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Nantucket, Mass. (shoal off)									1		1
Nantucket (1 mile west of), Mass.									1		1
Nantucket Bay, Mass. (south of Great Point)									1		1
Nantucket, Sankaty Light (near)									1		1
Nantucket Shoal (south side of)								1	2		3
Napatree Beach, Conn.									1		1
Napatree Point, Conn.							1		1		2
Napeague, Long Island.								1			1
Nappertrice Point, Martha's Vineyard				1							1
Narragansett Pier, R. I.				1	1				1		3
Nashawena Island, Vineyard Sound			2	1				1	1		4
Nash's Island, Me.				1							1
Nassau Inlet, Fla.				1							1
Nausett, Cape Cod.			1	9		1	1	3	3		18
Naushon Island, Vineyard Sound							1		1		2
Navy Cove and Mobile Point (between), Miss.						1					1
Negro Island (northeast side of Saco Bay), Me.						1					1
Negro Point, Hell Gate, N. Y.							2	1		1	4
New Bedford Harbor, Mass.						1		1			3
Newburyport, Mass.					1	1	1		1		4
Newcombs' Hollow, Mass.							2				2
New Canal, Lake Pontchartrain (mouth of), La.									1		1
New Haven, Conn.	1					1	1	1			4
New Inlet, N. C.	1					2		1			4
New Inlet, N. C. (5 miles north of)							1	1			2
New Inlet, N. C. (8 miles south of)								1			1
New Inlet, N. J.						1					1
New Inlet, Long Island, N. Y.							1				1
New London, Conn.				2				2		1	5
New London Light-House, Conn.								1			1
New River (2 miles south of), Fla.									1		1
Newport, R. I.						1		1			2
Newport News, Va.								1			1
Nigger Island, Me.				1							1
Nix Mate, Boston Harbor.							1	1			2
Nommeset Island, Vineyard Sound					1	1					2
Norman's Woe, Cape Ann, Mass.					1			1			2
North Bar, Hereford, N. J.								1	1		2
North Breakers, mouth of Merrimac River, Mass.							1	2	1	1	5
North Breakers, Mosquito Inlet, Fla.						1					1
North Brother, Hell Gate, N. Y.				1							2
North Inlet, S. C.						1					1
North Point, Chesapeake Bay (3 miles southeast of)							1				1
North Point Creek, Chesapeake Bay									2		2
Northport, Me.								1			1
North River Bar, N. C.									1		1
North Truro, Mass.									1		1
North Truro, Mass. ($\frac{1}{2}$ mile N. N. W. L. S. S)									1		1
Norton Cove, Me. (ledge in)									1		1
Norton Island, Seal Harbor, Me.								1			1
Norton's Point, Carver Harbor, Me.									1		1
Norton's Shoals, Mass.					2						2
Norwalk, Conn.									1		1
Norwalk Island, Long Island Sound						1					1
Nove's Point Rocks, R. I.								1			1
Oak's Ledge, Mass.					1						1
Ocean Beach, N. J.									1	1	2
Ocean City, Md.										1	1
Ocean Grove, N. J.					1			1	1		3
Ocean View, Va.								1			2
Ocracoke Beach, N. C.									1		1
Ocracoke Inlet, N. C.				1				3	1		5
Odiorne Point (2 miles south of Portsmouth), N. H.						1		1			2
O'Donnell's Point, Lubec, Me. (near)								1		1	2
Old Cillew Ledge, Me.						1	1				2
Oldfield Point Light, Long Island, N. Y.									1		1
Old Harbor Bar, Chatham, Mass.									1		1
Old Inlet, Long Beach, N. J.							1				1
Old Man Ledge, Me.						1			1	1	3
Old Newton Rock, Mass.	1										1
Old Prince Ledge, Cape Porpoise Harbor, Me.									1		1
Oregon Inlet, N. C.	7	1	7	3		1					19
Orleans, Cape Cod.								2	2		4
Orr's Island, Me.	1										1
Otter Island Ledge, Me.							1		1		2

