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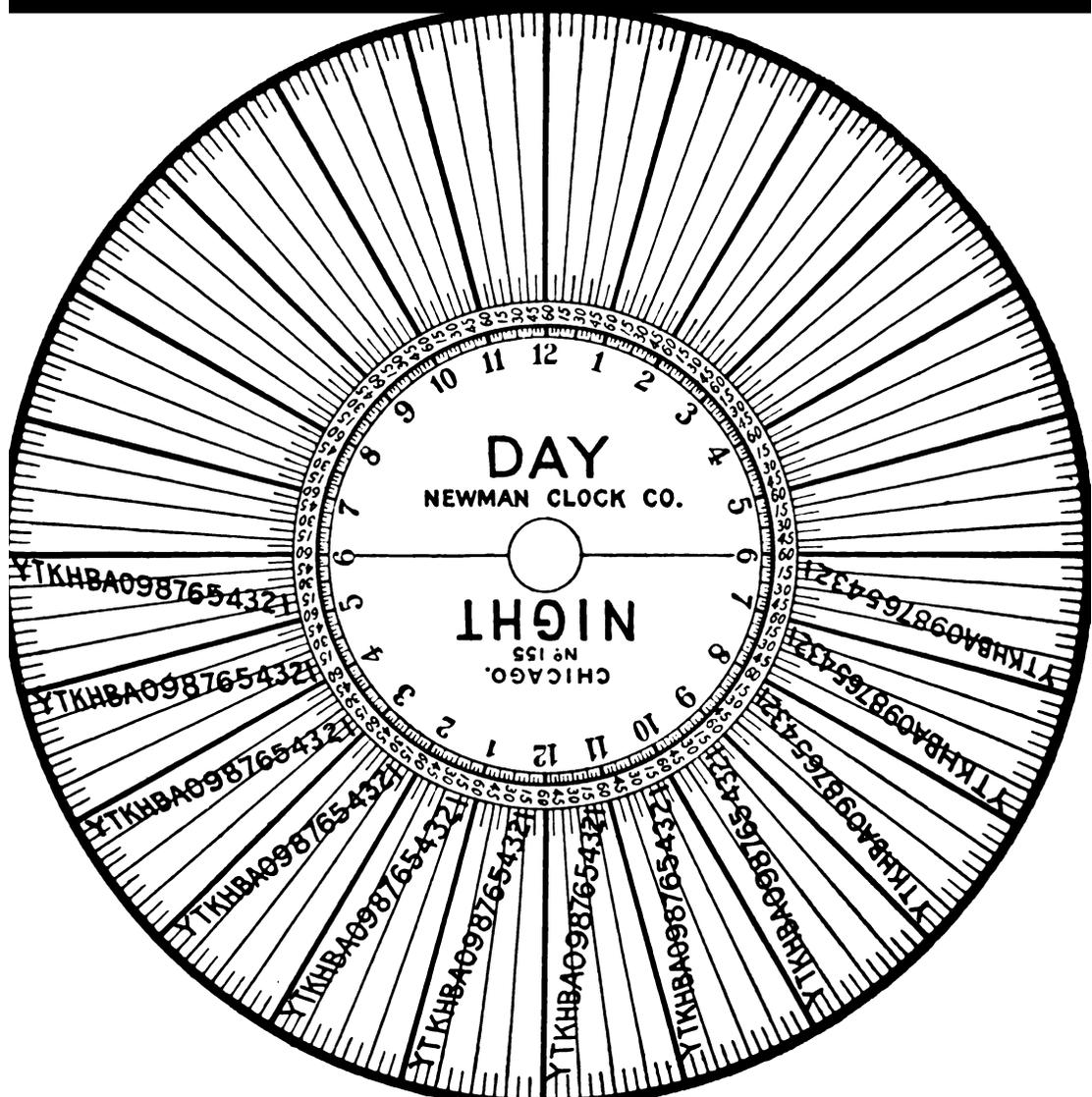
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Annual report of the United States Life-Saving Service

United States. Life-Saving Service

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11 April, 1902.

Nov. 1892
(C. 27)

ANNUAL REPORT

OF THE

UNITED STATES LIFE-SAVING SERVICE

FOR THE

FISCAL YEAR ENDING JUNE 30, 1901.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.

1902.

APR 11 1912

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Office of Life-Saving Service.

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ORGANIZATION OF THE UNITED STATES LIFE-SAVING SERVICE.

(In conformity with Act of Congress approved June 18, 1878.)

- SUMNER I. KIMBALL, General Superintendent, Washington, D. C.
 HORACE L. PIPER, Assistant General Superintendent, Washington, D. C.
 Captain CHARLES A. ABBEY, United States Revenue-Cutter Service, Inspector of Life-Saving Stations, No. 17 State street, New York City.
- | | | |
|---|---|---|
| Captain CHARLES A. ABBEY, United States Revenue-Cutter Service, No. 17 State street, New York City.
Captain SAMUEL E. MAGUIRE, United States Revenue-Cutter Service, No. 17 State street, New York City. | } | Superintendents of Construction Life-Saving Stations, Atlantic and Lake Coasts. |
| Captain CHARLES A. ABBEY, United States Revenue-Cutter Service, No. 17 State street, New York City.
Captain FRED. M. MUNGER, United States Revenue-Cutter Service, Room 35, New Appraisers' Stores, San Francisco, California. | } | Superintendents of Construction Life-Saving Stations, Pacific Coast. |

ASSISTANT INSPECTORS:

- | | | |
|-------------------------------|---|---|
| <i>First District</i> | { | Lieutenant WORTH G. ROSS, United States Revenue-Cutter Service, Post-Office Building, Room 148, or P. O. Box 1908, Boston, Massachusetts. |
| <i>Second District</i> | | Lieutenant FRANK H. NEWCOMB, United States Revenue-Cutter Service, Patchogue, New York. |
| <i>Third District</i> | } | Lieutenant CHARLES H. McLELLAN, United States Revenue-Cutter Service, Toms River, New Jersey. |
| <i>Fourth District</i> | | Captain HORATIO D. SMITH, United States Revenue-Cutter Service, Onancock, Virginia. |
| <i>Fifth District</i> | | Lieutenant RICHARD O. CRISP, United States Revenue-Cutter Service, Elizabeth City, North Carolina. |
| <i>Sixth District</i> | | Captain ———, United States Revenue-Cutter Service, Custom-House, Charleston, South Carolina. |
| <i>Seventh District</i> | | Captain ———, United States Revenue-Cutter Service, Custom-House, Galveston, Texas. |
| <i>Eighth District</i> | } | Captain JAMES H. ROGERS, United States Revenue-Cutter Service, Room 204, P. O. Building, Detroit, Michigan. |
| <i>Ninth District</i> | | Lieutenant WILLIAM E. REYNOLDS, United States Revenue-Cutter Service, Room 543, Rand-McNally Building, Chicago, Illinois. |
| <i>Tenth District</i> | } | Coast of California, Captain FRED. M. MUNGER, United States Revenue Cutter-Service, Room 35, New Appraisers' Stores, San Francisco, California. |
| <i>Eleventh District</i> .. | | Coast of Washington and Oregon, Captain WM. H. ROBERTS, United States Revenue-Cutter Service, Tacoma, Washington. |
| <i>Twelfth District</i> | | Lieutenant FRANCIS A. LEVIS, United States Revenue-Cutter Service, on special duty, Washington, D. C. |
| <i>Thirteenth District</i> .. | | Lieutenant ———, United States Revenue-Cutter Service, on special duty, Washington, D. C. |

DISTRICT SUPERINTENDENTS.

- First District*.....SILAS H. HARDING, Portsmouth, New Hampshire.
Second District.....BENJAMIN C. SPARROW, East Orleans, Massachusetts.
Third District.....HERBERT M. KNOWLES, Wakefield, Rhode Island.
Fourth District.....ARTHUR DOMINY, Bayshore, New York.
Fifth District.....JOHN G. W. HAVENS, Point Pleasant, New Jersey.
Sixth District.....Lieutenant R. O. CRISP, Revenue-Cutter Service, Acting Superintendent.
Seventh District.....PATRICK H. MORGAN, Shawboro, North Carolina.
Eighth District.....HIRAM B. SHAW, Ormond, Florida.
Ninth District.....WILLIAM A. HUTCHINGS, Galveston, Texas.
Tenth District.....EDWIN E. CHAPMAN, Buffalo, New York.
Eleventh District.....JEROME G. KIAH, Harbor Beach, Michigan.
Twelfth District.....CHARLES MORTON, Grand Haven, Michigan.
Thirteenth District...THOMAS J. BLAKENEY, Room 35, New Appraisers' Stores, San Francisco, California.

BOARD ON LIFE-SAVING APPLIANCES.

- Professor CECIL H. PEABODY, Massachusetts Institute of Technology, Boston, Massachusetts, *President*.
 Major DAVID A. LYLE, Ordnance Department, United States Army, P. O. Box 1606, Philadelphia, Pennsylvania.
 Captain CHARLES A. ABBEY, United States Revenue-Cutter Service, Inspector of Life-Saving Stations, No. 17 State street, New York City.
 Lieutenant FRANCIS A. LEVIS, United States Revenue-Cutter Service, Washington, D. C., *Recorder*.
 BENJAMIN C. SPARROW, Superintendent Second Life-Saving District, East Orleans, Massachusetts.
 JEROME G. KIAH, Superintendent Tenth Life-Saving District, Harbor Beach, Michigan.
 HERBERT M. KNOWLES, Superintendent Third Life-Saving District, Wakefield, Rhode Island.

LETTER OF TRANSMITTAL.

TREASURY DEPARTMENT,
UNITED STATES LIFE-SAVING SERVICE,
Washington, D. C., November 14, 1901.

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, 1901, 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.

Respectfully,

SUMNER I. KIMBALL,
General Superintendent.

Hon. LYMAN J. GAGE,
Secretary of the Treasury.

OPERATIONS
OF THE
UNITED STATES LIFE-SAVING SERVICE.

—
1901

REPORT OF THE UNITED STATES LIFE-SAVING SERVICE, 1901.

OPERATIONS.

There were 270 stations embraced in the Life-Saving Establishment at the close of the fiscal year. Of this number, 195 were situated on the Atlantic and Gulf coasts, 58 on the coasts of the Great Lakes, 16 on the Pacific coast, and 1 at the Falls of the Ohio, Louisville, Kentucky.

The number located in each of the several districts was as follows:

First District (coasts of Maine and New Hampshire).....	14
Second District (coast of Massachusetts)	31
Third District (coasts of Rhode Island and Fishers Island).....	8
Fourth District (coast of Long Island)	33
Fifth District (coast of New Jersey)	42
Sixth District (coast from Cape Henlopen to Cape Charles)	18
Seventh District (coast from Cape Henry to Cape Fear River).....	31
Eighth District (coasts of South Carolina, Georgia, and eastern Florida).....	10
Ninth District (Gulf coast).....	8
Tenth District (Lakes Erie and Ontario, including Louisville Station).....	12
Eleventh District (Lakes Huron and Superior).....	18
Twelfth District (Lake Michigan).....	29
Thirteenth District (Pacific coast).....	16
Total	270

The following statement shows the periods during which the stations were manned (termed the active season) and the number of surfmen employed at each station:

Employment of surfmen, season of 1900-1901.

District.	Stations.	Periods of employment (all dates inclusive).
1	Quoddy Head, Cross Island, Crumple Island, Cranberry Isles, White Head, Burnt Island, Damariscove Island, Hunniwells Beach, Cape Elizabeth, Fletchers Neck, Jerrys Point, Wallis Sands, Rye Beach, and Great Boars Head.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
2	Salisbury Beach, Plum Island, Knobbs Beach, Gap Cove, Point Allerton, North Scituate, Fourth Cliff, Brant Rock, Gurnet, Wood End, Race Point, Peaked Hill Bars, High Head, Highland, Pamet River, Cahoons Hollow, Nauset, Orleans, Old Harbor, Chatham, Coskata, Surfside, Great Neck, Muskeget, Gay Head, and Cuttyhunk.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
	Monomoy	7 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
	City Point	9 surfmen from July 1 to Nov. 15, 1900, and from May 1 to June 30, 1901.

Employment of surfmen, season of 1900-1901—Continued.