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Owl's Head, Me					1	1					2
Oyster Beds Beacon, Savannah River							1				1
Oyster Bed Reef, N. Y.						1					1
Oyster Island, N. Y.					1						1
Oyster Rock, Wilmington Harbor, N. C.								1			1
Padre Island, Tex.									2		2
Palacios Point, Tex. (Matagorda Bay)									1		1
Parker's Cove, Islesboro', Me.								1			1
Parker's Island, N. Y.									1		1
Parinet Hollow, Cape Cod									1		1
Pascagoula Bar, Miss.						1					1
Pasque Isle, Vineyard Sound					2	3		1			6
Pass à l'Outre, mouth of Mississippi River					1	1					2
Pass Cavallo, Tex.			1	1							2
Pass Cavallo Bar, Tex. (20 miles southwest of)							1				1
Pass Christian, Miss.					1						1
Patapsco River (mouth of), Md.										3	3
Patience Island, R. I.	1										1
Patuxent River (mouth of)								1		1	2
Pavilion Beach, Mass.	1						2		1		4
Peaked Hill Bar, Cape Cod				1		2	1	1		1	6
Peak's Island, Casco Bay, Me.										1	1
Peck's Beach, N. J.				1						1	2
Pelican Shoals, Fla.			1			1	1				3
Pemaquid Light, Me.					1						1
Pembroke, Me.						1					1
Penfield Reef, Conn.										1	1
Penikese Island, Buzzard's Bay									1		1
Pensacola, Fla.	1			2					2		5
Pensacola Bay (north shore of), Fla.									1		1
Pensacola Bay Bar, Fla.							1		1		2
Pepperell's Cove, off Portsmouth Harbor								1			1
Perdido Bay Bar, Fla.							1				1
Perdido Inlet, Fla.	1										1
Perkins' Ledge (mouth of Kennebec River), Me.						1					1
Perrico Shoal, Tampa Bay, Fla.									1		1
Perry's Creek, Penobscot Bay									2		2
Perry Mill Wharf, Newport, R. I.								1			1
Petit Manan, Me.					1	1		1	1		4
Phippsburg Ledge, Me.							1				1
Piankatank River (mouth of), Va.										2	2
Pickard's Point, Penobscot Bay						1					1
Pickle's Reef, Fla.								1	2	1	4
Pickle's Reef and French Reef (between), Fla.							1				1
Pigeon Point							1				1
Pine Island, off New London, Conn.										1	1
Piscataqua River (near mouth of), N. H.										1	1
Plum Gut, Long Island Sound						1					1
Plum Island, Long Island Sound				1					1		2
Plum Point, Chesapeake Bay										1	1
Plymouth, Mass.				1							1
Point Allerton, Boston Harbor					1	1					2
Point au Fer, Fla.						1					1
Point Gammon, Mass.					1						1
Point Isabel, Tex.						3					3
Point Judith, R. I.			2		1	2	1	1		2	9
Point no Point, Chesapeake Bay									1		1
Point of Rocks, Deer Cove, Lynn, Mass.										1	1
Point Pleasant (3 miles south of Ocean House), N. J.										1	1
Pollock Rip, Mass.						1	1				2
Pond Cove, Cape Elizabeth, Me.								1			1
Pond Cove Island, Englishman's Bay, Me.							1				1
Pond Island, Me.							1	1			2
Port duogue Light, Long Island					1		1				3
Popasquash Point, Narragansett Bay										1	1
Pool's Island, Chesapeake Bay (3 miles southeast of)										1	1
Poplar Point Light, R. I.	1										1
Portland Head, Cape Elizabeth, Me.							1			1	2
Port Jefferson, Long Island								1			1
Port Morris, N. J. (rock near)										1	1
Port Penn, Delaware Bay								1			1
Portsmouth, N. H.									3	1	5
Pot Rock, Hell Gate, N. Y.								1			1
Powder Horn Bayou, Tex.					1		2				3
Prince's Bay, Perth Amboy, N. J.									1		1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Prospect Harbor							5				5
Provincetown, Cape Cod				4			5	2		7	18
Pulaski Shoals, Fla.										1	1
Pulpit Harbor, North Haven							1			1	1
Pumpkin Hill Shoal, Charleston, S. C.							1	1		1	3
Pumpkin Rock							1			1	1
Queenstown Creek, Md.							1		1		1
Quoddy Bay (west side), Me.										1	1
Quoddy Head, Me. (near L. S. S. No. 1)										1	1
Quogue, Long Island, N. Y.			1	1							2
Quonochontang Beach, R. I.							1				1
Race Point, Fisher's Island, Long Island Sound								1			1
Race Point, Mass.		1	1	1	3	2	4				12
Race Point, Mass. (near L. S. S.)										1	1
Race Point (near), Mass.										1	1
Race Point (near Cutler), Me.									1		1
Race Rock, Long Island Sound								1			1
Rackliff Island, Seal Harbor, Me.										1	1
Ragged Island, Penobscot Bay							1				1
Ragged Point, Assateague Island, Va.									1		1
Ragged Point, Va., Chesapeake Bay								1			1
Ram Island, Me.						1				1	2
Ram Island Reef, Long Island Sound								1			1
Ram's Head Ledge, Boston Harbor						1					1
Rand's Point, New Castle, N. H.										1	1
Red Beach, Calais, Me.									2		2
Red Fish Bar (near Light), Tex.										1	1
Red Fish Light, Tex. (2 miles east of)								1			1
Red Fish Light (near), Tex.										1	1
Red Spring Point (near Glen Cove Dock), Long Island							1				1
Reedy Island, Delaware Bay							1			1	2
Revenue Point Shoal, Ala.						1					1
Rich Inlet, N. C.										1	1
Richmond Island, Me.					1		1	1			3
Rip-Raps, mouth of Chesapeake Bay								1			1
Robert's Harbor, Me.							1				1
Robinson's Hole, Vineyard Sound, Mass.									1		1
Rockaway, Long Island	2			1	1			1		1	6
Rockaway Beach (main inlet), Long Island										1	1
Rockaway Shoals, Long Island Sound							1	1			2
Rock Island Beach, Long Island Sound, N. Y.						1					1
Rock Point, Chesapeake Bay							1			1	2
Rockland, Me.									1	1	2
Rockport, Mass.					1						1
Rocky Neck, Gloucester, Mass.										1	1
Rocky Point, Long Island Sound							1		1		2
Rocky Point, Mass.					1						1
Romer Shoals, N. Y.					1	1	3			2	7
Rose Island, R. I.										1	1
Rose Landing, Long Island					1						1
Rudder Rock, Deer Island, Me.							1				1
Rye Beach, N. H.		1								2	3
Rye Ledges, N. H.										2	2
Sabine Pass, La.							1				1
Sachem's Head, Conn.										1	1
Saddle Back Island, Penobscot Bay							1				1
Sail Rock, Lubec, Me.		1									1
Saint Andrew's Bar, Fla.		1									1
Saint Augustine, Fla.									1		1
Saint Augustine Bar, Fla.								1			1
Saint Augustine Light, Fla.			1		1	1					3
Saint Augustine Light (1 mile north of), Fla.										1	1
Saint Catharine's Sound, Ga.				1							1
Saint George's Island, Fla.				1							1
Saint Helena Sound, S. C.							1		1		2
Saint John's Bar, Fla.										2	2
Saint John's Bar (½ mile south of), Fla.					3	1		1	2		9
Saint Lucie (10 miles north of), Fla.										1	1
Saint Mark's, Fla.		1								1	1
Saint Mary's River (mouth of), Ga.										1	1
Saint Simon's Bar, Ga.			2		1						3
Saint Vincent's Island, Fla.									1		1
Salem Creek (mouth of), Mass.										1	1
Salisbury Beach, Mass.								1			1
Salt Island Ledge, Mass.						1					1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Saluria, Tex.							1				1
Saluria Bayou, Tex.							1				1
Sand Beach (5 miles south of Cape Henlopen)								1			1
Sand Shoal Inlet, Va.									1		1
Sandy Hook, N. J.	1	2	1		4		4	1	3	2	18
Sandy Keys, Florida Reef (near).									1		1
Sandy Point, Chesapeake Bay								4			4
Sankaty Head (near light-house), Mass.										1	1
San Luis Pass, Tex.						4			1		5
San Luis Pass, Tex. (2 miles northeast of)									1		1
San Luis Pass, Tex. (4 miles west of)										1	1
San Luis Pass, Tex. (5 miles west of)									1		1
Santa Rosa Island, Fla.								1		2	3
Santa Rosa Island, Tex.				1	1			1			3
Sapelo Shoals, Ga.		1	2	1							4
Satilla River, Ga.				1							1
Saugatuck, Conn.	1										1
Saybrook Bar, Conn.		2	2		1	1	1	2	3		12
Saybrook Point, Conn.										1	1
Schoodic Island, Me.									1		1
School-Ship Rock, Mass.										1	1
Scituate, Mass.	2	1	1	3		3		2	3	1	16
Sculpin Rock, Me.						1					1
Seaconnet Point, R. I.							1			1	2
Seaconnet River (mouth of west side), R. I.							1				1
Sea Grove, Cape May, N. J.								1			1
Seal Cove, Mount Desert, Me.							1				1
Seal Harbor, Muscle Ridge Channel, Me.									2	1	3
Seal Island Ledge, Me.								1			1
Seal Island, Machias, Me.									1		1
Seal Ledge, Me.							1				1
Searsport Harbor, Me.							1				1
Seavey's Island, Portsmouth Harbor, Me.							1				1
Seven Mile Beach, N. J.			1								1
Seyern River (mouth of), Md.									1		1
Sewell's Point, Va.							1				1
Shabbit Island, Me.						1					1
Shallotte Bar, N. C. (west side)								1			1
Shallotte Inlet, Western Breakers, N. C.										1	1
Shark River, N. J.			2	1					1		4
Sheep's-Head Bay Bar, Long Island				1							1
Sheepscot River (mouth of), Me.									1		1
Shinnecock, Long Island							2	1			3
Ship Bottom, N. J. (½ mile above L. S. S. No. 20)										1	1
Ship Shoals, Va.								1			1
Shippen's Reef, Long Island Sound			1		1	1					3
Shiverly Ledge, off Spruce Head, Me.									1		1
Shore Island, R. I. (east of Portsmouth Grove)									1		1
Short Beach, (½ mile south of L. S. S. No. 23)										3	3
Shovelful Light, Nantucket Sound		1									1
Shovelful Shoals, Cape Cod						1	3		1	2	7
Simonton Cove, Cape Elizabeth, Me.							1				1
Sinepuxent, Md.				1	1			1	2	1	6
Skinner's Head, Marblehead Harbor, Mass.								1	1		2
Slocum's River (mouth of), Dartmouth, Mass.									1		1
Sloop Ledge, Sheepscot Bay, Me.											1
Smith's Island, Va.	2			1			3		1	1	8
Smith's Island, Nantucket Shoals						1					1
Smith's Ledge, Conn.	1					1					2
Smith's Point, Chesapeake Bay					1						1
Smith's Point, Long Island (1 mile west of L. S. S. No. 20)										1	1
Smith's Reef, Long Island Sound					1						1
Smith's Rock, Scituate Neck, Mass.								1			1
Smithtown, Long Island									1		1
Smithtown Bay, Long Island Sound								1			1
Smithtown Beach, Long Island Sound								1			1
Smithville, N. C.					1						1
Snow's Flats, Me.					1						1
Somer's Point, N. J.										2	2
Southampton, Long Island			1		1	1					3
South Breaker, off Baker's Island, Mass.									2		2
South Breakers, Ipswich, Mass.							1				

TABLE 65.—List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
South Chatham, Mass									1		1
South Dennis, Mass			3								3
South Gardiner, Me									1		1
South Marshfield, Beattie's Island, Me						1					1
Southern Island, Me. (near Saint George)									1		1
Southport Bar, Conn					1			1			2
Southport, Me					3						3
South Saint George, Me								2			2
Southwest Harbor, Me					1						1
Southwest Reef, Tortugas, Fla										1	1
Southwest Pass, mouth of Mississippi River								1			1
Sow and Pigs, Mass					1						1
Spectacle Island, Cumberland Inlet, Ga								1			1
Spouting Rock, R. I	1										1
Spruce Head, Me		1									1
Spruce Island, off Machias, south side of, Me									1		1
Spruce Point, Booth Bay Harbor, Me					1			1			2
Spruce Point Ledge, Me						1					1
Squan Beach, N. J	5		4	2	1	2	2	2	1		19
Squan Inlet (9 miles below)										1	1
Squan Inlet Shoals, N. J			2								2
Squash Meadow Shoals, Vineyard Sound						2	1				3
Stage Island, Me					1		2				3
Stage Island, Saco Bay, Me									1		1
Stamford, Conn	1					1					2
Stamford, Conn. (Sunken Ledge off)										1	1
Staten Island, N. Y			1			1	1	1			4
Stingray Point, mouth of Rappahannock River							2				2
Stirrup Key, Florida Reefs									1		1
Stone Beacon Ledge, Portsmouth Harbor								1			1
Stone Horse Shoal, Nantucket							1	1			2
Stone Horse Shoal (near Tybee Island), Ga							2				2
Stone Rock, York River, Me								1			1
Stonington Harbor (Academy Grounds), Conn							1				1
Stono Breakers (mouth of Stono River), S. C							1		1		2
Stono Inlet, S. C							1				1
Stony Point, Cape Poge, Mass								1			1
Straitsmouth Island, Mass										1	1
Stratford Shoals, Conn					1			1			2
Straws Point (ledge near), N. H										1	1
Succonesset Light, Mass		1									1
Succonesset Shoal (2 miles east of), Mass									1		1
Sullivan Falls, Me						1					1
Sunken Ledge, Sullivan Falls, Me									1		1
Swampscott, King's Beach, Mass							2				2
Swampscott, Lincoln House Point, Mass							2				2
Sweet's Island, Sheepscott River (mouth of), Me									1		1
Tally's Point Reef, Chesapeake Bay									1		1
Tampa, Fla	3		1	1							5
Tanner's Point, Long Island (1 mile east of L. S. S. No. 15)									1		1
Tarpanin Cove, Vineyard Sound					1	3				1	5
Taunton River (mouth of), Mass									1		1
Taylor's Island, Chesapeake Bay										1	1
Tenant Harbor, Me									1		1
Tenpound Island, Mass					1		2				3
Terry Ledge (off White Head Light), Me							1				1
Thames River, Conn. (near Comstock's Point)						1					1
Thatcher's Island, Mass							2				2
Thatcher's Island (near Londoner), Mass							1	2			3
Thatcher's Island, Me. (off)								1			1
Thimble's Channel (SW. point Long Island Sound)										1	1
Thimble Island, Long Island Sound						2					2
Thomaston, Me					1						1
Three Tree Island, Me						1					1
Throg's Point, Long Island Sound (rock near)										1	1
Thumb Cap Island, Mass						1					1
Tiger Island, Ga										1	1
Tilghman's Island, Chesapeake Bay										1	1
Timbalier Island, La. (west end of)									1		1
Tiverton, R. I									1	1	2
Toddy Rock, off Hull, Mass							1				1
Tom Moore's Rock, off Marblehead, Mass										1	1
Tom Never's Head, Nantucket (4 mile east of)										1	1
Tom's River (1½ miles N. L. S. No. 13), N. J										1	1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Toos Point, Va.....					1	1					2
Tortugas, Fla.....							1	1			2
Tortugas, Fla. (southwest reef).....								1			1
Townsend's Inlet, N. J.....					1	4	2			2	9
Townsend's Inlet, N. J., (3 miles south of).....								1			1
Triangle Ledges, Me.....								1			1
Truro, Mass.....			1		1	1		1	1		4
Tubb Inlet, N. C.....					1						1
Tucker Beach, N. J.....		1		1							2
Tuckernuck Shoals, Nantucket.....		2				2		2	1	2	9
Tupps Inlet, S. C.....				1							1
Turner's Lump, Va.....					1						1
Turner's Shoal, Assateague, Va. (near).....										1	1
Turtle Gut Bar, Cape May.....								1			1
Turtle Inlet Bar, N. J.....				1					1		2
Two Brothers, Wickford, R. I.....						1					1
Two Bush Island, Me.....						1					1
Tybee Island, Ga.....						2			1		3
Vancoek Shoals, Tex.....											1
Vineyard Haven Harbor, Mass.....				2		5	3		4	10	24
Vineyard Sound, shoal in.....										2	2
Ward's Island, N. Y.....				1							1
Warren Harbor, R. I.....				1							1
Warren's Cove, Mass.....										1	1
Warwick Neck, R. I.....	1										1
Watchapreague, Va.....							1				1
Watchapreague Inlet, Va.....				1	2			1			4
Watchapreague Shoal, Va.....						2					2
Watch Hill, R. I.....			1		1						2
Watch Hill, R. I. (5 miles east of).....							1				1
Webber's Ledge, Muscongus Sound, Me.....							1				1
Wellfleet, Cape Cod.....		1		3	1						5
Wells Beach, Me.....			1		1		1				3
West Chop, Vineyard Sound.....					1	2	9			1	13
West Dennis, Cape Cod.....					1						1
West Hampton Bar, L. I. (near L. S. S. No. 15).....									1		1
West Harbor, Me.....					1						1
West Quoddy Bay (near Campobello), Me.....							1				1
West Quoddy Head, Me.....						1			1		2
West River, mouth of (Three Sisters), Chesapeake Bay.....							3				3
Western Dry Rocks, Fla.....								1			1
Westport Point (near), Mass.....									1		1
Whale Back Rock, Narragansett Bay.....							1				1
Whale Back Shoal, Cape Cod.....										1	1
Whale Rock, R. I.....			1							1	2
Whale Rock Light, Me.....						1					1
Wheeler Bay, Me. (Red Ledge in).....							1				1
White Head, Me.....					1	2					3
White Head, Me. (1 mile south of light).....										1	1
Wicomico River, Md. (mouth of).....								1			1
Wicopasset Reef, Conn.....										1	1
Wilkes' Ledge, Buzzard's Bay.....						1					1
Williams' Shoal, Cobb's Island, Va.....										1	1
Willoughby Shoal, Chesapeake Bay.....					1						1
Willoughby Spit, Chesapeake Bay.....										1	1
Wilmington Bar, N. C.....					1						1
Windmill Point, Stonington, Conn.....							1				1
Winter Harbor, Me.....								1			1
Winter Quarter Shoals, Md.....		1			2	1	1				5
Winthrop Beach, Mass.....					1	1					2
Winthrop Head, Boston Bay.....										1	1
Winyah Bay, S. C.....				1					1		2
Wire's Point, Onancock, Va.....							1				1
Wiscasset Ledge, Me.....				1							1
Wolftrap Shoal, Mob Jack Bay, Va.....							1		1		2
Wood End, Cape Cod.....						5	1	1	1	4	12
Wood's Hole, Mass.....							1			1	2
Wood Island, Me.....	1			1							2
Wood Island (near Biddeford Pool), Me.....									1		1
Wood Island Ledges, Kennebec River, Me.....										1	1
Yarmouth Flats, Mass.....										1	1
Yarmouth Port, Mass.....										1	1
York Beach, Me.....					1		1			1	3
York Ledge, Me.....						1		1			2

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
York Narrows, Me					1						1
York Point, Me					1					1	1
Young's Point (entrance to Fox Islands Thoroughfare), Me.							1				1

LAKE COASTS.

[NOTE.—This list includes also places on the Canadian shore where American vessels have stranded.]

Ahnapee Harbor, Lake Michigan			1			1					2
Ahnapee, Lake Michigan (2½ miles south of)										1	1
Alabaster Reef, Lake Huron			1	1			1				3
Alcona, Lake Huron					1				2		3
Alpena, Lake Huron					2						2
Amherstburg, Lake Erie					2				1		3
Amherst Island, Lake Ontario										1	1
Amsterdam, Lake Michigan		1									1
Apostle Island, Lake Superior						1					1
Ashtabula, Lake Erie		1		1		1	2	2			7
Ashtabula River (mouth of), Lake Erie									1	1	1
Au Sable River (mouth of), Lake Huron									1		1
Avon Point, Lake Erie						1					1
Bailey's Harbor, Lake Michigan	3	1					2				6
Barcelona Harbor, Lake Erie, N. Y.								1			1
Bark River (mouth of), Green Bay, Mich.								1	1		2
Bark Shanty, Lake Huron			1								1
Bar Point, Lake Erie	1	1	3	4	4	1	1		1		16
Bay Quinte, Lake Ontario		2					1				3
Bear Harbor, Lake Michigan								1			1
Beaver Harbor, Lake Michigan								1			1
Beaver Island, Lake Michigan			3		2		1				6
Belle Island, Detroit River	1				4		1				6
Biddle's Point (¼ mile west of), Lake Michigan										1	1
Big and Little Sturgeon Point, Green Bay						1					1
Big Point au Sable, Lake Michigan		1									1
Big Sodus, Lake Ontario			1						2		3
Black Creek, Lake Michigan			1								1
Black River, Lake Erie		2	1		1						4
Black River, Lake Huron						2					2
Bois Blanc Island, Lake Erie							1			1	2
Bois Blanc Island, Lake Huron				2	2	1	2				7
Bois Blanc Island (10 miles east of), Lake Huron									1		1
Braddock's Point, Lake Ontario								1			1
Brockville, Saint Lawrence River			1								1
Buffalo Harbor, Lake Erie		1	3	1	1	2	1	1	2		12
Burlington Beach, Lake Ontario			1								1
Burnt Cabin Point Reef, Lake Huron									1		1
Buckhorn Dock, Lake Erie								1			1
Calumet (3 miles south of), Lake Michigan									1		1
Calumet Reef, Lake Michigan						1					1
Canna Island, Lake Michigan						1					1
Cape Hurd, Lake Huron			1								1
Carlson Pier and Ellison's Bay (between), Wis						1					1
Carlton Island, Saint Lawrence River				1							1
Carleton, Lake Michigan					1					1	2
Carp River, Lake Michigan	1										1
Cassidy's Reef, Lake Erie						1					1
Cataract Rock, Lake Ontario						1					1
Cathead Point, Lake Michigan						1					1
Cedar Point, Sandusky Bay, Lake Erie			1		2	1	1				5
Cedar Rapids, Saint Lawrence River			1								1
Cedar River, Lake Michigan		1					1				2
Chambers' Island, Lake Michigan			1		1						2
Charity Island, Lake Huron			1								1
Charlevoix, Lake Michigan								1			1
Charlotte (4 miles west of), Lake Ontario									1		1
Charlotte Harbor, Lake Ontario						1	1				2
Charlotte Pier, Lake Ontario (¾ mile west of)										1	1
Cheboygan, Straits of Mackinac					1		4		1		6
Cheboygan (¾ mile west of), Straits of Mackinac										1	1
Chester's Reef, Lake Erie						1					1
Chicago (5 miles south of)									1		1

TABLE 65.—List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.