District.	Stations.	Period of employment (all dates inclusive).
2	Nahant.....	6 surfmen from Sept. 18, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
	Manomet Point.....	6 surfmen from Mar. 1 to May 31, 1901; and 1 additional surfman from Mar. 1 to Apr. 30, 1901.
3	Brenton Point, Narragansett Pier, Point Judith, Quonochontaug, Watch Hill, Sandy Point, New Shoreham, and Block Island.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
4	Ditch Plain, Hither Plain, Napeague, Amagansett, Georgica, Mecox, Southampton, Shinnecock, Tiana, Quogue, Potunk, Moriches, Forge River, Smiths Point, Bellport, Blue Point, Lone Hill, Point of Woods, Fire Island, Oak Island, Gilgo, Jones Beach, Zachs Inlet, Short Beach, Point Lookout, Long Beach, Rockaway, Rockaway Point, Eatons Neck, and Rocky Point.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
5	Spermaceti Cove, Seabright, Monmouth Beach, Long Branch, Deal, Shark River, Spring Lake, Squan Beach, Bayhead, Mantoloking, Chadwick, Toms River, Island Beach, Cedar Creek, Forked River, Barnegat, Loveladies Island, Harvey Cedars, Ship Bottom, Long Beach, Bonds, Little Egg, Little Beach, Brigantine, South Brigantine, Atlantic City, Absecon, Great Egg, Ocean City, Pecks Beach, Corson Inlet, Sea Isle City, Townsend Inlet, Avalon, Tahams, Hereford Inlet, Holly Beach, Turtle Gut, Cold Spring, and Cape May.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
6	Sandy Hook.....	8 surfmen from Aug. 1, 1900, to May 31, 1901.
	Cape Henlopen, Rehoboth Beach, Indian River Inlet, Fenwick Island, Isle of Wight, Ocean City, North Beach, Green Run Inlet, Popes Island, Assateague Beach, Wallops Beach, Metomkin Inlet, Wachapreague, and Parramore Beach.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
	Lewes, Hog Island, Cobb Island, and Smith Island.	7 surfmen from Aug. 1, 1900, to May 31, 1901.
7	Seatack, Dam Neck Mills, Little Island, False Cape, Wash Woods, Currituck Inlet, Whales Head, Poyners Hill, Caffey's Inlet, Paul Gamliels Hill, Kitty Hawk, Kill Devil Hills, Nags Head, Bodie Island, Oregon Inlet, Pea Island, Chicamacomico, Gull Shoal, Little Kinnakeet, Big Kinnakeet, Durants, Portsmouth, and Core Bank.	6 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
	New Inlet and Ocracoke.....	7 surfmen from Aug. 1, 1900, to May 31, 1901.
	Cape Lookout and Oak Island.....	7 surfmen from Aug. 1, 1900, to May 31, 1901; and 1 additional surfman from Dec. 1, 1900, to Apr. 30, 1901.
	Cape Henry, Cape Hatteras, Creeds Hill, and Cape Fear.	8 surfmen from Aug. 1, 1900, to May 31, 1901.
8	Sullivan's Island.....	6 surfmen from Aug. 1, 1900, to May 31, 1901.
9	Santa Rosa, Sabine Pass, Galveston, Velasco, Saluria, Aransas, and Brazos.	6 surfmen from Aug. 1, 1900, to May 31, 1901.
	San Luis.....	7 surfmen from Aug. 1, 1900, to May 31, 1901.
10	Big Sandy and Fort Niagara.....	7 surfmen from July 1 to Dec. 10, 1900, and from Apr. 15 to June 30, 1901.
	Oswego and Charlotte.....	8 surfmen from July 1 to Dec. 10, 1900, and from Apr. 15 to June 30, 1901.
	Buffalo, Erie, Fairport, and Cleveland.....	8 surfmen from July 1 to Dec. 15, 1900, and from Apr. 15 to June 30, 1901.
	Ashtabula and Point Marblehead.....	7 surfmen from July 1 to Dec. 15, 1900, and from Apr. 15 to June 30, 1901.
	Louisville.....	6 surfmen from July 1, 1900, to June 30, 1901.
11	Lake View Beach.....	7 surfmen from July 1 to Dec. 10, 1900, and from Apr. 16 to June 30, 1901.
	Sand Beach, Pointe aux Barques, Grindstone City, Ottawa Point, Sturgeon Point, Thunder Bay Island, and Middle Island.	8 surfmen from July 1 to Dec. 10, 1900, and from Apr. 16 to June 30, 1901.
	Hammonds Bay and Bois Blanc.....	8 surfmen from July 1 to Dec. 10, 1900, and from Apr. 17 to June 30, 1901.
	Vermilion Point, Crisps, Two Heart River, and Muskallonge Lake.	7 surfmen from July 1 to Dec. 12, 1900, and from May 1 to June 30, 1901.
	Marquette.....	8 surfmen from July 1 to Dec. 5, 1900, and from Apr. 29 to June 30, 1901.
	Ship Canal.....	8 surfmen from July 1 to Dec. 9, 1900, and from Apr. 27 to June 30, 1901.

Employment of surfmen, season of 1900-1901—Continued.

District.	Stations.	Periods of employment (all dates inclusive).
11	Duluth	8 surfmen from July 1 to Dec. 13, 1900, and from Apr. 18 to June 30, 1901.
	Grand Marais.....	6 surfmen from Sept. 16 to Dec. 6, 1900, and from May 1 to June 30, 1901.
12	North Manitou Island and Plum Island.....	7 surfmen from July 1 to Nov. 30, 1900, and from Apr. 5 to June 30, 1901.
	Point Betsie, Frankfort, Manistee, Grande Pointe au Sable, Pentwater, White River, Holland, South Haven, Evanston, Kenosha, Racine, Two Rivers, Kewaunee, Sturgeon Bay Canal, and Baileys Harbor.	7 surfmen from July 1 to Nov. 30, 1900, and from Apr. 1 to June 30, 1901.
	Ludington, Muskegon, and Saint Joseph	7 surfmen from July 1 to Dec. 5, 1900, and from Apr. 1 to June 30, 1901.
	Chicago and Sheboygan.....	8 surfmen from July 1 to Nov. 30, 1900, and from Apr. 1 to June 30, 1901.
	Grand Haven, South Chicago, Old Chicago, and Milwaukee.	8 surfmen from July 1 to Dec. 5, 1900, and from Apr. 1 to June 30, 1901.
	Michigan City.....	8 surfmen from July 1 to Nov. 30, 1900, and 7 surfmen from Apr. 1 to June 30, 1901.
	Charlevoix	2 surfmen from Oct. 1, 1 surfman from Oct. 3, and 3 surfmen from Oct. 10 to Nov. 30, 1900, and 7 surfmen from Apr. 5 to June 30, 1901.
	Petersons Point, Ilwaco Beach, Yaquina Bay, Coquille River, and Point Reyes.	7 surfmen from July 1, 1900, to June 30, 1901.
	Shoalwater Bay, Umpqua River, Cape Arago, Humboldt Bay, Fort Point, Golden Gate Park, and Southside.	8 surfmen from July 1, 1900, to June 30, 1901.
	Cape Disappointment	8 surfmen from July 1, 1900, to June 30, 1901, and 1 additional surfman from Apr. 11 to June 30, 1901.
Point Adams	8 surfmen from July 1, 1900, to June 30, 1901, and 1 additional surfman from May 1 to June 30, 1901.	

The foregoing tabular statement includes but one of the ten stations in the Eighth District, the others being maintained only as houses of refuge for the succor of the shipwrecked, no crews being employed. Keepers are on duty at all stations throughout the year.

STATISTICS.

The statistics of the year present the most satisfactory results accomplished since the general extension of the Service to the sea and lake coasts in 1876. They show the smallest loss of life from documented vessels suffering disaster within the scope of the Service that has occurred during these years, and also with respect to vessels of all classes, including the undocumented, with the exception of the years 1880, 1882, 1885, and 1888. Even compared with these, it is the smallest in proportion to the number of casualties, the loss having been only 1 in every 45 casualties, as against 1 in every 41 casualties in 1880, 1 in every 29 in 1882, 1 in every 34 in 1885, and 1 in every 32 in 1888. The average number of lives lost annually during the entire period of twenty-five years was 37, one life having been lost in every 13 casualties, while the number lost during the past year was but 17, or, as above stated, 1 in every 45 casualties. From documented vessels alone the number lost was only 7—1 to every 54 casualties.

The number of disasters to documented vessels within the field of station operations during the year was 377. There were on board these vessels 2,848 persons, of whom 7 were lost. The estimated value of the vessels was \$5,263,420 and that of their cargoes \$2,090,580, making the total value of property imperiled \$7,354,000. Of this

amount \$6,405,035 was saved and \$948,965 lost. The number of vessels totally lost was 43.

In addition to the foregoing, there were also 393 casualties to undocumented craft—sailboats, rowboats, etc.—carrying 927 persons, 10 of whom perished. The value of property involved in these instances is estimated at \$213,540, of which \$160,240 was saved and \$53,300 lost.

Six hundred and forty-seven persons received succor at the stations, the number of days' relief furnished aggregating 1,214.

The results of disasters to vessels of all descriptions within the scope of the Service aggregate, therefore, as follows:

Total number of disasters	770
Total value of property involved	\$7,567,540
Total value of property saved	\$6,565,275
Total value of property lost	\$1,002,265
Total number of persons involved	3,775
Total number of persons lost	17
Total number of shipwrecked persons succored at stations	^b 647
Total number of days' succor afforded	^b 1,214
Number of vessels totally lost	43

The apportionment of the foregoing statistics to the Atlantic, Lake, and Pacific coasts, respectively, is shown in the following table:

	Atlantic and Gulf coasts.	Lake coasts.*	Pacific coast.	Total.
Total number of disasters	458	285	27	770
Total value of vessels	3,010,390	1,904,265	555,440	5,470,095
Total value of cargoes	1,191,265	604,455	301,725	2,097,445
Total amount of property involved	4,201,655	2,508,720	857,165	7,567,540
Total amount of property saved	3,494,955	2,382,985	747,335	6,565,275
Total amount of property lost	766,700	125,735	109,830	1,002,265
Total number of persons on board	2,320	1,286	219	3,775
Total number of persons lost	10	6	1	17
Number of shipwrecked persons succored at stations	492	123	82	^b 647
Total number of days' succor afforded	365	180	49	^b 1,214
Number of disasters involving total loss of vessels	40	2	1	43

* Including the river station at Louisville, Kentucky.

^b These figures include persons to whom succor was given who were not on board vessels embraced in table of casualties.

The apportionment to the several districts is as follows:

First District.

Number of disasters	81
Value of vessels	\$201,205
Value of cargoes	\$46,270
Total value of property	\$247,475

* It should not be understood that the entire amount represented by the figures was saved by the Service. A considerable portion was saved by salvage companies, wrecking tugs, and other instrumentalities, often working in conjunction with the surfmen. It is manifestly impossible to apportion the relative results accomplished. It is equally impossible to give even an approximate estimate of the number of lives saved by the station crews. It would be preposterous to assume that all those on board vessels suffering disaster who escape would have been lost but for the aid of the life-savers; yet the number of persons taken ashore by the lifeboats and other appliances by no means indicates the sum total saved by the Service. In many instances where vessels are released from stranding or other perilous predicaments by the life-saving crews both the vessels and those on board are saved, although the people are not actually taken ashore, and frequently the vessels and crews escaping disaster entirely are undoubtedly saved by the warning signals of the patrolmen, while in numerous cases, either where vessels suffer actual disaster or where they are only warned from danger, no loss of life would have ensued if no aid had been rendered. The number of disasters, the property involved, the amounts saved and lost, the number of persons on board, and the number lost are known, and these facts are all that can be expressed statistically with reasonable accuracy. The narratives which follow under the caption "Loss of life" and the brief statements under the captions "Services of crews" and "Vessels warned from danger" convey as adequate an idea of what the life-saving crews actually do in each instance as space will allow.

^b These figures include persons to whom succor was given who were not on board vessels embraced in table of casualties.

Number of persons on board vessels	302
Number of persons lost	3
Number of shipwrecked persons succored at stations.....	50
Number of days' succor afforded	119
Value of property saved	\$185, 420
Value of property lost	\$62, 055
Number of disasters involving total loss of vessels	8

Second District.

Number of disasters	149
Value of vessels	\$428, 730
Value of cargoes.....	\$115, 300
Total value of property	\$544, 030
Number of persons on board vessels	813
Number of persons lost	1
Number of shipwrecked persons succored at stations.....	119
Number of days' succor afforded	187
Value of property saved	\$394, 925
Value of property lost	\$149, 105
Number of disasters involving total loss of vessels	8

Third District.

Number of disasters	7
Value of vessels	\$19, 180
Value of cargoes.....	\$3, 000
Total value of property	\$22, 180
Number of persons on board vessels	44
Number of persons lost	None.
Number of shipwrecked persons succored at stations.....	13
Number of days' succor afforded	25
Value of property saved	\$16, 305
Value of property lost	\$5, 875
Number of disasters involving total loss of vessels	3

Fourth District.

Number of disasters	34
Value of vessels	\$150, 155
Value of cargoes.....	\$85, 095
Total value of property	\$235, 250
Number of persons on board vessels	127
Number of persons lost	1
Number of shipwrecked persons succored at stations.....	46
Number of days' succor afforded	60
Value of property saved	\$197, 510
Value of property lost	\$37, 740
Number of disasters involving total loss of vessels.....	2

Fifth District.