LAKE COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Chicago Harbor, Lake Michigan	2		3	1	1	1	6		2		16
Chicanore Reef, Lake Erie					1						1
Chocolay River (1 mile east of), Lake Superior								1			1
Chuckaluna Reef, Lake Erie	1	1		1							3
Clay Banks, Lake Erie			2	1	1						4
Clay Banks, Lake Michigan						1	1				2
Cleveland Harbor, Lake Erie	2	5	1		3	1	2		1		15
Coburg, Lake Ontario	2	1									3
Cockburn Island, Lake Huron			1							2	3
Colburn Rock ($\frac{1}{2}$ mile from), Welland Canal										1	1
Colchester Reef, Lake Erie	2	1	1	1		1				1	7
Collingwood, Lake Huron	1									1	2
Conneaut, Lake Erie			2								2
Conneaut, Lake Erie (4 miles east of)										1	1
Cove Island, Lake Huron		3			1						4
Crib Reef, Lake Erie								1			1
Crow Island, Saginaw River				1							1
Death's Door, Lake Michigan		1			1	1	1	1			5
Detour, Lake Huron (18 miles from)									1		1
Detour, Lake Huron (Saint Mary's River)			3			1			1		5
Detour, Lake Huron (4 miles east of)									1		1
Detroit, Detroit River						1					1
Detroit Island, Lake Michigan	1										1
Detroit River	1			2		2			2		7
Devil's Nose, Lake Ontario		1									1
Devil's River, Lake Huron	1										1
Dorney's Reef Point, Lake Michigan						1					1
Dover Bay, Lake Erie			1								1
Drummond Island, Lake Huron	1										1
Duck Island, Lake Ontario				1							1
Duluth, Lake Superior				1							1
Dunkirk Harbor, Lake Erie		3	1			2	1				7
Dykesville, Lake Michigan			1								1
Eagle Harbor, Green Bay, Lake Michigan										1	1
Eagle Harbor, Lake Superior				1	1						2
East Hamburg (8 miles west of Buffalo), Lake Erie								1			1
East Sister Island, Lake Erie		1	1	1							3
East Sister Reef, Lake Erie									1		1
Eleven Foot Shoals, Green Bay			1			1					2
Elk Island, Saint Clair River	2										2
Ellison's Bay, Wis.								1			1
Ellsworth River, Lake Michigan				1							1
Elm Reef, Lake Michigan		1									1
Erie Harbor, Lake Erie	2	3	3	2		2	1		1		14
Escanaba, Lake Michigan			1				1				2
Euclid, Lake Erie											1
Evanston, Lake Michigan				2	2						4
Fairport Harbor, Lake Erie		1	1		1	2	1		1		7
False Ducks, Lake Ontario				1							1
False Presque Isle, Lake Huron		1					2		2		5
Featherbed Shoals, Lake Ontario						1					1
Ferrer's Point, Lake Ontario	1										1
Fighting Island, Detroit River						1					2
Fish Point, near Point au Pelee, Lake Erie									1		1
Fisherman's Shoals, Lake Michigan							1				1
Fitzgerald Island, Lake Huron			1								1
Ford Shoals (4 miles west of Oswego), Lake Ontario										1	1
Forest Bay, Lake Huron						1					1
Forrester, Lake Huron			1								1
Fort Niagara, Lake Ontario			1								1
Fort Shoals, Lake Ontario					1						1
Forty-Mile Point, Lake Huron			1			1		1	1		4
Forty-Mile Point (8 miles southeast by east from), Lake Huron									1		1
Four-Mile Point, Lake Ontario									1		1
Fox Point (9 miles north of), Lake Michigan										1	1
Frankfort, Lake Michigan				2	1	1	2			1	7
Frankfort, Lake Ontario					2						2
Gallop Island, Lake Ontario									1		1
Gallop Rapids, Saint Lawrence River			1	1							2
Garden Island, Lake Ontario				1							1
Genesee River, Lake Ontario			1								1
Genesee, Lake Huron			1								1
Geneva (off), Lake Erie						1					1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

LAKE COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Good Harbor Bay, Lake Michigan							2				2
Goodrich, Lake Huron		1	1	1							3
Grabble's Point, Lake Erie						1					1
Graham's Shoals, Lake Michigan		1	1	1	1	1					5
Graham's Shoals, near Straits of Mackinac									2		2
Grand Haven, Lake Michigan		2	1		6	1	6	1	1	6	24
Grand Haven (beach north of North Pier), Lake Michigan										3	3
Grand Island, Lake Superior	3	2		1	1	1	1	1			10
Grand Marais, Lake Superior							1	1			1
Grand Marais, Lake Superior (7 miles east of)									1		1
Grand River Harbor, Lake Michigan (4 miles north of)									1		1
Grand River, Lake Erie				1	1						2
Grand River, Lake Erie (beach east mouth of)									1		1
Grand River, Lake Michigan						2		1	1		4
Gray's Reef, Lake Michigan									1	1	1
Green Island (7 miles west of), Lake Erie									1		1
Green's Reef, Lake Erie			1								1
Griffith's Island, Lake Huron				1							1
Grindstone City, Lake Michigan							1	1			2
Grosse Island, Detroit River	1				1		1	1			4
Grosse Point, Lake Michigan		1	1								2
Gull Island, Lake Michigan										1	1
Gull Island, Lake Ontario						1					1
Gull Island Rock (8 miles from Michipicoton), Lake Superior										1	1
Gull Island Shoal, Lake Michigan									1		1
Gull Point, Lake Ontario			2								2
Hammond's Bay, Lake Huron	3		1	1	1						6
Harbor of Refuge, Lake Michigan									1		1
Harrisville, Lake Huron	1								1		2
Hat Island, Lake Michigan		1									1
Hat Island Reef, Green Bay						1					1
Herson's Island, Saint Clair River		1				1			1		3
Highland Reef, Lake Michigan	1										1
Hog Island, Lake Saint Clair						1					1
Hog Island Reef, Lake Michigan	1	1	1								3
Holland, Detroit River						1					1
Holland, Lake Michigan	1			1			1	1	1		5
Horn's Pier (locality unknown)				1							1
Horseshoe Harbor (reef near), Lake Erie										1	1
Horseshoe Island, Lake Superior (supposed)						1					1
Horseshoe Reef, Green Bay, Lake Michigan										1	1
How Island, Lake Ontario			2								2
Huron City, Lake Huron		1									1
Huron Island, Lake Superior							1				1
Hyde Park (off), Lake Michigan									1		1
Indian Town Reef, Green Bay, Lake Michigan										1	1
Inverhuron Harbor, Lake Huron						2					2
Isle Royale, Lake Superior				1				1			2
Jacksonport, Lake Michigan (40 rods north of)									1		1
Johnson's Island, Saint Lawrence River						1					1
Kalamazoo River, South Bar (mouth of), Lake Michigan										1	1
Kelley's Island, Lake Erie	1			1	2	1	1				6
Kenosha, Lake Michigan			2		1	1		1			6
Kettle Point, Lake Huron		1	1								2
Kewaunee, Lake Michigan	1		1		2		1				5
Keweenaw Bay, Lake Superior								1			1
Kincardine, Lake Huron	1		4								5
Lake George Flats, Saint River						1					1
Langley's Pier, Lake Michigan					1						1
Latman Point, Lake Ontario		1									1
Laughing Whitefish Reef, Lake Superior			2								2
Leamington, Lake Ontario							1				1
Leland, Lake Michigan			3	1					1		5
Lexington, Lake Huron							1		1		2
Lime Kiln Reef, Detroit River					2	4	3	2	1	2	14
Limestone Island, Georgian Bay									1		1
Little Bay de Noquet, Lake Michigan	1										1
Little Graham Shoals, Straits of Mackinac					1						1
Little Manitou Island, Lake Michigan						1					1
Little Point au Sauble Light (3 miles north of), Lake Michigan										1	1
Little Sister Reef, Lake Michigan					1						1
Little Sturgeon Bay, Lake Michigan							1				1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

LAKE COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Lone Rock, Lake Michigan.....						1					1
Long Island, Lake Ontario.....					1						1
Long Point, Lake Erie.....	3	7	6	2		5	2		3		28
Long Point, Lake Erie (12 miles west of).....									1		1
Long Tail Point, Green Bay, Lake Michigan.....										2	2
Ludington, Lake Michigan.....		2		2		1					5
Mackinac, Straits of.....	3	4			1						8
Mackinac City, Lake Michigan.....							1		1		2
Madison, Lake Erie.....			1								1
Malden, Detroit River.....					1	1					2
Malden, Detroit River (2 miles south of).....									1		1
Mammy Judy Light, Detroit River.....		1									1
Manistee Harbor, Lake Michigan.....	2	2		1	2	1	2	1			11
Manitou, Lake Michigan.....		2		1							3
Manitowoc, Lake Michigan.....						1	3				4
Marblehead, Lake Erie.....				1					1		2
Marblehead and Catawba Island (between), Lake Erie.....								1			1
Marquette, Lake Superior.....	1			2	2						5
Maumee Bay, Lake Erie.....				1							1
Michigan City, Lake Michigan.....				2	1	2	1		2		8
Michigan City (6 miles east of), Lake Michigan.....									1		1
Michipicoton, Lake Superior.....				1							1
Middle Bass Island, Lake Erie.....						1					1
Middle Island, Lake Huron.....	1			1	1						3
Middle Sister Island, Lake Erie.....	1			2							3
Middle Village, Lake Michigan.....									1		1
Milwaukee, Lake Michigan.....	4	2		1	2	1	2		1		13
Mission Point, Lake Michigan.....							1				1
Mission Reef, Lake Michigan.....		1									1
Morgan's Point, Lake Erie.....			1	1		1		1			4
Morrisburg, Lake Ontario.....		1				1					2
Muskegon, Lake Michigan.....	1	1		2	3	1	1	1	1		11
Napanee, Lake Ontario.....		2									2
Nebish Rapids, Saint Mary's River.....	1		1	1	4	4	1				12
New Buffalo, Lake Michigan.....	1	1					1				3
New Cut (5 miles below), Long Point, Lake Erie.....									1		1
Niagara Reef, West Sister Island, Lake Erie.....								1			1
Niagara River, Lake Erie.....			1		1					1	3
Nicholson Island, Lake Ontario.....			1								1
Nine-Mile Creek, Lake Ontario.....			2								2
Noon Point, Lake Huron.....	1										1
North Bass Island, Lake Erie.....	1										1
North Bay, Lake Michigan.....	1		1			1	1				4
North Harbor Reef, Lake Erie.....	1		2			2					5
North Manitou, Lake Michigan.....	3	1	1		4	1	2	2			14
North Point, Lake Huron.....									3		3
North Point, Lake Michigan.....	1			2	1						4
North Point Reef, Lake Huron.....									1		1
Northport, Lake Michigan.....	3		1								4
Oak Point, Lake Ontario.....					1						1
O'Connell's Pier, Lake Michigan.....								1			1
Oconto Reef, Lake Michigan.....							1				1
Old Mackinac Point, Lake Huron.....							3	1			4
Ole Antrim, Lake Michigan.....						1	1				2
Oscoda, Lake Huron.....										1	1
Oswego, Lake Ontario.....	1	5	2	3	1		1	2		2	17
Owen Sound, Georgian Bay, Lake Huron.....			1								1
Pancake Shoal, Lake Michigan.....			1								1
Papoose Island, Lake Huron.....				1							1
Paul Pier, 8 miles south of South Haven, Lake Michigan.....										1	1
Peach Orchard Reef, Lake Erie.....								1			1
Pêche Island, Lake Saint Clair.....						1					1
Peninsula Point, Lake Erie.....							1				1
Peninsula Point, Lake Michigan.....							1				1
Peninsula Reef, Lake Michigan.....	1										1
Pentwater, Lake Michigan.....			2		2					1	5
Perry's Pier, Lake Michigan.....						2					2
Peshigo Reef, Lake Michigan.....				1	1	1					3
Pictou, Lake Ontario.....			1								1
Pigeon Bay, Lake Erie.....					2				1		3
Pigeon Bay, Lake Huron.....			1								1
Pigeon Island, Lake Ontario.....		1	1			1					3
Pigeon Point, Lake Erie.....									1		1
Pillar Point, Lake Ontario.....			1								1
Pilot and Detroit Isle, Lake Michigan.....				1							1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

LAKE COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Pilot Island, Lake Michigan			1	1	1		1		2		6
Pine River, Lake Michigan					1				1		2
Pinnepo, Lake Huron	2										2
Pike Island, Lake Michigan				1							1
Pike's Pier Bar (9 miles north of Saint Joseph), Lake Michigan										1	1
Plum Island, Lake Michigan						1	1		1		3
Point Abino, Lake Erie	2		2							1	8
Point au Pelée, Lake Erie	2	3	11	5	4	3	3		2	1	34
Point au Pelée Island, Lake Erie									2		2
Point au Sauble, Lake Huron				3							3
Point au Sauble, Lake Michigan			1				1				2
Point aux Barques, Lake Huron		1	2		1	1	1		1		7
Point aux Barques (4½ miles above), Lake Huron										1	1
Point aux Pins, Lake Erie				1							1
Point Betsey, Lake Michigan		2		1							3
Point Clark, Lake Huron, Canada							1				1
Point Dalhousie, Lake Ontario							1				1
Point Edwards, Lake Huron		1	2			1				1	5
Point Elgin, Lake Huron		2									2
Point Frederick, Lake Ontario		2									2
Point La Barbe, Straits of Mackinac							1				1
Point Moullier, Lake Erie						1					1
Point Peninsula, Lake Michigan		1									1
Point Peninsula, Lake Ontario								1			1
Point Permit, Lake Erie					1						1
Point Peter, Lake Ontario	1										1
Point Sanilac, Lake Huron					1						1
Portage Canal, Lake Michigan		1									1
Portage Canal, Lake Superior		1									1
Portage, Michigan								1			1
Portage Island Reef, Green Bay, Lake Michigan										1	1
Portage River, Lake Superior	1					1					2
Port Austin, Lake Huron	1		1		1	1	1				5
Port Austin, Lake Huron (1 mile west of)									1		1
Port Austin Reef, Lake Huron						1	1				2
Port Austin Reef, Lake Michigan			2						1		3
Port Bruce, Lake Huron				2							2
Port Burwell, Lake Erie		2	1	2	1		1				7
Port Colborne, Lake Erie	3	3	2	1		1			1		11
Port Crescent, Lake Erie				1							1
Port Glasgow (off), Lake Ontario									1		1
Port Hope, Lake Huron			1								1
Port Hope, Lake Huron (¾ mile from)										1	1
Port Huron, Saint Clair River	1										1
Port Maitland, Lake Erie	1			2		4					7
Port Ryers, Lake Erie									1		1
Port Sanilac Bar, Lake Huron									1		1
Port Stanley, Lake Erie			1	1							2
Port Washington, Lake Michigan	1	1				1					3
Poverty Island, Lake Michigan				1					1		2
Presque Isle Bay, Lake Huron	2	1	3								6
Presque Isle, Lake Erie				2					1		3
Presque Isle, Lake Huron					1	1			2		4
Put-in-Bay, Lake Erie			1			1					2
Pultneyville, Lake Ontario (2 miles east of)										1	1
Racine, Wisconsin								3			3
Racine Reef, Lake Michigan	2	3	3	2	2	2	1		1		16
Rock Falls, Lake Huron						2					2
Rock Island, Lake Michigan					1						1
Rondeau, Lake Erie	2			6							8
Ronk's Pier, Lake Michigan					1						1
Round Island, Lake Michigan		1	1								2
Saginaw River, Saginaw Bay, Lake Huron										1	1
Saint Clair Flats, Lake Saint Clair		1				2			1		4
Saint Clair River		1			1						2
Saint Helena, Straits of Mackinac		2		2			1		1		6
Saint Joseph, Lake Michigan	1		3	2	1		3	2	2	1	15
Saint Lawrence River			1	1	1						3
Saint Martin's Island, Lake Michigan		1			1					1	3
Saint Mary's River		1	2	1	2						6
Salmon's Point, Lake Ontario		1									1
Sand Bay, Beaver Island, Lake Michigan									1		1
Sand Bay, Lake Ontario							1				1
Sand Beach, Lake Huron						1			2	1	4

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

LAKE COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Sand Beach, Lake Huron (5 miles above)										1	1
Sandy Creek, Lake Michigan			1								1
Saugatuck, Lake Michigan				1							1
Sault Sainte Marie (1 mile above)									2		2
Sault Sainte Marie Canal		2									2
Scholie's Point, Lake Erie						1					1
Sheboygan, Lake Michigan			3	2	1	2	1				9
Sheboygan, Lake Michigan (10 miles south of)										1	1
Silon Creek, Lake Erie		1									1
Sister Bay, Wisconsin								1			1
Sister Island, Lake Michigan							1				1
Skullagalee, Lake Michigan								1			1
Sleeping Bear Point, Lake Michigan		1				1	1				3
Snake Island, Lake Ontario			2								2
South Bass Island, Lake Erie										1	1
South Bay, Lake Ontario		1	1								2
South Fox Island, Lake Michigan					1						1
South Haven, Lake Michigan	1	1		1		1	4				8
South Haven, Lake Michigan (3 miles south of)										1	1
South Manitou, Lake Michigan			1	1		1	5	2			10
South Point Island, Lake Michigan				1							1
South River, Lake Huron	1										1
Spider Island, Lake Michigan				2					1		3
Starve Island, Lake Huron				1							1
Starve Island Reef, Lake Erie						2	1		1	1	5
Steam Mill Point, Lake Champlain							1				1
Stony Creek, Lake Michigan	2		1								3
Stony Island, Detroit River	1			1		1				1	4
Stony Point, Lake Ontario								2			2
Strawberry Island, Green Bay			2								2
Sturgeon Bay Canal, Lake Michigan									1		1
Sturgeon Point, Lake Erie			1	1							2
Sturgeon Point, Lake Erie (4 miles south of)										1	1
Sturgeon Point, Lake Huron			1			1					2
Sturgeon Point Reef, Lake Erie						1					1
Sugar Island, Lake Huron			2						1		3
Sumner and Squaw Island (between) Lake Michigan					1						1
Taintor Island, Lake Ontario					1						1
Tawas Bay, Lake Huron			1	2	1						4
Tawas Point, Lake Huron						1					1
Thames River				1							1
Thunder Bay, Lake Huron	1	1		1							3
Thunder Bay Island, Lake Huron								2	2	1	5
Tibbit's Point (entrance to Kingston), Lake Ontario									1		1
Timber Island, Lake Huron				1							1
Topsail Island Reef, Saint Mary's River									1		1
Toronto Piers, Lake Ontario (west of)								1			1
Toronto Point, Lake Ontario		1					1				2
Turtle Island, Lake Erie			1								1
Twin River Point, Lake Michigan							1				1
Two Creeks, Lake Michigan							1				1
Two Rivers, Lake Michigan	1	1	2								4
Vail's Reef, Lake Huron	1										1
Vermillion Point, Lake Superior	1		1								2
Walker's Point, Manitoula, Lake Huron										1	1
Washington Harbor, Wis., Lake Michigan										1	1
Washington Island, Lake Michigan		1	1		1						3
Washington Island, Lake Michigan (West Harbor)										1	1
Waukegan, Lake Michigan		1					3				4
Waukegan (6 miles north of), Lake Michigan										1	1
Waukegan Pier, Lake Michigan				1		1	2				4
Welland Canal			1					1			2
West Vermillion, Lake Erie (½ miles west of)									1		1
Whale's Back Shoal, Lake Michigan				1							1
White Fish Point, Lake Superior (9 miles above)								1			1
White Hall, Lake Michigan		1		1			1		1		4
White Lake Harbor (1 mile north of), Lake Michigan										1	1
White Lake Pier, Lake Michigan					3	1			1		5
White River (bar mouth of), Lake Michigan										1	1
White Rock, Saginaw Bay						1					1
White Shoals, Straits of Mackinac		1	2								3
Willard's Bay, Lake Ontario						1					1
Wilson Harbor, Lake Ontario		1				1					2
Wind Point, Lake Michigan							1	1			2
Windmill Point, Lake Erie		3									3