Number of disasters	82
Value of vessels	\$265, 110
Value of cargoes.....	\$144, 125
Total value of property	\$409, 235
Number of persons on board vessels	346
Number of persons lost	2
Number of shipwrecked persons succored at stations.....	77
Number of days' succor afforded	150
Value of property saved	\$265, 365
Value of property lost	\$143, 870
Number of disasters involving total loss of vessels	6

Sixth District.

Number of disasters	38
Value of vessels	\$419, 925
Value of cargoes.....	\$38, 150
Total value of property	\$458, 075
Number of persons on board vessels	187

Number of persons lost	None.
Number of shipwrecked persons succored at stations	67
Number of days' succor afforded	124
Value of property saved	\$380, 745
Value of property lost	\$77, 330
Number of disasters involving total loss of vessels	9

Seventh District.

Number of disasters	27
Value of vessels	\$1, 065, 600
Value of cargoes	\$590, 165
Total value of property	\$1, 655, 765
Number of persons on board vessels	241
Number of persons lost	3
Number of shipwrecked persons succored at stations	69
Number of days' succor afforded	242
Value of property saved	\$1, 409, 770
Value of property lost	\$245, 995
Number of disasters involving total loss of vessels	4

Eighth District.

Number of disasters	15
Value of vessels	\$311, 625
Value of cargoes	\$137, 600
Total value of property	\$449, 225
Number of persons on board vessels	145
Number of persons lost	None.
Number of shipwrecked persons succored at stations	10
Number of days' succor afforded	10
Value of property saved	\$430, 220
Value of property lost	\$19, 005
Number of disasters involving total loss of vessels	None.

Ninth District.

Number of disasters	25
Value of vessels	\$148, 860
Value of cargoes	\$31, 560
Total value of property	\$180, 420
Number of persons on board vessels	115
Number of persons lost	None.
Number of shipwrecked persons succored at stations	41
Number of days' succor afforded	68
Value of property saved	\$154, 695
Value of property lost	\$25, 725
Number of disasters involving total loss of vessels	None.

Tenth District.

Number of disasters	87
Value of vessels	\$163, 755
Value of cargoes	\$31, 090
Total value of property	\$194, 845
Number of persons on board vessels	303
Number of persons lost	3
Number of shipwrecked persons succored at stations	14
Number of days' succor afforded	14
Value of property saved	\$153, 040
Value of property lost	\$41, 805
Number of disasters involving total loss of vessels	2

Eleventh District.

Number of disasters	82
Value of vessels	\$999, 485
Value of cargoes	\$405, 350
Total value of property	\$1, 404, 835

Number of persons on board vessels	425
Number of persons lost	None.
Number of shipwrecked persons succored at stations	81
Number of days' succor afforded.....	136
Value of property saved	\$1, 363, 465
Value of property lost	\$41, 370
Number of disasters involving total loss of vessels.....	None.

Twelfth District.

Number of disasters	116
Value of vessels	\$741, 025
Value of cargoes.....	\$168, 015
Total value of property	\$909, 040
Number of persons on board vessels	508
Number of persons lost	3
Number of shipwrecked persons succored at stations	28
Number of days' succor afforded.....	30
Value of property saved	\$866, 480
Value of property lost	\$42, 560
Number of disasters involving total loss of vessels.....	None.

Thirteenth District.

Number of disasters	27
Value of vessels	\$555, 440
Value of cargoes.....	\$301, 725
Total value of property	\$857, 165
Number of persons on board vessels	219
Number of persons lost	1
Number of shipwrecked persons succored at stations	32
Number of days' succor afforded.....	49
Value of property saved	\$747, 335
Value of property lost	\$109, 830
Number of disasters involving total loss of vessels.....	1

In addition to the foregoing there were miscellaneous rescues from vessels as follows: Fifteen persons, by wading out into the surf; 7 persons by a hawser thrown to the wreck by a surfman; 5 persons by sliding down the whip line which they made fast to the flying jib stay; 1 person by the diving of a surfman beneath a tug, and a man was hauled ashore by a line which was tied around his body by the keeper, who swam off through a heavy sea to his rescue.

There were rescued from positions of danger otherwise than from vessels 69 persons, who would probably have perished but for the aid of the surfmen. Of these, 17 had fallen from wharves, piers, landings, and the like; 13 were bathers who were in imminent danger of drowning; 12 were on outlying rocks, cribs, or points cut off from the land by the rising tide; 2 were mired on mud flats and unable to extricate themselves; 1 was a man who tried to commit suicide while suffering from delirium tremens; 1 was a man who had been buried alive by the caving in of the sand while digging a well; 1 was an old man who was found lying unconscious in the snow; 1 was a boy who had broken through the ice; 1 was an aeronaut whose parachute descended into the sea, and 20 were people who were taken to places of safety during the great storm which swept over Galveston, Texas, on September 8, 1901.

In 548 instances vessels were worked off when stranded, repaired when damaged, piloted out of dangerous places, and similarly assisted by the station crews. Besides the foregoing, assistance of minor importance was rendered to 403 vessels and small craft.

Two hundred and thirty-one vessels running into danger were

warned off by station patrolmen—210 by night signals and 21 by day signals.

The surfboat was used 720 times, making 996 trips. The self-righting and self-bailing lifeboat was used 78 times, making 118 trips. The gasoline launches at the City Point Station (Second District) were used 112 times, making 119 trips. Smaller boats were used 502 times, making 585 trips. The river life skiffs at the Louisville Station (Tenth District) were used 53 times, making 56 trips. The breeches buoy was used 11 times, making 73 trips. The wreck gun was employed 15 times, firing 24 shots. The heaving stick was used 27 times.

There were landed by the surfboat, 684 persons; by the lifeboat, 172; by the gasoline launches, 165; by the river life skiffs, 56; by other station boats, 194, and by the breeches buoy, 65.

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, 1901.**

Total number of disasters	12, 633
Total value of vessels	\$131, 371, 750
Total value of cargoes	\$55, 361, 649
Total value of property involved	\$186, 733, 399
Total value of property saved	\$146, 078, 182
Total value of property lost	\$40, 655, 217
Total number of persons involved	^b 93, 791
Total number of lives lost	^c 978
Total number of persons succored	^d 15, 949
Total number of days' succor afforded	39, 320

DISASTERS INVOLVING LOSS OF LIFE.

Section 9 of the act of Congress approved June 18, 1878, entitled "An Act to organize the Life-Saving Service," contains the following provision:

That upon the occurrence of any shipwreck within the scope of the operations of the Life-Saving Service, attended with loss of life, the General Superintendent shall cause an investigation of all the circumstances connected with said disaster and loss of life to be made, with a view of ascertaining the cause of the disaster, and whether any of the officers or employees of the Service have been guilty of neglect or misconduct in the premises.

Agreeably to the foregoing requirement, all shipwrecks of the class named therein have been fully investigated and the results as gathered from the testimony taken under oath are set forth below.

Accounts of disasters not attended with loss of life may be found under the caption "Services of Life-Saving Crews."

*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 the coast from Cape Henry to Cape Hatteras; season of 1875-76, to the coasts of New England, Long Island, New Jersey, the coast from Cape Henlopen to Cape Charles, and the 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 and Pacific coasts, and since 1880 the coast of Texas.

^bIncluding persons rescued not on board of vessels.

^cEighty-five of these were lost at the disaster to the steamer *Metropolis* in 1877-78, when service was impeded by distance, and fourteen others in the same year owing to similar causes.

^dIncluding castaways not on board vessels embraced in tables of casualties.

A MAN DROWNED IN THE NIAGARA RIVER.

About 10.40 o'clock in the night of July 22, 1900, shouts of distress, coming from the Niagara River, were heard by the lookout of the Fort Niagara Station, who instantly ran downstairs and alarmed the crew. While they were turning out he partially launched the surfboat, and under instructions of the No. 1 surfman, who was acting keeper, not to wait to put on either their shoes or hats, the crew completed the launching and with breathless haste tumbled into the boat and pulled away.

In five minutes from the alarm the surfboat reached the scene of the accident, which was about two-thirds of the distance to the Canadian shore, and there found a skiff without oars containing two intoxicated men, who incoherently stated that their companion, William Mason, lost one of the oars, which he endeavored to recover by seizing the other and jumping overboard, and that they had not seen him after he struck the water.

Upon this information the life-saving men pulled down the stream and made diligent but fruitless search for the missing man. They picked up one of the lost oars, and came across a skiff which had put out from the Canadian side, whose occupant informed them that he also had found an oar, but had discovered no sign of any person in the water. After thoroughly satisfying themselves that Mason was drowned, they pulled back to the mouth of the river and picked up the skiff containing his companions, which was now drifting out into the lake, towed it to the Canadian shore, where it belonged, and placed the men upon the beach, one of them then being still so stupefied with liquor that he could hardly stand up.

A second account of the affair, as told by the rescued men, was that they had been to Youngstown, on the American side, where they had consumed much whisky, and that Mason fell out of the boat while reaching over for a lost oar. The testimony shows that the man who lost his life was only a few months before rescued from drowning by this same life-saving crew under similar conditions, and the officer who investigated the circumstances in the present instance closed his report with the remark that the loss of life was the result of a "drunken drowning accident for which the life-saving crew could be held in no way responsible. They made fire-engine time to the scene and used good judgment in handling their boat."

ONE LIFE LOST FROM THE BARGE BLACKBIRD.

On the 18th of September, 1900, the barge *Blackbird*, of 435 tons burden, which was being towed around Cape Cod by the tug *Wyalusing*, in company with the barges *Bangor* and *Buffalo*, broke her tow-line and came to anchor about two miles from Cahoons Hollow Life-Saving Station while the tug with the other barges proceeded on its way. The three men composing the crew of the abandoned barge some time after attempted to reach the shore in their dory and one of them was drowned. The *Blackbird* belonged in Perth Amboy, New Jersey, and was bound in tow from Newburg, New York, to Boston, Massachusetts, with a cargo of coal.

About 9 o'clock in the morning of the day above named the wind breezed up along Cape Cod and soon freshened into a gale from the northeast, which made a heavy sea on the bars that lie off the east

shore. A heavy rain was falling, making the weather somewhat thick, but about 11 o'clock the tug above named came into view having in tow three barges, perhaps a mile and a half off the land, and apparently proceeding without difficulty, being at that time some four or five miles northeast by north of the station.

The entire life-saving crew, excepting one man who was on day liberty, was on the beach gazing at the vessels, when about 11.30 the last barge of the tow, the *Blackbird*, parted her line and went adrift. At this moment the tug and tow were a mile and a half northeast by east of the station, and, as they were well clear of the outer breakers, seemed to be in no danger. As soon as the line parted the tug rounded to, and the life-saving men on shore supposed that she was about to return to pick up the *Blackbird*, but were surprised to observe that she simply steamed abreast of the latter, blew several whistles, and then apparently without further concern proceeded on her way with the rest of her tow.

As soon as Keeper Cole noticed that the towline had parted, he ordered out the breeches-buoy apparatus and hurried it to the beach, keeping along with the barge as she was drifting southward before the wind and sea. The surf was running so high that a boat could not have been launched, or probably have lived for any great length of time in the breakers, which were then rushing in with great fury. When the life savers had gone about a mile and a half south of the station they observed the crew on the *Blackbird* drop an anchor, which brought her up about half a mile offshore and still safely outside the shoals. Keeper Cole, in order to gain a position where the life-saving crew could take advantage of the wind and tide in case disaster should come, continued on for a short distance farther down the beach. Three men were all the time visible on the barge, but they made no signals for aid and gave no evidences that they considered the vessel in distress.

About 1.30 p. m., probably half an hour after the anchor was dropped, the surfmen saw the sailors lower their dory into the water and haul it astern with a line, whereupon the keeper, fearing that the intention was to attempt to reach the shore in it, simultaneously waved a white and a red flag, the usual warning against attempting to land in the ship's boats. No heed whatever was paid to the signal, and fifteen minutes later the sailors pulled the dory alongside and one of them got into it, being followed shortly afterwards by the other two. The life-savers now looked on with much apprehension and lost not a moment in making preparations to assist the men should they actually try to pull ashore. The sticks were removed from the heaving lines and the latter were used as life lines, Surfman Howland placing one about his body, while another was tied around Surfman Nickerson, and two others of the crew were designated to act as tenders of the lines.

In a very few moments the sailors started for the land, and fortunately passed through the outer line of surf where there were some places not so rough as the rest. The inner breakers, however, presented a solid mass of tremendous seas, and as soon as the dory reached them it capsized and cast all three of its occupants into the foam-covered water, the wind and current carrying them rapidly to the southward, but also toward the shore. The life-savers kept along abreast of them, and by proceeding far into the surf upon the most favorable opportunity, at great risk to their own lives, Keeper Cole

and Surfman Nickerson succeeded first in saving the youngest of the three, a boy named Anton Cralles.