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

LAKE COASTS.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Wolf Island, Lake Ontario.....		1									1
Wood Island, Lake Michigan.....							1				1
Woodward's Bay, Lake Michigan.....				1							1
Yates' Pier, Lake Ontario.....					1						1

PACIFIC COAST.

Admiralty Inlet, Puget Sound.....						1					1
Albion River, Cal.....									1		1
Alcatraz Island, San Francisco Bay.....									1		1
Aquina Bar, Oreg.....							1				1
Arch Rock ($\frac{3}{4}$ mile east-northeast from Alcatraz Island).....									1		1
Arestable Island, Alaska.....				1							1
Astoria, Oreg.....						1					1
Baker's Bay, Columbia River.....		1									1
Baker's Island, San Francisco Bay.....		1									1
Belkopsky, one of the Ounga Islands, Alaska.....									1		1
Bolinas (beach near), Cal.....		1							1		1
Bowen's Landing, Cal.....								2	1	1	5
Cape Blanco, Oreg.....	1										1
Cape Flattery, Wash. Ter.....			1	1			1	1			4
Cape Foulweather (10 miles north of), Wash. Ter.....							2				2
Cape Pinos, Cal.....	1										1
Caprian Islands, Alaska.....							1				1
Carquinez Strait, Cal.....								1			1
Casper Creek, Cal.....		3									3
Casper River (mouth of), Cal.....							1				1
Clarence Straits, Alaska.....		1									1
Clark's Island Reef, Washington Sound.....						1					1
Clatsop's Spit, Columbia River.....						1	1				2
Columbia River.....			1			2		1	1		5
Columbia River (mouth of), $\frac{1}{4}$ mile northeast of Point Adams Light.....										1	1
Columbia River Bar.....									3	1	4
Cook's Inlet, Alaska.....		1	2								3
Coos Bay, Oreg.....	2				2						4
Coos Bay Bar, Oreg.....								1	1		2
Coos Bay Bar (9 miles north of), Oreg.....					1	1					2
Coquilla, Cape Arago, Oreg.....			1								1
Coquilla River (5 miles south of), Oreg.....								1			1
Cottoneva, Cal.....								1			1
Crescent Bay, Juan de Fuca Straits.....									1		1
Crescent City, Cal.....								1	1		2
Crescent City Bay, Cal.....										1	1
Cuffey's Cove, Cal.....			1	1				1			3
Davenport's Landing, Cal.....		1									1
Destruction Island, Wash. Ter.....							1				1
Discovery Island, Straits of Juan de Fuca.....	1					1					2
Drake's Bay, Cal.....									2		2
Duncan's Landing, Cal.....						1					1
Dungeness Spit, Wash. Ter.....					1					1	2
Duxbury Reef, Cal.....					1	1			1	1	4
Eagle Harbor, North Point Shoal.....								1			1
Eel River, Cal., (mouth of).....		1							1		1
Eel River Bar, Cal.....									1		1
Farallones, Cal.....			1			1					2
Fish Rock, Cal.....										1	1
Fish Rock (near bluff), Cal.....						1			1		2
Fisk's Mill, Sonoma County, Cal.....							1				1
Fort Point, San Francisco Bay.....			1			1		1			3
Fort Ross, Cal.....						1					1
Fort Stephens, Oreg.....						1					1
Four Fathom Bank, Cal.....				1							1
Gerstler's Cove, Cal.....									1		1
Goleta, Cal.....									1		1
Humboldt Bar, Cal.....		1							2		3
Hunter's Point, San Francisco Bay.....									1		1
Kake Island (north side of), Alaska.....					1	1					2
Kalwack, Alaska.....			1								1
Kodiak Harbor (21 miles southeast of), Alaska.....						1					1
Lime Point, San Francisco Bay.....									1		1
Little Alcatraz Rock, San Francisco Bay.....							1				1

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

PACIFIC COAST—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Little River, Cal.									1	1	2
Little River Head, Cal.											1
Marrow Stone Point (northwest side of)							1				1
Mendocino, Cal.			2				1		1		3
Mill Rock, entrance to San Francisco Bay	1							1	2		4
Mission Rock, San Francisco Bay										1	1
Monterey, Cal. (2½ miles northeast of)										1	1
Mora Bay, Cal.								2			2
Navarro River (northwest reef), Cal.										1	1
New Dungeness, Straits of Juan de Fuca										1	1
Newport, Cal.					1						1
North Farallon Island, Cal.						1					1
North Head, San Francisco Bay						1					1
Novara River, Cal.			1								1
Noyo River (mouth of), Cal.									1		1
Ocean Side House, Cal.				1							1
Ounga Choumagia Islands, Alaska.								1			1
Parsons Beach, Santa Cruz, Cal.										1	1
Pajaro, Cal.		1									1
Piedras Blancas, Cal.	2										2
Pillar Point, Cal.								1			1
Point Arena, Cal.			1		1	1				1	4
Point Arena, Cal. (15 miles from)								1			1
Point Arena Harbor, Cal.						1					1
Point Arena Light-House (near), Cal.							1				1
Point Bonita, Cal.			1								1
Point Bonita (5½ miles northwest of), Cal.										1	1
Point Bonita Light (2 miles north of), Cal.									1		1
Point Diablo, Cal.			1								1
Point Fermin, Cal.			1								1
Point Gorda, Cal.					1						1
Point Grenville, Wash. Ter.					1						1
Point Hueneme, Cal.		1									1
Point of Rocks, Mission Bay, Cal.									1		1
Point of Rocks, Wrangel, Alaska.							1				1
Point Pedro, Cal.			1								1
Point Reyes, Cal.		2				1		1	1	1	6
Point Sal, Cal.							1				1
Point Sur, Cal.						1					1
Point Wilson, Wash. Ter.							1				1
Port Orford, Oreg.							1				1
Port Orford, Oreg. (15 miles south of)									1		1
Rincon Rock, San Francisco Bay			1								1
Rocky Point, Cal.								1			1
Rogue River, Oreg.						1					1
Rogue River (mouth of), Oreg.							1				1
Rough and Ready (5 miles south of Point Arena), Cal.									1		1
Salmon Creek, Cal.									1		1
Salt Point, Cal.				1					1		2
San Buenaventura, Cal.									1		1
San Diego Bay, Cal.							3	1			4
San Francisco Bay			3		1				1		5
San Juan Harbor, Straits of Fuca					1						1
San Juan Passage, Wash. Ter.								1			1
San Pablo Bay, Cal.									1		1
San Pedro, Cal.									1		1
Sand Island, Oreg.				1							1
Sand Spit, Oreg.	1				1		1			1	3
Santa Cruz, Light-House Point, Cal.								1			1
Shoalwater Bay, Wash. Ter.							1				1
Smith's Point (below Astoria), Oreg.							1				1
Smith's River (mouth of), Cal.									1	1	2
Soquel, Cal.	1										1
South Beach, San Francisco Bay						1	1				2
South Beach, Yaquina Bay, Oreg.							1				1
Stewart's Point, Cal.		6					1				7
Stillwater Cove, Cal.		1									1
Straits of Fuca	1					1					2
Timber Cove, Cal.			1								1
Tomales Bar, Cal.					1						1
Tomlinson's Reef, Wilmington Bay, Cal.							1				1
Trinidad Harbor, Cal.									1		1
Umpqua Bar, Oreg.				2						1	3

TABLE 65.—*List of Places on the Coasts of the United States where Vessels have Stranded, &c.—Continued.*

PACIFIC COAST—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	
Umpqua River (mouth of), Oreg.....					1		1				2
Water Bay Bar, Wash. Ter.....						1					1
Westport, Cal.....										1	1
Yaquina Bay, Oreg.....					1			1	1		3

TABLE 66.—*List of Places where American Vessels have Stranded in FOREIGN WATERS during the last five years.*

Name of place.	Fiscal year ending June 30—					Total.
	1875.	1876.	1877.	1878.	1879.	
Abaco Island, Bahamas.....					1	1
Abaco (Grand Cay Reef), Bahamas.....				1		1
Abaco Island (Bone Fish Bay), Bahamas.....		1				1
Abaco Island (Green Turtle Key), Bahamas.....		1				1
Abaco Island (Powell's Key), Bahamas.....		1				1
Abaco Island (Wood Key), Bahamas.....		1				1
Abaco Light (15 miles north of), Bahamas.....				1		1
Abraham's Bay, Monguana Island.....		1				1
Adacora, Venezuela.....				1		1
Adjuah, west coast of Africa.....					1	1
Altalta (on sand beach, 20 miles north), Mexico.....	1					1
Altalta (off), Mexico.....				1		1
Altalta Harbor, Mexico.....				1		1
Alvarado (25 miles east of), Mexico.....		1				1
Amherst Island, Gulf of Saint Lawrence.....	1	2				3
Anegada Island, British West Indies.....					1	1
Anegada Reef, British West Indies.....				1		1
Anquilla Island, Salt Key Bank, Straits of Florida.....	1					1
Argyle (Old Man), Nova Scotia.....		1				1
Arica, Peru.....					1	1
Arecibo, Porto Rico.....					1	1
Arogant Shoal, latitude 5° 17' south, longitude 113° 29' east.....		1				1
Aspinwall, Central America.....					1	1
Bahamas.....			2			2
Bahamas (Grand Turk and Salt Cay, reef between).....					1	1
Bahamas (Harbor Island).....					1	1
Bahamas (Miradpurvos Island).....					1	1
Bahamas (Whale Key).....					1	1
Bahama Bank.....			1			1
Balahare Island (one of the Hebrides).....				1		1
Baracoa Harbor, Cuba.....			2			2
Barbadoes, latitude 58° 40' west.....		1				1
Barbaretta Island, Honduras.....			1			1
Barbuda Island, West Indies.....		1				1
Barclay Sound (southwest end of Tyaartoos Island), British Columbia.....		1				1
Bay of Fundy.....				1		1
Bay of Fundy (Saint Mary's Ledges, entrance to).....					1	1
Bay of Saint George, Newfoundland.....		1				1
Bay of Saint Lawrence.....			1			1
Belfast, Carrickfergus Bank, Ireland.....		1				1
Belize (main reef), 30 miles off.....		1				1
Benoit's Cove, Newfoundland.....				1		1
Bermuda.....		2	2			4
Bermuda (Adventure Reef).....					1	1
Bermuda Reef (15 miles from).....					1	1
Bermuda (St. George Island).....					1	1
Black Point and Seven Hills, Honduras, Central America.....	1					1
Bog Shippegan Gully, New Brunswick.....					1	1
Boiling Reef, Gulf of Georgia.....	1					1
Bolton Island, Molucca Group, East Indies.....	1					1
Bonacca Harbor, Honduras, Central America.....	1					1
Brara Island, Cape de Verde Island.....		1				1

TABLE 66.—*List of Places where American Vessels have Stranded in FOREIGN WATERS, &c.—Continued.*

Name of place.	Fiscal year ending June 30—					Total.
	1875.	1876.	1877.	1878.	1879.	
Brazil, latitude 5° 2' south, longitude 25° 22' west.....				1		1
Brier Island, Northwest Ledge, Canada		1				1
Brier Island, Pond Cove, Nova Scotia		1				1
Buckos Reef, Tobago, British West Indies	1					1
Byron, one of the Magdalen Islands, Gulf of Saint Lawrence					1	1
Caicos Island, West Indies		1		1		2
Caicos Reef (north of), Bahamas		1	1			2
Cape Agulhas (15 miles north of), Africa			1			1
Cape Bollard, Newfoundland			1			1
Cape Breton Island		2		1		3
Cape Frio (60 miles from Rio), Brazil				1		1
Cape Henry, Anticosti Island Gulf of Saint Lawrence					1	1
Cape Hogan, Arichat Island, Nova Scotia		1				1
Cape Horn				1		1
Cape Isabella, San Domingo			1			1
Cape Negro (25 miles east of Rio Janeiro)		1				1
Cape Negro Harbor, Nova Scotia					1	1
Cape Negro Island, Nova Scotia	1		1			2
Cape Sable, Nova Scotia	1					1
Cape Saint Mary, Newfoundland			1			1
Cape Saint Mary, Newfoundland (5 miles south of)				1		1
Cape Town, Africa					1	1
Cape Verde Island		2				2
Cardenas, Cuba			3			3
Cariaco, Gulf of Venezuela			1			1
Caribbean (near reef), Cuba		1				1
Carinata Straits, East Indies	1					1
Carlisle Bay, Barbadoes		1				1
Carnarvon Bar, North Wales, near Llanenddwyn Point				1		1
Casumpeque, Prince Edward Island					1	1
Cay Bars, Little Bahamas			1			1
Cay Largo, West Indies			1			1
Cette (near), France				1		1
Charlottetown Harbor, Prince Edward Island				1		1
Cheticamp, Cape Breton			1			1
Chickotan Island, Kurile Islands, Asia			1			1
China Sea			2	1		3
Chincorro Reef (90 miles north of Belize)		1				1
Cienfuegos Harbor (west head of), Cuba		1	1			2
Coachman's Reef, Nova Scotia					1	1
Coatzacoalcas River (on sand bar), Mexico		1				1
Cockburn Harbor Shoal, E. C		1				1
Colon, Central America					1	1
Colonia Harbor Rock, South America	1					1
Colorado Reef, Cuba	1		2			3
Colorado Reef, Lord Howe's Island, Australia			1			1
Comacho Bay, Peru			1			1
Constantinople (near), Turkey		1				1
Coral Island, Japan Bay				1		1
Corn Island, Central America	1				1	2
Coxyde, Belgium				1		1
Crooked Island, Bahamas	1				1	2
Crooked Island and Passage, near Castle Island, West Indies		1				1
Dartmouth, England			1			1
Demas Key (Salt Key Banks), West Indies		1				1
Dona Maria Inlet, Cuba	1					1
Dugeon Shoal, Yorkshire, England		1				1
Dunkirk Roads (entrance to), France					1	1
Dungeness, Kent County, England					1	1
East London, Africa			1			1
Emulons Ledges, Nova Scotia				1		1
English Bank (probably), Bristol Channel	1					1
Ensenada, mouth of Bristol Channel, Argentine Republic			1			1
Falmouth Harbor Reef, Jamaica					1	1
Fiji Islands, northeast group			1			1
Flores Islands		1				1
Flushing, mouth of West Scheldt, Holland				1		1
Flushing Roads, near Antwerp, Belgium					1	1
Formentera, Balearic Islands	1					1
Frenchman's Harbor, south side Isle of Ruatan		1				1
Galway (near), coast of Ireland					1	1
Garrucha Roadstead, Spain				1		1
Gibraltar	1					1
Giegler Light, near	1					1
Gonaives Island, West Indies		1	1			2
Goodwin Sands, England			1			1
Gough's Island, South Pacific Ocean					1	1

TABLE 66.—*List of Places where American Vessels have Stranded in FOREIGN WATERS, &c.*—Continued.