Only one of the others could now be seen, and the keeper, accompanied this time by Surfman Howland, quickly reentered the surf, both of them having to swim, and were able to reach the captain, Thomas B. Kelly, who was on the point of drowning. All three were then quickly drawn ashore by means of the life lines in the hands of the surfmen. Captain Kelly was very far gone when dragged out of the water, his eyes being closed and he being unable to stand up or even to assist his rescuers in any way. They promptly ejected the water from his stomach and chest by the methods of the Service for restoring the apparently drowned and after a while succeeded in bringing him to.

Both the survivors were taken to the life-saving station, where proper stimulants were administered, and they were furnished with dry clothing and well cared for until the following morning, when they departed for their homes. The other member of the barge's crew, Charles A. Ashley, of Haverhill, Massachusetts, perished, and up to the time the investigating officer left the scene his body had not been recovered. The general opinion was that he must have been injured in some way when the boat capsized.

The action of the crew of the *Blackbird* in attempting to reach the shore in their dory was extremely injudicious, and was resolved upon mainly because, from their position on the barge the surf appeared much smoother than it really was, as is always the case when viewed from the outside. Had they remained on the barge, which was towed to Boston the next day, they would have been entirely safe, but the captain knew she was leaking and was afraid she would part her chains.

Lieutenant Ross, the investigating officer, expresses the opinion, derived from the testimony taken by him, that the life-saving crew worked with well-directed energy and purpose on this occasion; that the keeper and surfmen are deserving of high praise for the fearless way in which they entered the formidable surf, and that but for their presence all three of the barge's crew would have perished. The rescued men also bore grateful testimony to the courage and fidelity of the life-saving crew, to whom they stated they owed their lives.

DROWNING OF A MAN NEAR CAPE MAY.

William C. Rutherford, of Cold Spring, New Jersey, was drowned in the surf 1 mile west of the Cold Spring Life-Saving Station about midday of October 13, 1900.

From the testimony taken by the assistant inspector of the district it appears that on the morning of the day above named four men made their appearance at the Cold Spring Station with the purpose of making a fishing trip in a skiff owned by one of them, which lay on the shore near the station. The wind was blowing briskly from the eastward and the sea was so rough and choppy that Keeper Sooy dissuaded the men from their venturesome purpose, and soon getting into their wagon they departed for their homes, some 8 miles distant. One of them testifies, however, that they had not ridden far when Mr. Rutherford expressed decided reluctance to give up the fishing excursion, and thereupon drove back to the beach. Against the repeated advice of Keeper Sooy they launched their boat and got out safely. When the keeper found that they were determined to go he advised them that

whenever they should attempt to land they had better pull up nearer the next station, where there would be less surf. Some two and a half hours afterwards Surfman Church, who had left the station on his bicycle to go to the post-office, saw them heading for the beach near the iron pier at Cape May City, and observing that the skiff was not being well managed, paused to watch its movements. The first breaker they passed safely, but at the second the skiff broached to and Rutherford, who rose up in his place, was thrown overboard. He clung to his oar, however, and finding that he could touch bottom with his feet, began to struggle toward the beach, while the three men in the skiff again headed shoreward and called out for Rutherford to bring along the oar. It was plain that the men anticipated no trouble to Rutherford, but nevertheless Surfman Church left his bicycle and hastened to the beach. Two runs of seas swept over Rutherford's head and a moment later he fell forward on his face and began to float away with the current. His companions in the skiff had made no effort to assist him, but Church promptly dashed into the surf, and with the aid of one of the men from the skiff, which had now landed, dragged the body ashore. One of the men was at once dispatched on Church's wheel to the station for assistance, while Church began the Service method of resuscitation upon Rutherford.

Keeper Sooy and several members of his crew, with two physicians, soon appeared, and although the physicians pronounced the man dead the keeper continued for an hour operations for restoring the apparently drowned. At the end of that time it was evident beyond all possibility of doubt that the man was dead.

Although Mr. Rutherford was in the surf only about three minutes, the doctors testified at the coroner's inquest that his death was due solely to strangulation by water, and the jury reported the death to be due to accidental drowning. The promptness and good judgment of the Life-Saving men were highly commended, and all the witnesses testified that, far from being in anyway remiss, they did everything possible under the circumstances, in which opinion the investigating officer fully concurred.

WRECK OF THE SCHOONER JENNIE HALL.

On the 21st of December, 1900, the American three-masted schooner *Jennie Hall* was wrecked within about a third of a mile of the Dam Neck Mills Life-Saving Station, coast of Virginia, and of 8 persons on board 3 perished.

The schooner was of 362 tons net burden, hailing from Addison, Maine, was 17 years old, and carried a crew of 7 men all told. She cleared from Port of Spain, Trinidad, with 550 tons of asphalt in bulk for Baltimore, Maryland, on November 11, 1900, and sailed on the following morning. Shortly afterwards a stowaway named Ben Mall was discovered on board, making the entire ship's company when she was lost 8 persons, 4 of whom—Mall, Johnson, Moore, and Crosby—were negroes.

The voyage was uneventful until the vessel reached the latitude of the Bahamas, about December 2, when she encountered severe gales from the northeast, which carried away her sails almost as fast as they could be repaired and set, and created a very high cross sea. Notwithstanding these adverse conditions, she continued to make

progress northward, the gale meantime diminishing somewhat, so that on December 14 she sighted Currituck light, coast of North Carolina, about west by south, and distant some 10 miles. The wind, however, again became so furious that the foresail and mainsail were blown away, and the schooner was forced to scud to the southward for three or four days, when she reached the latitude of Ocracoke, North Carolina, but far offshore in the Gulf Stream. Having been unable to obtain observations for some time, the master did not know his position, but the weather moderated, and, having repaired his sails, he put the schooner on the port tack, heading about northeast by east, but sometimes coming up as high as north when the wind backed westward.

On December 19, in the morning, he spoke the light-ship anchored on Diamond Shoals, off Cape Hatteras, and procured from that vessel such supplies as could be spared; his own stores, with the exception of bread, having been exhausted for ten days. Then the schooner continued to the northward, still on the port tack, until midnight, when the wind fell light and backed to the southward. It continued backing around for the next twenty-four hours, at the end of which period it was blowing hard from the east-northeast. The craft was then close hauled on the starboard tack under all lower sail, except one reef in the mainsail, and was making, as the mate calculated, something like 8 knots an hour on a north-northwest course. Rain was falling heavily, and at about 4 o'clock the next morning a light was discovered through the thick mist to the southwest, and a cast of the lead, which was thrown at once, showed 8 fathoms of water, from which the captain concluded that the light was that of the Cape Henry Lighthouse. Upon that supposition he set his course north-northwest. Fifteen minutes later another cast of the lead still showed 8 fathoms, and everything seemed to be going well until a quarter of an hour later, when the vessel struck the bottom with much force about 10 miles south of Cape Henry.

All hands instantly rushed on deck and let go the halyards of all the sails except the mainsail, the crew and stowaway taking to the mizzen rigging for safety, while the master and mate went below to pack up some of their effects. The air was now laden with sleet driven by a 50-mile gale from the northeast, and the breakers were soon sweeping the decks in such great volume as to completely flood the cabin, compelling the two officers to return to the deck and make a rush for a place of safety in the starboard mizzen rigging. The mate succeeded in getting into the shrouds, but Captain Lawson was not so quick, and the mate, having seized the captain's oilskin coat by the collar, was helping him up when an immense sea broke over the after part of the vessel and tore him away, leaving the collar of his coat in the strong grasp of the mate.

The survivors state that Captain Lawson feebly called out once or twice and then disappeared, the night being so dark that he was not seen after he fell. The mate further testifies that the captain was exceedingly despondent and that during the trying circumstances preceding the wreck, and also while they were in the cabin packing their things, remarked that he was too old to live, anyway; from which condition of mind the mate concludes that the old man made no great effort to save himself.

For an hour and a half after the captain was lost the rest of the men remained in the rigging, unable to make out the land and totally igno-

rant of their whereabouts. Although the temperature was not down to the freezing point, it was cold enough to thoroughly chill them, almost worn out as they were and with their garments drenched by the seas which dashed over them before they could mount the rigging.

The vessel was rolling and pounding heavily, and the mainsail, which was still drawing, forced her little by little higher onto the beach, but her heavy cargo held her so firmly in the hard sand that she offered such resistance to the sea as to cause her bulwarks soon to be pretty well demolished and all her light framework broken up. When day dawned the shipwrecked men could just make out the shore line through the heavy sleet, and a few moments later were able to perceive the life-savers (from the Dam Neck Mills Station) coming to their rescue with the beach apparatus, which encouraging fact so far revived their spirits that they were stimulated to hold on where a few moments before they were almost ready to give up.

About 6.20 a. m. Surfman John H. Carroll, of the Dam Neck Mills Station, who was making his patrol on horseback, discovered the wreck when he was within about a quarter of a mile of her, and, immediately putting his horse into a run, conveyed the information to the station, which was only a few hundred yards away. The life-saving crew, in command of veteran keeper Bailey T. Barco, instantly turned out and manned the beach-apparatus cart, while the keeper called up Seatack Station by telephone and requested his assistance. Keeper Barco and his crew arrived abreast the wreck within twenty minutes. The weather was still thick and stormy, and great seas were rolling in with such force as to cast up large portions of wreckage from 30 to 50 yards beyond high-water mark, while the tide was just beginning to fall, and the longshore current, which sets southward on the ebb of the tide, was now running with torrential force before the northerly gale, making the launching of a boat utterly out of the question.

The only hope of rescuing the shipwrecked people lay in the Lyle gun and the breeches-buoy apparatus, and as the ship was almost directly headon to the beach, parallel with the line of fire, and the men were in the mizzen rigging, the task of placing a line where they could by any possibility reach it was obviously an extremely difficult one. The little gun was, however, mounted on a large box to keep it above water, and at 7 o'clock the first shot was fired with a No. 9 line and a charge of 4 ounces of powder. The distance to the wreck was estimated at 300 yards and the shot passed, as it should have done, to windward of her, carrying the line fairly across her weather rigging, where the sailors easily laid hold of it and began to haul off. They succeeded in drawing the shot line on board until the tail block of the whip line reached the head stays, where it fouled, and, all efforts to clear it having failed, the attempt had to be abandoned. The surfmen then hauled back the whip and cut the shot line, and as the vessel was slowly heaving to the southward they moved the gun in that direction and a second time fired, the line, however, parting.

By this time the Seatack crew reached the scene, and many citizens also had arrived before the third shot was fired. This projectile passed between the main topmast and the backstay, which placed it in such position that the sailors could not secure it except by crossing along the spring stay from the mizzen to the main mast, a feat which everybody on shore was well satisfied lay beyond their power in their exhausted condition. Therefore the keeper again hauled in and cut

the line, and then, more than ever realizing that not an instant of time should be lost, he rapidly moved the gun to a more advantageous position to the southward and aimed, with 10 degrees elevation, just as close as he dared to the position of the men in the rigging. The vessel was at this time tailing somewhat to the southward. After having carefully sighted the gun, Keeper Barco turned his eyes away for fear the shot might possibly hit some of the men, and pulled the lanyard. The skill and fine judgment which he displayed in taking his aim and selecting the size of the line and the charge of powder were happily demonstrated by the result, the shot passing directly through the small triangle formed by the mizzen topmast, the topmast stay, and spring stay, and the line falling fairly into the hands of the shipwrecked men.

The slack of the line of course fell into the water, and being swept southward with the rushing longshore current, the men on board experienced great difficulty in hauling it off, while the keeper, fearing, as it was a No. 7, that it would not be strong enough to haul off the whip, bent a No. 9 line to it as an intermediary. When the strain became so great that the sailors could pull in no more, the surfmen would signal them to belay, and would then carry the shore end of the line well to the windward and make a signal to haul off again. By this maneuver, often repeated, the shipwrecked men were finally enabled to get the whip line to the schooner and properly make the tail block fast, but it had taken them two hours to accomplish the work.

The hawser was now bent to one part of the whip line and sent out by the life-savers pulling on the other part, and was also properly fastened by the sailors above the whip-line block. The lines being now in place, the shore end of the hawser was promptly set up, the breeches buoy placed upon it, and the gear was ready for operations. The exertion necessarily imposed upon the sailors in hauling off the shot and whip lines had somewhat warmed them up, and, in fact, improved their condition; but as soon as inaction ensued they rapidly lost energy again. Two of them, John Johnson, seaman, and Ben Mall, the stowaway, both colored, speedily became unconscious and fell from aloft, striking the deck below and were immediately swept overboard and carried away by the rapid current. Nobody saw them afterwards. About the same time, Steward Fred Percival began to lose consciousness, but, with quick and admirable forethought, tied his feet to the outrigger of the starboard crosstree and laid himself athwart the crosstrees, letting the middle portion of his body sag somewhat between them. In that position he remained more dead than alive until rescued.