Name of place.	Fiscal year ending June 30—					Total.
	1875.	1876.	1877.	1878.	1879.	
Grand Bahamas	1					1
Grand Bahamas (near Sandy Cay)					1	1
Grand Cayman, West Indies				1		1
Grand Manan Island (entrance to Bay of Fundy)					1	1
Grand Manan (Duck Island, near)					1	1
Grand Manan, small island east of, near coast of Maine		1				1
Grand Sands, near Trieste			1			1
Grand Turk, northeast of reef		1				1
Greytown, Nicaragua				1		1
Grindstone Island, New Brunswick	1					1
Guanabana (10 miles north of Matanzas), Cuba				1		1
Gull Island, Long Harbor, Newfoundland			1			1
Gull Island, Nova Scotia	1					1
Gun Fleet Sound, Essex, England					1	1
Hake, South Banks, Nieuwe Diep				1		1
Halifax, Nova Scotia			1			1
Hammond's Knoll (off Yarmouth Head)		1				1
Harbor Island, Bay of Islands, Newfoundland			1			1
Havana (reef south side of), Cuba					1	1
Havana and Matanzas (between), Cuba		1				1
Hayo Main Rock, Bay of Yeddo, Japan		1				1
Hesquot Sound, Vancouver's Island	1					1
Hogsty's Reef, Bahamas			1			1
Honduras (Cocorocame reef), Central America					1	1
Honduras (near Truxillo), Central America				1		1
Hong Kong, China	2					2
Hoogly River, Diamond Harbor, British India	1					1
Hook Point, Wexford, Ireland					1	1
Hudson Bay			1			1
Idsumosaki Island, Japan					1	1
Imbetiba, Brazil					1	1
Indian Island, Labrador		1				1
Ile Bois, Straits of Belle Isle					1	1
Jacquemel Bay, Hayti		1			1	2
Jardinillos Reef, West Indies		1	1			2
Jarvis Island, South Pacific				1		1
Jeremie Harbor, West Indies			1		2	3
Jig Rock, near Shelburne, Nova Scotia			1			1
Kaloot Bank, Holland		1				1
Kamschatka, Sea of Okhotsk			1			1
Kutsimo Island, off the coast of Japan					1	1
Lachine Canal, near Montreal, Canada					1	1
Lavendera Shoal, Matanzas Harbor		1				1
Lamoig, Jutland			1			1
Leones Islands, Montego Gulf, Jamaica	1					1
Le Preau, New Brunswick					1	1
Liberty Point, Campobelle Island, New Brunswick	1					1
Liscomb Harbor, Nova Scotia				1		1
Little Bahama Banks					1	1
Little Curaçoa, Caribbean Sea				1		1
Liverpool, England			1			1
Lockport Harbor, Nova Scotia (ledge off)				1		1
Lockville, Geography Bay, West Australia	1					1
Los Palmos, Canary Islands			1			1
Lucea (reef at), Jamaica					1	1
Macassar Straits, East Indies	1					1
MacNutt's Island, Nova Scotia		1				1
Madison Island		1				1
Madeira Island		1				1
Magdalen Island, Gulf of St. Lawrence		1				1
Malpec Bar, Gulf of St. Lawrence	1					1
Mainadieu Reef, Cape Breton			1			1
Maquabo, Porto Rico			1			1
Marfa Drychon Beach, Cardigan Bay, Wales	1					1
Mariguana Island, West Indies		1				1
Mariguana Reef, Bahamas	1					1
Matane (2 miles west of), St. Lawrence River				1		1
Matanilla Reef, Bahama Banks			1			1
Matanzas Harbor, Cuba		1			1	2
Mayo Island, Cape Verde Group	1					1
Mazatlan, Mexico			1	1		2
Mexico, coast of					1	1
Middle Wolf, New Brunswick (southern point of)			1			1
Milford Haven, South Wales					1	1
Miragoane, Hayti			1			1
Mistaken Point, Newfoundland			1			1
Monte Rugginore (east of), Sardinia		1				1

TABLE 66.—*List of Places where American Vessels have Stranded in FOREIGN WATERS, &c.*—Continued.

Name of place.	Fiscal year ending June 30—					Total.
	1875.	1876.	1877.	1878.	1879.	
Morant Cays, West Indies.....				1		1
Moselle Shoals, Bahamas.....	1					1
Moule, Guadeloupe, West Indies.....					1	1
Murder Island Ledge (near Yarmouth), Nova Scotia.....			1			1
Musquash, Bay of Fundy, New Brunswick.....			1			1
Nag's Head, Louisiana, Cape Breton.....		1	1			2
Nassau, New Providence.....					1	1
Neiva, St. Domingo and Navassa (between).....			1	1		2
Neptune Shoal, Batavia Harbor.....			1			1
Nevis, Windward Islands.....				1		1
New Guinea (coral reef off southwest coast of).....					1	1
New Harbor Point, Nova Scotia.....				1		1
Newport Roads, Wales.....		1				1
Nicaragua (coast of).....					1	1
Noel's Point Reef (entrance St. George's Harbor).....		1				1
No Name Cay (near Abaco), West Indies.....				1		1
North Bimini, Bahamas.....			1			1
Nuevas Harbor, Cuba.....		1		1		2
Pabillon de Pica, South America.....			1			1
Palance Shoals (near Manila).....		1				1
Para River (mouth of), South America.....	1					1
Pictou, Nova Scotia.....					1	1
Piraguara Bay (42 miles north of Ceara), Brazil.....					1	1
Point Castilla, Honduras, Central America.....				1		1
Point Della Madonna, South America.....					1	1
Point Negro and Point Race (between), South America.....			1			1
Ponce, Porto Rico and St. Thomas (between).....				1		1
Popa Island, Pacific Ocean, Malay Archipelago.....			1			1
Porter's Passage (east side of), Halifax, Nova Scotia.....			1			1
Port Elizabeth, South Africa.....					1	1
Port Maria, Jamaica.....	1					1
Port Natal, South Africa.....					2	2
Porto Rico, West Indies.....			1			1
Progreso, Mexico.....		1				1
Prospect, Nova Scotia.....		1				1
Puntas Arenas (18 miles south of), Central America.....					1	1
Quoin Point, Cape Good Hope, Africa.....		1				1
Quionata, coast of Spanish Honduras.....				1		1
Rio de Contas (mouth of), Brazil.....					1	1
Rocas Reef (125 miles northwest of Cape St. Roque), Brazil.....	1					1
Rocky Reef, Point Carlisle Bay, Jamaica.....				1		1
Rum Cay, Bahamas.....		2				2
Sable Island, Nova Scotia.....		2				2
Saint Christopher (Sandy Point), West Indies.....					1	1
Saint George, New Brunswick.....	1					1
Saint John's, Porto Rico.....			1			1
Saint Lawrence Bay.....				1		1
Saint Mary's Bay, Nova Scotia.....	1					1
Saint Pierre, Newfoundland.....			1			1
Saint Thomas Harbor, West Indies.....			3			3
Sand Island (island near), Straits of Formosa.....					1	1
San Antonio Light (15 miles east of), Cuba.....				2		2
San Felipe Keys (one of), Cuba.....				1		1
San Geronimo Island, Lower California.....				1		1
San Jose de Guatemala.....		1				1
San Quentin Harbor, Lower California.....				1		1
San Salvador, West Indies.....				1		1
Sanger Island, Hoogly River, British India.....			1			1
Santa Anna, Mexico.....					1	1
Santa Anna (near), Mexico.....					1	1
Santa Anna (1 mile east of), Mexico.....					1	1
Santa Catalina Island, Pacific Ocean.....					1	1
Santiago de Cuba (near).....					1	1
Saona Island Reef, off Hayti.....					1	1
Saona Island, West Indies (north side of).....			1			1
Scarborough Shoals, China Sea.....	1					1
Scilly Island, South Pacific.....					1	1
Seal Shoal, Newfoundland.....			1			1
Serranilla Bank, Caribbean Sea.....			1			1
Seven Stones, off Land's End, England.....				1		1
Shag Harbor, Nova Scotia.....					1	1
Shark's Point, mouth of Congo River.....			1			1
Sheep Keys Shoals, Bahamas.....			1			1
Shoal Bay (7 miles south of Petty Harbor), Newfoundland.....				1		1
Sicily Island, near Avola.....	1					1
Smith's Island, Port Hood Harbor, Cape Breton.....				2		2
Soldier's Ledge, Tusket Island, Nova Scotia.....	1					1

TABLE 66.—*List of Places where American Vessels have Stranded in FOREIGN WATERS, &c.*—Continued.

Name of place.	Fiscal year ending June 30—					Total.
	1875.	1876.	1877.	1878.	1879.	
Soledad Lagoon, Lower California				1		1
South Bimini Shoals, Bahamas	1	1				2
Stackpole, England	1	1				2
Straits of Georgia, British North America					2	2
Straits of Magellan, South America		1				1
Sumatra, Gasper Straits			1			1
Suwarrow Reef, South Pacific			1			1
Swallow Reef, China Sea				1		1
Talbot's Passage, Cape Horn		1				1
Taylor's Bank, River Mersey, England		1				1
Tecumshin, Wexford, Ireland					1	1
Terschelling Light, Netherlands			1			1
Tonala Bar, Mexico	1	1		1		3
Tongue Island, English Channel		1				1
Torkeo (near), Sweden			1			1
Trackio, Nova Scotia					1	1
Trial Island, British Columbia		1				1
Trinidad, West Indies				1		1
Turk's Island, Great Sand Cay		1				1
Turk's Island, Middle Reef, Bahamas	1					1
Turk's Island, Northwest Reef, Bahamas	1					1
Tusket Island, Nova Scotia					1	1
Tuspan River (mouth of), Mexico	1					1
Tuspan Bar, Mexico		1		1		2
Two Rivers, Nova Scotia					1	1
Valdes Peninsula, Patagonia	1					1
Verdon Roads (near Bordeaux), France		1				1
Victoria Harbor, British Columbia			1			1
Walney Island, England				1		1
Watling Isle (130 miles north of), Bahamas				1		1
White Head, Nova Scotia					1	1
Wicklow Bay, Ireland			1			1
Wood's Island, Bay of Islands, British America	1					1
Woody Island, Cape Breton, British America	1					1
Woodward's Cove, Grand Manan, New Brunswick			1			1
Yabucoa, Porto Rico			1			1
Yarmouth, Nova Scotia		1	1			2
Zanzibar, Africa			1			1

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