As soon as the beach apparatus was ready, the breeches buoy was sent out and the mate directed the two remaining colored men, Crosby and Moore, to get into it together, which they did, and were landed without incident, although both were insensible. The buoy was immediately sent back to the schooner, and the mate, who felt his strength rapidly deserting him, got into it. The life-savers quickly drew him to the beach, finding him unconscious, in which condition he remained for something like four hours, when he recovered under the careful and appropriate treatment of the surfmen. The next trip of the buoy brought to the land Seaman Richard Combs, fortunately in full possession of his faculties, who informed the keeper that there was still one man on board, Steward Percival, above mentioned. The buoy was,

therefore, again sent off, but the man in the crosstrees did not move, nor was there any sign of life on board, and after a short time the buoy was withdrawn to the shore.

Having certain knowledge that there was another man on the wreck and perhaps still alive, although he had paid no attention to the presence of the buoy, Keeper Barco called for a volunteer to go out and ascertain the true situation. Surfman John R. O'Neal instantly responded to the call, and getting into the buoy was sent to the schooner, where he worked diligently for fifteen minutes trying to get Percival cleared from his position, as above described, on the crosstrees, in order to place him in the breeches buoy; but finding himself unable to do so, he signaled to be hauled ashore. Having reported the facts to the keeper, O'Neal expressed himself as entirely ready to go out again if someone would go with him to assist in handling the unconscious steward. Volunteers stepped forth in numbers, but the schooner having now swung around sufficiently to make a lee, the keeper decided to attempt to place two men on board with the surfboat and to hold the boat alongside until they could lower the shipwrecked sailor into it by a line.

The boat was accordingly brought out and preparations were quickly made to launch. O'Neal and Horatio Drinkwater, the latter an ex-surfman of tried courage and large experience, placed themselves in the bow of the boat and stood by to board the wreck the instant they could do so. Keeper Barco seized the steering oar and the rest of the crew was made up by Surfmen W. H. Partridge, George W. Whitehurst and John Carroll of the Dam Neck Mills Station, and John Sparrow and Benjamin Simmons of the Seatack Station. The enterprise now adopted was an exceedingly hazardous one, for the sea was still lashed into fury by the 50-knot gale, the current alongshore was running like a mill race, the surf was encumbered with all sorts of wreckage, and the booms were thrashing from side to side with swift and deadly power, while there was imminent danger that the masts would fall. Nevertheless, the boat was gallantly launched and through the faultless handling of Keeper Barco and the stout arms of the crew reached the wreck in good time. Instantly the two men in the bows sprang into the rigging.

It soon became apparent, however, that the boat could not be kept alongside on account of the current and dangerous débris, which would have smashed her to pieces, and the keeper, therefore, decided to return to the beach. Scarcely had he swung the bow of his boat shoreward when a giant sea struck her, knocking Surfman Sparrow overboard and driving the boat 50 feet away from him before he reappeared on the crest of the waves. Fortunately a long line was trailing astern, which he caught hold of while the keeper held the head of the boat up to the seas and the crew crossed their oars and hauled Sparrow in. Now, eagerly watching his chance, the keeper deftly turned the boat, and the crew pulled with all their might for the shore, where they soon landed, although 300 yards to leeward, amid the cheers and congratulations of everybody present.

As soon as O'Neal and Drinkwater boarded the wreck, the latter ran up the mizzen rigging on the lee side, while the former dashed across the deck and mounted on the weather side. Reaching the mast head at about the same instant, they found Percival so effectively wedged in between the crosstrees that they were at first unable to move

him, and it became necessary to devise some plan of operations which would enable them not only to get him out of his cramped position, but also to make sure that he would not fall overboard. They therefore tied a line fast around his body, hauled it taut, and taking one end of it to the neck of the breeches buoy made it fast close up to the block. Then O'Neal went beneath the crosstrees, with his feet on the ratlines, and placing his head and shoulders under Percival's body lifted with all his power. In this way the unconscious man was raised from his position and then launched into the air. For a moment the line which held him fouled a cleat, but it was soon cleared, and upon signal he was hauled to the shore over the hawser without having been placed in the breeches buoy at all, which was not feasible to be done on account of his great weight and totally helpless condition. The buoy was then sent back to the wreck, and Drinkwater and O'Neal getting into it, were drawn ashore, and the rescue was complete.

When Percival's inanimate body reached the beach it was instantly cut loose and placed in a cart that had been summoned for the purpose, which was driven posthaste to the station. There the work of resuscitation was zealously begun, and after considerable time signs of life became apparent, upon which the surfmen redoubled their energies. Fearing, however, that the man might have been injured while bent half double between the crosstrees, swung to and fro with every roll of the vessel, or perhaps while in transit to the shore, Keeper Barco telephoned for Dr. P. F. J. Miller, of Virginia Beach, about $4\frac{1}{2}$ miles distant, who appeared at the station in about half an hour and administered to the man such medical treatment as seemed necessary. An hour and a half later Percival returned to consciousness so far as to speak rather incoherently, and from that time his recovery was more satisfactory, although his mind seemed somewhat clouded thereafter while he remained at the station. Dr. Miller, however, expressed the opinion that the condition would pass away in a few days, and that the man had suffered no material physical injury.

The circumstances of this wreck and rescue are believed to reflect more than usual credit upon the life-saving men. The captain of the schooner was lost before she was discovered. The other two men who perished fell from aloft while everything possible was being done for their rescue.

Lieutenant Johnston, the investigating officer, says:

I heard nothing but words of praise for the brave men who went out in that boat. The members of the Seatack crew and others say that, while they have seen worse surf on the beach, never in their lives have they known a boat to go to sea under so many dangers and difficulties as beset the crew upon this occasion. I am of the opinion that every member of the boat's crew endangered his life. The conduct of Keeper Bailey T. Barco, I believe, bordered upon extreme and heroic daring, for his was the initiative in launching the boat, and his the responsibility for the results. He went, acting upon his own excellent judgment, and the others went bravely with him without hesitation, well knowing his great courage and splendid surfmanship. Especial credit is due to Surfman John R. O'Neal for his intrepid conduct in volunteering to go out in the breeches buoy, and to Horatio Drinkwater for his heroic service in connection with O'Neal when both were placed on board the wreck from the surfboat.

CAPSIZE OF A DORY.

By the capsize of a fishing dory in the surf near the Quogue Life-Saving Station, coast of Long Island, one life was lost on the 31st of December, 1900.

Just before sunrise in the morning of that day, three colored fishermen, Herbert G. and Frederick C. Smith, and Reginald Smith, a boy about 19 years of age, put out to sea in a 17-foot dory for the purpose of surf fishing. The sea was smooth when they launched in front of their fish house, about half a mile east of the life-saving station, and the wind was light from the northward, while the atmosphere was somewhat misty. They set their trawls on the fishing grounds some 3 miles southeast of the station and remained in that vicinity until about 10 o'clock, a. m., when they observed a large flag displayed from the station flagpole, which, in accordance with a previous understanding with the local fishermen, signified that the surf was becoming dangerous for landing.

Keeper Herman had observed that the sea was increasing as early as 9 o'clock, and at 9.30 ran up the signal, which has been understood between the fishermen and the life-savers for some eighteen or nineteen years. Three fishing boats were out at that time, and the keeper apprehending that there might be difficulty when they should attempt to land, mustered his entire crew, hauled the surfboat down to the water's edge, and made all ready for launching. By this time the three boats were in plain view, headed for the shore in the vicinity of their respective fish houses. Keeper Herman, therefore, immediately set out in that direction, in order to be close at hand to render all possible assistance should mishap overtake any of them. The surf at that point turned out to be much rougher and more difficult of passage than it was opposite the life-saving station, and, therefore, mounting a high bank, the keeper waved his oil coat as a signal to the dories to proceed further westward, which they immediately did. Fisherman Gilmore's boat was the first to try the surf, and, taking advantage of a smooth chance almost directly in front of his fish house, ran in and safely landed. The two other dories when they arrived abreast of the life-saving station and beyond the outer bar stopped pulling and laid by for a time as though in doubt whether to attempt a landing. The keeper, however, being uncertain as to what their purpose might be and whether or not they wished assistance, determined to go out to them with his surfboat. Taking with him 6 men of his crew, leaving the other on the beach, a launch was effected and the surfboat was soon pulled to the vicinity of the two dories. To the men in charge of each, Edward F. Warner and Herbert G. Smith, the keeper stated that the surf was pretty rough and requested them all to get into his boat and let him take them ashore, but they declined, saying they would try to make it themselves.

After a little delay for a favorable opportunity, Warner's boat pulled for the shore and made a safe passage through the breakers of the outer bar followed by the life-saving boat, which in turn was followed by that of the colored men, who were using a drag made of a piece of fish net filled with fish and towed astern. When all three boats had passed the bar they held back for a few minutes in the quieter water waiting for another "slatch" which would afford them a fair opportunity to pass through the dangerous surf tumbling between them and the shore. Warner again started first and succeeded in landing without serious trouble, although he was very materially assisted by Surfman Jackson, previously mentioned as having been left on the beach. About this time the surfboat and the Smith dory started in. The Smith boat passed the first roller successfully, and Herbert Smith,

who had command, ordered the other two to pull hard, intending to follow in close behind the great wave. Reginald Smith, however, did not respond with his oars, being young and of little experience in boats, and, therefore, the dory, lacking the necessary headway, was caught by the next great roller which lifted the stern high up and drove her forward with frightful rapidity. As it broke under the stern the dory slued sharply to the westward and Herbert was pitched headlong into the sea. Then the dory rolled over broadside to the beach and threw out the other two.

Half swimming and half wading, Herbert and Frederick scrambled for the shore, while the boy Reginald, apparently dazed, attempted to climb on the bottom of the capsized dory. The life-saving boat was at this time within about 50 feet of the beach, and under the circumstances there was nothing to be done but first to force it with all possible celerity to the shore, when all hands jumped overboard and rushed into the surf to aid the young fellow still clinging to the dory. Taking the end of a small line, Surfman Overton made it fast around his waist, and the men behind holding on to it so that he might not be swept to sea by the undertow, which at this point is unusually strong and perilous in consequence of its concentration from both sides into a deep gully or "sea-puss," he struggled out toward the helpless man, to whom Herbert Smith on shore shouted instructions that he let go of the boat and get away from it as soon as he could. Upon this injunction the young man appears to have let go and was now washing helplessly back and forth just inshore of the dory, and the life-savers resolutely pushed toward him as far as they could go, but still he was beyond their reach. Once he was swept within 15 or 20 feet of Overton, who was barely able to keep his place, while every sea dashed shoulder high against him. The receding waves now carried young Smith back to the dory, and he attempted to climb on to it again, but a heavy sea swept him off, and when he reappeared he was floating face downward outside of the boat, drifting slowly away. Then he sank and was seen no more.

That keeper Herman and the several members of the Quogue life-saving crew used all judicious and necessary precautions on this occasion for the prevention of the accident, and after it had taken place exerted every effort within the power of man to effect a rescue, is clearly shown. If the three persons in the Smith boat had complied with the request of Keeper Herman to transfer themselves from the dory to the station surfboat all would have been landed without any trouble whatever.

A MAN LOST FROM A DREDGE.

John Leonard, jr., a native of Finland, was drowned on the 11th of January, 1901, about one-fourth of a mile north of the Great Egg Life-Saving Station.

It appears, from the testimony of the foreman in charge of the dredge to which Leonard belonged, that the latter was ordered about dusk to go ashore to bail out a pontoon, and that while proceeding to carry out his instructions, he was thrown into the water and drowned by the capsize of the skiff in which he was about to pull away from the dredge. The skiff, which was light and narrow, careened the instant Leonard jumped into it, and he fell into the water, but Foreman Franzen, who witnessed the accident, promptly got over the side of the

drodged into the skiff and hauled Leonard out of the water. Scarcely had he accomplished this when the skiff again rolled down, and this time completely capsized.

The foreman swam without great difficulty to the nearest mooring cable and sang out for Leonard to cling to the skiff. Meantime a line was thrown from the dredge to Leonard, but both ends went overboard, and before anything else could be done the man lost his hold on the capsized boat and began to drift away with the rapid tide. The gas-engine launch was started at once in pursuit of him, but while it was still about 40 yards distant from him he sank and did not rise again.

Although the accident occurred within a quarter of a mile of the station it happened on the off side of the dredge where the station lookout could not possibly see it, and the first information the life-saving men obtained was from a messenger who was sent to secure their assistance to recover the body. They responded at once, and searched until 8 p. m., and on several tides thereafter, but were not able to find any trace of the body.

WRECK OF THE WENDELL BURPEE.

On the 7th of April, 1901, the small schooner *Wendell Burpee*, of St. John, New Brunswick, was wrecked in Broad Cove, near Cape Elizabeth, coast of Maine, and three lives were lost.

This vessel left Port Liberty, New York, about the 26th of March, bound for St. John, carrying a cargo of 153 tons of soft coal and having on board a crew of four men, including the master. Three days after her departure she touched at Hyannisport, Massachusetts, and remained there for a week during unfavorable easterly weather. On April 6, the wind being fair from the southwest, sail was again set and she proceeded on her course. About noon the wind shifted to the south, and later into the southeast with rain. After dark sail was shortened and the northeast course was maintained until about midnight, when, the wind becoming stronger, the mainsail was taken in. On the morning of the 7th the gale was so heavy that the standing jib was carried away and the captain decided to heave the vessel to with her head offshore. Half an hour later he sighted land and two lighthouses, which, at first, he supposed were those on Matinicus Rock.

It was soon discovered that the land was Cape Elizabeth, and the captain determined to make an effort to run into Portland Harbor, the weather at that time being rainy and misty, while a heavy surf and undertow, due largely to a high sea on the previous day, were sweeping over and along the beaches. On account of these conditions the life-saving crew of the Cape Elizabeth Station were exercising especial vigilance by carefully patrolling the shores north and south of the station, as is the custom during the day when the weather is thick.

About 10.30 a. m. the south patrolman, Surfman Parker, reported to the station that a vessel was in sight to the eastward, which was soon made out to be a schooner, some 3 miles away, under a reefed foresail, and as subsequently shown, was the *Burpee*. She was standing to the southward and the seas were sweeping her decks. While the keeper was watching her with his glass, she suddenly stood off, jibed her foresail, and headed to the northward, toward Portland Harbor. Notwithstanding that she was obviously making heavy weather of it, she now had a fair wind, and the life-saving men did not con-

sider her in any special danger, holding the opinion that she would succeed in making the harbor without disaster, especially as she showed no signal of distress or for assistance. Before long, however, it was observed that her crew were making efforts to set the mainsail, and as they succeeded in hoisting it only part way up, the keeper was satisfied that they were having difficulty in managing the vessel, which carried no headsail, and fear soon arose among the on-lookers whether she would be able to weather Trundy's Reef, a dangerous ledge which projects some distance into the sea.

Keeper Dyer now promptly summoned all his crew and proceeded with the utmost haste for the north boathouse, which is located about 2 miles from the station, and the schooner was kept in sight by the surfmen every moment until they reached the woods on the north side of Broad Cove, when she was still standing to the northward. As they emerged on the other side of the woods, however, it was noticed that she had come to an anchor inside of Broad Cove Rock, which is about three-fourths of a mile from the shore.

Perhaps thirty minutes had been consumed by the life-savers in reaching the boathouse. There was very small chance of launching the surfboat in the heavy seas, and the keeper, therefore, ordered the beach cart manned, and with the aid of a number of outsiders, who eagerly volunteered their services, hastened back for Trundy's Point. The vessel was in view again just before the point was reached, and the life-savers observed that her anchor chain had parted and she was drifting helplessly, stern foremost, into Broad Cove. Continuing on as fast as they could, their progress being impeded somewhat by their having to clear a way through a stone fence for a passage for the apparatus, the life-saving men and volunteers arrived at the northern edge of the cove, where they met the son of the lighthouse keeper at Cape Elizabeth, who gave them information that the crew had attempted to leave the schooner in their small boat and that all but one of them had been drowned. One, it appears, John Swenson, the mate, succeeded in reaching the shore and was taken to a cottage near by, where he was speedily supplied by the keeper with the necessary stimulants and dry clothing from the stores at the station. Under the care of the surfmen he was soon restored to such condition that he was able to walk to the station and appeared to suffer no ill effects from his experience.

Shortly after daylight on the following day, April 9, Surfman Alexander found upon the beach, not far from the vessel, the body of the cook, George S. Forester, who was from St. John, New Brunswick. The coroner at Portland subsequently took charge of the remains. The bodies of the other two who were lost, Captain Lewis Merseburg, of St. John, and Charles Kindon, sailor, of England, had not been recovered when the investigating officer visited the station.

Lieutenant Ross, who inquired into the circumstances, says:

The foregoing account proves, I think, that the life-saving crew did everything in their power to assist the *Wendell Burpee*. The evidence shows that the keeper used good judgment in proceeding to the north boathouse, for it is in that vicinity that all on shore supposed the craft would strike in case she failed to weather the land. The place where the schooner struck is about $1\frac{1}{2}$ miles north of the station, and the testimony of competent witnesses places her about 75 yards from high-water mark. She remained in good condition, and, therefore, it is obvious that no difficulty would have been experienced in rescuing the entire crew with the breeches-buoy apparatus had they stood by her even for a few minutes instead of rashly trying to escape in

the yawl. The testimony of the mate who survived is clear as to this point. He says that while the crew were trying to put on more sail, the schooner kept drifting nearer the shore and in the emergency the starboard anchor was let go, but the cable almost instantly parting the port anchor was resorted to. That, however, held on only a few moments, and the vessel being at the mercy of the wind and the sea soon stranded, the breakers sweeping over her from stem to stern and tearing the deck house in pieces. Two sailors hastily took to the rigging, but to all on board it seemed that the craft could not many minutes withstand the shock of the sea, and with this fear uppermost in their minds all hands determined to abandon her. No sooner had the yawl cleared the schooner, however, than it capsized, and the occupants were thrown into the seething surf, only Swenson, the mate, reaching the shore alive.

CAPSIZING OF THE ROWBOAT VINA.

John D. Winstandley was drowned by the capsizing of a small sailboat on the 18th of May, 1901, in Lake Michigan, a short distance south of the Casino Pier, Jackson Park, Chicago, Illinois. The boat was but 14 feet long, with a beam of only 42 inches, and was equipped with a folding centerboard and a small spritsail. Three men were in it, and there can be no room for doubt that they displayed faulty judgment in venturing outside the harbor in so frail and unstable a craft during the weather which then prevailed, the wind being fresh from the north, while the sea was choppy. The scene of the accident was in the immediate vicinity of the anchorage of the Jackson Park Yacht Club, and the boat was observed sailing about by several persons there. About 5.30 some fishermen on the shore either witnessed the accident or saw the capsized craft immediately after it went over, and one of them hastened to the vicinity of the yachts lying at anchor and gave the alarm.

Several small boats promptly started to the rescue, but only two ventured outside the harbor, one of which was a 16-foot electro-vapor launch and the other a 9-foot rowboat, with a beam, however, of 5 feet. Of the three men who were in the capsized craft each of these two boats rescued one, the launch getting Mr. H. W. Nichols and the dingey Mr. A. S. Rogers, both of whom were clinging to the capsized boat. Winstandley was unable to hold out as long as the others and was washed off and drowned when relief was almost at hand. The scene of the accident was about half a mile from the life-saving station, and although the lookout in the watchtower had observed the little boat once or twice while her sail was set his attention was turned in another direction at the precise moment of the accident, his duty being to survey the whole shore within view of the station. It appears that he was not in any way impressed by the fact that the boat was no longer visible when he turned his eye in the direction where she had last been seen, and the first news of the accident received at the station was from a boy who was sent as fast as he could go on a bicycle to notify the life-saving crew. He thinks it took him about five minutes to cover the distance, the way he went having been by the road, fully a mile, and his course against the wind.

The life-saving crew was instantly turned out, and the surfboat was launched and pulled with all the speed the crew could command toward the place indicated by the boy, surfman No. 1, Joseph Langlois, in charge, Keeper Andres at that time having been temporarily absent from the station. The boat made excellent time, but nevertheless did not reach the scene until Winstandley had disappeared. A small rowboat was observed headed for the entrance of the yacht harbor, and the surfboat promptly overhauled it for the purpose of obtaining infor-

mation. Langlois was informed that two persons had been saved and one lost, one of the rescued persons being then in the boat with which he was holding communication. It appears that the rescued man was Rogers, who was lying in the bottom of the boat, in fact nearly insensible, but the life-saving men appear neither to have asked nor the men in charge of the boat to have volunteered any information as to his condition. Had Surfman Langlois made inquiry it would have been ascertained that the rescued man was then in an extremely precarious state, and had the men who had Rogers in charge realized the true situation it would seem that they should have made haste to inform the life-saving crew and requested them to take him to the life-saving station. However, these are the facts, and the surfboat returned to the station to procure grappling irons in order to prosecute the search for the body of Winstandley.

Rogers was conveyed to the boathouse of the yacht club, and after some delay there—nobody seeming to understand what ought to be done—he was sent to the life-saving station in a cab, which had to be procured from a stand nearly a mile distant. Much time was lost in this way, but fortunately Rogers still possessed sufficient vitality to respond to the intelligent methods of resuscitation immediately put in operation upon him and at 9 o'clock was breathing naturally and in every way sufficiently restored to be sent to his home.

CAPSIZE OF A FISH BOAT.

About 10.30 o'clock in the forenoon of May 22, 1901, the weather being threatening, the lifeboat of the Cape Disappointment Station was pulled out and anchored near Peacock Spit, mouth of the Columbia River, as is customary under such conditions, to be in readiness to afford assistance to any of the numerous fishermen who may meet with disaster. Before half past 12 a fish boat was seen to capsize about 500 yards away, and the lifeboat started immediately to the rescue of two men known to be in peril—two being the invariable complement of each boat of the fishing fleet. The sea was so heavy that ten minutes at least were required to make the distance, but the men were able to cling to their boat, and both were soon rescued.

Hardly had these men been taken into the lifeboat when a heavy squall came out from the southward, making the weather so thick that the life-savers could see only a few yards to windward, and they therefore deemed it prudent to again come to anchor and wait for a favorable opportunity to take the rescued men ashore. About 1.15, just as the squall passed away, another boat was sighted capsized in the breakers about 400 yards distant, and the station crew pulled to it as rapidly as possible. In five minutes they were on the ground, where they found and rescued one man who had succeeded in climbing on to the bottom of the capsized boat, but the other, who was John Mattson, the boat puller, had disappeared beneath the breakers.

The survivor, Oscar Lautts, stated that while they were trying to recover their net, which had fouled with the bell buoy, the boat capsized, and Mattson was instantly drowned. The wind was blowing at the rate of 40 miles an hour when the capsize took place, and the survivor was not able to do anything for his comrade.

Accidents of this sort are occurring frequently in this vicinity without loss of life, due principally to the fact that the life-savers are con-

stantly on the watch for them, and in eight or nine cases out of ten effect rescues. In the few instances where fatalities occur the circumstances are, practically, as in the one above narrated, and it would be manifestly unfair to charge the Service with responsibility for the loss of life.

CAPSIZING OF A CANOE.

Roland Guilds and Louis Andlefinger, both of Oswego, New York, were lost about 3.50 o'clock p. m. on the 2d of January, 1901, by the capsizing of a canoe some 4 miles northwest of the Oswego Life-Saving Station.

The day was cloudy, and the canoe was not seen by the lookout at the moment it capsized, but shortly afterwards he discovered that it had disappeared, and by means of a marine glass saw what he thought were the heads of two men above the water. Without delay he notified the keeper, and gave him the ranges by which to steer the station boat, which was promptly launched and rowed in the direction given, coming upon the capsized canoe in quick time. The late occupants were nowhere to be found.

The capsized canoe was righted by the life-saving crew and taken in tow to the station, after the vicinity of the accident had been carefully searched. It was an extremely frail and unreliable craft, only 13 feet long, 18 inches wide, and 9 inches deep.

The bodies of the young men who lost their lives were not recovered until some six weeks after the disaster, when both were found near together 50 miles north-northeast from the life-saving station.

CAPSIZING OF A ROWBOAT.

About half an hour after noon of Sunday, June 23, 1901, two young men applied at the boathouse of Drake & Wallace, just above the railroad bridge at Saint Joseph, Michigan, for a small pleasure boat in which to take a row on the river. The day was warm and pleasant and the water was smooth. The boat was engaged for an hour, and shortly before the expiration of that time the men returned to the boathouse, but upon learning that they still had a few minutes to spare, shoved out into the stream again and pulled up the river, one of them rowing while the other sat in the stern of the boat. They attracted no special attention, and had not proceeded far on the river, possibly not more than 100 or 150 yards, when the boat capsized. What caused the mishap is a disputed point, some claiming that the man in the stern of the boat rocked it until it rolled over, while others assert that the capsizing took place as the men were standing in the act of changing places. It must, at all events, have resulted from some carelessness or mismanagement, probably due to inexperience, for though small—13 feet long with a beam of 40 inches—it was a safe one in such water when properly handled.

The accident was witnessed by several persons and an alarm was made at once. Two young men promptly put out from Drake & Wallace's place in a small boat, which was soon followed by another boat from the same point, but both arrived too late to rescue the unfortunate pleasure seekers. It appears that they came to the surface almost immediately after being thrown into the water and seized the capsized boat, where they held on for a very brief time only, probably not more

than a minute, and then apparently let go. Both at once sank out of sight and did not again rise to the surface. At first they called for help, and, it is supposed, they were unable to swim, as they made no attempt to do so, though not more than 100 feet from the dock.

One of the persons who witnessed the capsizing was an attendant of the draw of the bridge, who whistled and shouted loudly for the life-saving crew, the station being from 250 to 300 yards to the westward of the bridge and 400 from the scene of the disaster. The outcry was heard by the surfmen, and no time was lost in launching the surfboat and proceeding to the scene. The testimony states that not more than three minutes were consumed in making the distance, and the assistant inspector who investigated the circumstances and himself made a test is sure that the time could not possibly have been more than four minutes. The persons above mentioned as putting off from the boat-house had, however, a much shorter distance to row and were at the place first, but neither of them saw the men in the water nor detected any bubbles coming to the surface to indicate where they had gone down.

The surfboat hastily returned to the station, there being two boats already at the place to rescue the men should they appear, for the purpose of getting the grappling irons with which to drag for the bodies. Four men were sent with this apparatus in the Whitehall boat with instructions to begin dragging immediately. The keeper followed in a skiff, taking the medicine chest with him, and the remaining surfmen went in another small boat after taking in some other gear that might be needed. The dragging began within thirteen minutes after the alarm was given. One body was brought to the surface almost at once, and was immediately taken to the dock, where some of the life-saving crew began to work upon it in an effort at resuscitation. In about an hour the second body was recovered, and was also taken to the dock and subjected to the usual methods for restoring the apparently drowned.

A physician who had been early sent for did not reach the ground until about twenty minutes after the recovery of the second body. Upon examination he pronounced life extinct in both cases, and advised the keeper that further resuscitation proceedings would be useless.

The 2 young men who were lost were strangers in Saint Joseph, but from papers found on the bodies they were identified as Michael Linowiecki and Stephen Michalski, both of Chicago, Illinois.

The place where the accident occurred, although, as before stated, not far from the station, is completely hidden from the lookout tower by the railroad bridge, but in this instance even had the accident been seen by the lookout the circumstances show that notwithstanding the extreme promptness with which the life-saving boat reached the scene it could not have arrived in time to save life.

DEATH OF SUPERINTENDENT RICH.

By the decease of Captain Benjamin Swett Rich, superintendent of the Sixth Life-Saving District, the Service lost one of its oldest and ablest officers. He was born in the town of Wellfleet, on Cape Cod, Massachusetts, September 10, 1828, and from his childhood was familiar with the sea and with shipwrecks. His ancestry on both sides was Anglo-Saxon, and his first progenitors in America were Massachusetts Bay colonists, who came from England in the seventeenth century.

The name Rich appears in the oldest records of life-saving affairs in America. The first organization here devoted to the rescue of life from the perils of the sea was the Humane Society of the Commonwealth of Massachusetts, established in 1786, of which association Benjamin Rich, a relative of the subject of this sketch, was one of the earliest members and for fifteen years the president. On the list of his predecessors in that office appear such names as James Bowdoin, Thomas Russell, and Aaron Dexter, while among the members were Paul Revere, John Hancock, John Adams, Josiah Bartlett, Robert Treat Paine, and many others prominent in the beginning of our national life.

Superintendent Rich was the eldest son of Captain Mulford Rich, a master mariner in his day, who acquired a modest competency by the time he reached early middle life and then retired from the sea. When the Massachusetts Humane Society established a lifeboat station at Cahoons Hollow, near Wellfleet, about 1841, Captain Mulford Rich was placed in charge of it, and much of the time his son acted in the capacity of No. 1 man in the crew. The lifeboat station of that day was simply a rough building 20 by 8½ feet, shingled on the roof and battened on the sides, and the crews were volunteers gathered together from the coast people on occasions of disaster. Their services were "considered as granted voluntarily for humane and charitable purposes, and whenever any meritorious act was performed in rescuing lives, the volunteers in the boat were suitably rewarded on a full representation of the same to the society."

In 1849 young Rich was the first to discover the wreck of the immigrant ship *Franklin*, which was intentionally lost, and he also picked up on the beach a small box containing papers which not only disclosed the purpose to wreck the vessel, but afterwards furnished the proof in court which prevented the owners from pocketing ill-gotten gains from insurance companies. Many persons perished on this terrible occasion. Captain Mulford Rich was in charge of rescue operations and the son was one of the boat crew. On one of their trips the rescuers carried ashore an infant whose mother had perished, and young Rich held it in his arms. The child was barely alive when landed, but survived for many years to become one of the first of the industrious and frugal matrons of the cape. For heroism in saving the lives of 21 persons on this occasion, both father and son were awarded medals of honor by the Humane Society.

At the age of 9 years the late superintendent began the life of a seafarer, going on vessels in the summers and to the local school in the winters. Later he attended school for some months in Boston, Massachusetts, and for a year in Hartford, Connecticut. He was a studious and orderly boy, who always attended to the business in hand, so that when he reached the years of manhood he was equipped with a good education, to which, through a habit of much reading, he added a large store of useful general information. He followed the sea, serving in every position on shipboard from cabin boy to master, until 1857, when he settled in Virginia and engaged in business and farming enterprises.

When the Fifth, now the Sixth, Life-Saving District was organized, in 1875, Captain Rich was deemed the best man available for superintendent, and accordingly was appointed to the place on the 7th of August. To the end of his life he was vigilant and resolute in aiding

the Department in keeping his district clean and in the first rank of efficiency.

The district comprises the coasts of Delaware, Maryland, and Virginia, from Cape Henlopen to Cape Charles—an extremely dangerous stretch of seaboard and outlying shoals, which have been the scene of many pitiful wrecks and heroic rescues. During his incumbency there were more than 800 disasters, jeopardizing the lives of 6,292 persons, of whom only 45 were lost, while of \$12,104,157 of property imperiled \$8,588,875 was saved.

Captain Rich died in hospital at Baltimore June 22, 1901, and was buried at Onancock, Virginia, on the 23d. His death was the ultimate result of injury received while engaged in making a quarterly tour of inspection of his district, he being the sixth of the district superintendents who have died in the performance of duty or of disease or accident incident to it.

AWARD OF MEDALS.

During the year several medals of honor were awarded in recognition of notable courage and skill displayed in saving the lives of persons in danger of drowning.

Otto B. Storbeck.

The first case was that of Otto B. Storbeck, of Oshkosh, Wisconsin, who rescued four young women on the 2d of September, 1885, and was awarded a silver medal. At the time of the occurrence Storbeck was under 18 years of age. It appears that a boat having on board the persons rescued was capsized in the Fox River early in the morning, where the current was swift and the water very deep. While passing the vicinity Storbeck heard cries of distress, and running out on the bridge discovered the situation. Throwing off his coat and shoes, he instantly plunged from the bridge into the river and seized the girl nearest at hand, whom he pushed on to the capsized boat, where she would be safe. Then he seized two others, and instructed the fourth to cling to them, while he turned upon his back and supported them as he swam toward the south pier, drawing the capsized boat carrying the other girl by inserting one of his feet under and inside the gunwale. The water was extremely cold, and the exposure and extraordinary struggle were so severe that as soon as Storbeck reached the shore he fell into unconsciousness. In the letter of the Secretary of the Treasury transmitting the medal Storbeck's conduct is commended as displaying admirable promptness, courage, and good judgment.

H. R. Mayo Thom.

The second award was that of a gold medal to H. R. Mayo Thom, of Baltimore, Maryland, who rescued a woman from drowning in the Rappahannock River on the 12th of January, 1900. Just as the steamer *Richmond* was making the pier at Urbana about 4 o'clock in the morning, while the weather was very dark, a woman standing near the gangway was precipitated overboard by the shock of the vessel against the wharf. Mr. Thom was heavily clad, but without divesting himself of clothing, except his hat and a heavy overcoat, he quickly plunged overboard after the woman in the water, which was thickly

covered with ice that the steamer had broken up as it approached the landing. The woman, it appears, was blind, and in her frantic efforts to save herself laid hold of Mr. Thom in such a way as to very seriously increase the danger of the situation. He bravely held on to her, however, and was once carried to the bottom, his head coming in contact with the steamer as he arose to the surface, but fortunately not with sufficient force to deprive him of his faculties or self-possession. He bore the almost insensate woman close to the wharf, where she was taken up by means of a rope which he received from the people there and placed about her body. He was himself subsequently assisted to the dock by the aid of a boat hook. His conduct was universally commended by the witnesses as extremely gallant, and was deemed worthy the bestowal of a gold medal, the highest honor conferrable under the law.

Philip Bierschenk.

A silver medal was given to Philip Bierschenk, of Brooklyn, New York, for rescuing a child on the 1st day of July, 1900. About 12.30 p. m. the steamer *Regina*, carrying passengers, was headed into Glen Cove Harbor, Long Island, at the rate of about 7 knots an hour, when a boy, who had climbed over the rail of the steamer and was walking along the outside fender, a very dangerous place, suddenly lost his hold and fell into the water, which was about 25 feet deep and at the time considerably agitated. Bierschenk, who was a passenger, immediately responded to the cry of alarm which swept over the boat, and without pausing to remove his coat or shoes plunged overboard and swam to the boy, who was already considerably astern, seized him and held his head above the water until the steamer was put about and returned to his assistance, when a line was thrown to him and he was hauled on board holding the lad in his arms. The boy was unconscious and Bierschenk was scarcely able to speak. He was not a professional swimmer, and had never before been in water with his clothing on. These facts enhanced the merit of his act, while at the same time they largely increased his peril. His conduct was warmly applauded by all who were present.

Captain E. T. Brown.

The fourth award was that of a gold medal bestowed upon Captain E. T. Brown, of the Seventh United States Artillery, in recognition of his heroic conduct in saving life from the wreck of the steamer *Resolute*, in Boston Harbor, on the night of January 3, 1900. When opposite Fort Winthrop the *Resolute* collided with the heavy ocean-going tug *Swatara*, which is a steel vessel of more than 600 tons burden, the *Resolute* being a small steamer of only 70 tons. Captain Brown bravely remained on board the sinking vessel, inspiring confidence in those about him, while he assisted in transferring the passengers to the *Swatara*.

When the *Resolute* sank there were several persons still on board, among whom was Mrs. Clara J. Smith. When she rose to the surface after the sinking of the boat she was in close proximity to Captain Brown, who otherwise, in the extreme darkness, probably would not have discovered her presence. She at first seized the captain about the neck, and, being a woman weighing some 200 pounds, caused both

to sink, but when they came up the captain, with undismayed purpose and entire self-reliance, instructed her to place her hands upon his shoulders and he would save her. Twice again she bore him beneath the surface, and it seemed almost inevitable that he must abandon her or himself perish. He bravely persevered, however, and at last came across a piece of wreckage, which he seized and was able to hold to until both he and the woman were rescued by means of lines which were thrown from the tug *Channing*, that meantime had responded to the signals of distress blown by the *Swatara*.

The weather was extremely cold and dark, and there was considerable sea. The rescued woman made affidavit that but for the assistance of Captain Brown she would certainly have perished, and the evidence further shows that both would have drowned, having been invisible in the darkness, and the rescuing tug having already begun to move away supposing that all had been saved until apprised to the contrary by the screams of Mrs. Smith, whom Captain Brown requested to cry out, as he was himself so nearly submerged that he could not do so. His conduct throughout all the trying circumstances was in every way becoming a brave and generous heart, displaying unusual presence of mind, remarkable alertness, and unflinching courage, to the extreme peril of his own life.

John F. Crimmings.

Private John F. Crimmings, of the United States Marine Corps, received a silver medal for gallantly rescuing Apprentice R. H. Bonham, of the United States Navy, who fell overboard from a steam cutter of the U. S. flagship *Iowa* on the 19th of June, 1900, in the harbor of Tacoma, Washington.

About 9 o'clock in the evening the cutter was steaming to the ship with a considerable number of persons returning from shore liberty during the day, when Bonham fell into the water under such circumstances as to place his life in extreme peril. He was standing on the guard of the cutter and holding a bicycle when a heavy wave, created by a passing steamer, caused the cutter to roll so suddenly and deeply that he lost his foothold and pitched headlong into the water, carrying with him the bicycle, which became entangled in his clothes and rendered him helpless.

Crimmings heard Bonham's cry for assistance and instantly leaped overboard and swam in the direction of the voice, reaching the unfortunate man just as he was sinking and holding him up until assistance was received from the cutter. Had not the bicycle meantime broken away from its entanglement in the clothing of the boy, he would have been drowned and probably Crimmings also.

Charles Reiner.

In recognition of extreme heroism displayed in saving life at the wreck of the steamer *Weott* in Humboldt Bay, coast of California, on the 1st of December, 1899, a gold medal was bestowed upon Mr. Charles Reiner, mate of the steamer.

The vessel was disabled and reduced practically to a wreck on the bar about 5.30 o'clock in the afternoon by a succession of devastating seas which broke on board, smashed in the cabin, stove to pieces the boats, carried away the main rigging, and flooded the engine room,

creating a scene of horror and wild confusion. Half an hour later she was driven on the rocks 30 or 40 yards from the south jetty, where she pounded for some time and finally held fast about 25 yards off the trestle. By this time the weather was pitch dark, and there was great distress on board the wreck, over which the seas were frequently breaking, sometimes throwing their crests as high as the masthead, and the time which must necessarily elapse before a life-saving crew could reach the place seemed likely to result in the drowning of many of those on board. Reiner at once suggested what was then thought to be the reckless idea of jumping overboard and conveying a line to the shore, by means of which his shipmates and the passengers might be rescued. Twice the captain refused to permit the desperate undertaking, but finally, warning Reiner that he believed the attempt would be a useless risk of his life, he consented, and Reiner, making a heaving line fast to his waist, jumped into the breakers. In the dense darkness he was no longer visible, but it subsequently appeared that he was almost miraculously carried in on the back of a great breaker and landed without serious injury on the rocks, where he certainly would have been killed had he been in front of the wave. A few moments later his voice was heard coming from the trestle-work of the jetty, which stood about 20 feet above the rocks and which he reached by climbing one of the piles—in itself an astonishing feat. Picking his way along the stringers until abreast of the wreck, he shouted for a line to be thrown to him, having lost the one he attempted to take ashore. Upon receiving the line he at once made it fast and proceeded to utilize it to land the shipwrecked people, five of whom were taken to the shore. With the assistance of three of these Reiner succeeded in landing several others, when the lines fouled upon the rocks so that they could not be cleared, and the daring and humane operations suddenly came to an end. A few moments later the life-saving crew of the Humboldt Bay Station arrived upon the ground and completed the rescue.

The Secretary of the Treasury concludes his letter transmitting the medal with the following paragraph:

Your conduct throughout all the trying circumstances was commended on all hands as extremely brave and self-sacrificing. The testimony shows that you gave no thought to your own safety, but appeared to be animated solely by a lofty purpose, from which you could not be diverted, to save the lives of others, whatever peril you might yourself encounter. It is not often that an opportunity is afforded to honor so brave a man, and I experience extraordinary pleasure in acting as the medium for the award of the accompanying medal, which is the highest token that may be bestowed upon you under the laws of the United States.

W. C. Penoyar, jr., and Ralph E. V. Penoyar.

Silver medals were bestowed upon W. C. Penoyar, jr., and Ralph E. V. Penoyar, two lads of Bay City, Michigan, 15 and 12 years of age, respectively, in recognition of their gallant conduct in saving a little girl from drowning in the waters of Lake Huron, near Lexington, August 2, 1900.

Quite a number of children were wading and bathing in the water near the shore, among whom was little Miss Lena Westphal, 12 years of age. She and several others were holding hands when she thoughtlessly let go the grasp of those next to her, and, at the same time losing her foothold, was thrown down by the force of the waves and carried out into the lake by the undertow. Although she struggled

bravely to save herself, she could not regain her footing and had reached deep water when the Penoyar boys heard outcries of distress coming from some ladies who were on the shore and at once ran to the beach. Without divesting themselves of their clothing they rushed into the water and made their way to the little girl, who was then some 10 rods distant. Simultaneously laying hold of her, they began swimming back to the shore, which they finally reached after considerable effort and not without danger to themselves. But for their timely and judicious assistance the little girl would have drowned.

In view of all the circumstances, taking especially into account the youth of the boys, they appear to have displayed judgment and courage well worthy the medals they received.

W. W. Griesser.

Perhaps the most remarkable rescue performed during the year was that accomplished by Keeper W. W. Griesser of the Buffalo Life-Saving Station on November 21, 1900, which was rewarded by the bestowal of a gold medal.

The circumstances are graphically set forth in the following extract from the letter of the Secretary of the Treasury dated June 4, 1901, transmitting the medal:

About 2.20 o'clock p. m. of the day above named, while a gale of great velocity, said to have been at times as high as 80 miles an hour, was sweeping across the harbor of Buffalo, two large scows having several men on board broke from their moorings some 3 miles southwest of the life-saving station and drifted swiftly toward the breakers. Surfmen discovered the disaster from the lookout tower, whereupon you promptly launched and manned the lifeboat, which was taken in tow by the tug *Mason*, and by your direction dropped at a point three-fourths of a mile to the windward of the scows. You then allowed her to drive before the wind to a position just outside the outer line of the surf, where you rounded to and let go an anchor, intending by slacking away the hawser to get sufficiently near the scows to make sure whether the men had escaped or might still need assistance.

The terrible sweep of the wind, from which you were wholly unprotected, and the fact that the bottom of the lake at this point is mostly hardpan caused the anchor to drag so much that in a few moments the lifeboat was in the midst of the heaviest surf, which at times completely buried her. Two great combers broke on board, while a third one caught the bow and threw it high into the air, snapping asunder the hawser and pitching the heavy boat end over end. You and all but one of the crew were thrown out, and only after a hard swim reached the land more than a quarter of a mile away, where you learned that a man who had been on one of the scows was in a very perilous position among some old piles standing nearly a third of a mile from where you then were. A locomotive of the Lehigh Valley Railroad was passing at the time, and the engineer offered to take you and your crew to the place indicated, where you shortly arrived and beheld the half-drowned man clinging for his life to the slippery piles 400 or 500 feet from the shore, the seas constantly breaking over him, so deeply at times that he was entirely lost from sight.

The use of a boat was impracticable, and the situation of the unfortunate man was plainly such that he must perish unless aid should reach him. There was not time for much deliberation, and you quickly resolved to try to swim out with a line, calling upon Surfman Greenland to accompany you. As you two were about to start upon this hazardous enterprise you were warned by experienced men that you could not live to accomplish it, but, nothing daunted, you simply replied: "Wait until we try; he can not come to us; we will try to go to him."

Making one end of the line fast about your arm, you dashed into the lake, accompanied by Greenland, but had not proceeded far when you were both thrown back upon the beach. Again both set out, but when about 50 yards on the way a very heavy sea hurled Greenland against an old pile, doing him considerable injury, then swept him to the land.

You were still uninjured and bravely persisted in your purpose, being repeatedly driven shoreward but gradually gaining ground until, in the course of some fifteen minutes, you reached a pile standing some 60 or 70 yards from the beach, where you

held on for a few moments of rest. This was the only pause you made during the entire operation of rescue, which consumed three-fourths of an hour. After somewhat recovering your breath you renewed the battle, and although severely buffeted and many times beaten back from 100 to 200 feet, you still kept a stout heart. Sometimes when an ugly comber would have lifted you up and carried you rearward on its crest you dived beneath it and taking advantage of the undertow running in your favor maintained your progress. Physically weaker men could not have endured the strain, while men less brave although of equal strength would long before have given up.

At length getting sufficiently near you threw to the man the end of the line, instructing him to make it fast about his body and then to let go his hold of the piling and drop into the water. He had only sufficient strength, however, to secure the line about his wrist, and before he could leap the waves caught and fouled the bight of the line among the piling. At the same time you were thrown nearly 100 feet away and for once a fear entered your mind that you might fail after all. The imperiled man was begging piteously for you to save him and crying out that he could hold on but a few moments longer. To the people on the shore it seemed as though both of you must certainly perish. Baffled, but neither vanquished nor dismayed, you still persisted, regaining your lost ground, and at the end of fifteen minutes of very dangerous work cleared the snarl. Then upon your signal the man let go of the piles, while scores of persons at the other end of the line pulled him with a rush to the beach, where he was picked up unconscious.

When you were satisfied that no further mishap was likely to befall him you struck out for the land, which you reached without aid but so exhausted that you could not stand. Eager hands lifted your prostrate body from the edge of the water, while long-continued cheers attested the estimation accorded your gallant deed by the hundreds of persons who witnessed it.

It appears that while engaged in effecting this extraordinary rescue, involving very great courage, physical exertion, and mental anxiety, you were considerably injured by coming in contact with a floating telegraph pole, that passed over you two or three times, inflicting heavy blows upon your back. In view of this fact and all the other extremely adverse circumstances, it would seem incredible but for indisputable evidence that you performed the marvelous feat, which was, indeed, effected only at the extreme peril of your life.

Captain John Farrell.

Captain John Farrell, of Buffalo, New York, received a silver medal in acknowledgment of his heroic conduct in saving and assisting to save several persons from drowning on the 14th of October, 1886, and at other times. On the date mentioned a severe gale on Lake Erie raised the water around Buffalo Harbor to such an unprecedented height that it flooded the land and surrounded a number of houses located between the "sea-wall strip" and Buffalo Creek, rendering the escape of the residents impossible. Farrell, promptly realizing the danger, secured a skiff and devoted several hours of arduous and perilous work to the rescue of the persons in danger. Witnesses state the opinion that he individually saved the lives of a considerable number of persons during that night. He especially distinguished himself, however, by the rescue of an old lady, past 92 years of age, who was left alone, bedridden and helpless, in her humble dwelling while the storm was at its height. Many houses had already been destroyed and the frightful devastation was still going on, nevertheless when the appalling situation of the helpless old lady came to Captain Farrell's knowledge he forgot or put behind him all thought of danger to himself and courageously forced his way to the house, which had already been moved from its foundations, and placing the decrepit woman upon his back, conveyed her to a place of safety. The next morning showed that only one of the 20 houses formerly standing in the neighborhood remained, and that one was seriously damaged. The testimony clearly proves that on this occasion Farrell's self-imposed task was performed at the hazard of his life.

On the 4th of August, 1895, while in command of the harbor tug *E. C. Maytham*, Captain Farrell also rendered important aid in rescuing people from the capsized steam yacht known as the *Bung Brothers*, and on the 1st of August, 1899, while in command of the tug *S. W. Gee* he performed similar service.

André Fourchy.

A silver medal was granted to André Fourchy in view of heroic conduct displayed in saving the life of a man in imminent danger of drowning in the surf at Virginia Beach, Virginia, August 27, 1900.

A party of several persons while engaged in bathing suddenly found themselves beyond their depth, and all instantly turned for the shore. A lady of the group, however, found the current too strong, and when the rest reached the beach they discovered that she was still in the water and drifting seaward. Her husband promptly rushed back to her assistance, but it soon became evident to those on shore that he could neither save his wife nor probably himself again reach the beach. An alarm of distress was therefore made, which came to the ears of Mr. Fourchy, at the time engaged in writing in his room at the Dodson cottage. He at once dashed down the stairway, seized a life-preserver from the portico as he passed out, and upon reaching the edge of the water, pausing for only a moment to remove his shoes, plunged in and swam rapidly to the assistance of the imperiled man, whose wife was meantime being looked after and was rescued without much difficulty by another person.

The tide was running out strongly and there was little difficulty in swimming seaward, but when Mr. Fourchy reached the now almost exhausted man the latter frantically endeavored to seize him, which purpose, however, Fourchy skillfully thwarted, pushing under the man's breast the life-preserver and passing his arms through it in such a way as to support his head above water. Fourchy then struck out for the shore and for a considerable time engaged in a most discouraging struggle against the strong outflowing tide, towing and partially supporting the unconscious man. After a brave and determined effort, however, he succeeded in delivering his helpless burden safe upon the beach.

Captain E. Alexander.

Captain E. Alexander, master of the steamer *Mexico*, plying between San Francisco and San Diego, California, was the recipient of a silver medal bestowed upon him in acknowledgment of his humane and courageous conduct in rescuing an insane passenger who jumped overboard from the *Mexico*, which was lying at the wharf at Port Harford, April 3, 1900.

It appears that the demented person was a passenger on board the vessel, in charge of two deputy sheriffs, en route to the State insane asylum, and while locked in his stateroom seized a moment when he was unobserved and jumped through an open porthole into the water with the evident purpose of drowning himself.

Captain Alexander was some 300 yards distant from the vessel when he heard the cry "Passenger overboard!" and running to the dock was shown the place where the man was last seen to go down, between the vessel and the wharf. The captain immediately jumped into the

water, went some 6 feet beneath the surface, seized the drowning man, and sustained him until a rope was thrown, which he made fast about his body, and by means of which he was hauled on board the vessel, the captain himself being subsequently rescued in the same manner. The water was rough at the time, and the ship was surging back and forth from the wharf, while a strong undertow was running, making the position of the rescuer one of extreme danger.

Archie Farrell.

Archie Farrell, of Buffalo, New York, received a silver medal for rescuing Miss Laura McLeod from drowning at Woodlawn Beach, New York, August 15, 1897, the circumstances, as shown by the evidence submitted to the Department, having been as follows:

Miss McLeod, while in bathing with several others, got into dangerous water and called for assistance, to which one of the bathers responded, but was unable to help her. Two or three men on the beach also endeavored to rescue her, but failed on account of the heavy surf. A large crowd meantime gathered on the beach, but after the unsuccessful attempts above mentioned no one volunteered to go to the aid of the girl, who was floating and keeping above water as best she could, but having been out nearly half an hour was rapidly losing her strength. At this moment Archie Farrell arrived on the beach, and quickly comprehending the perilous situation of the unfortunate bather, threw off his clothing and, against the general protestations of the onlookers, plunged into the surf. Several times the waves threw him back on the beach, but he bravely kept up the struggle and at last began to make headway. Miss McLeod had sunk once and but for the timely arrival of her rescuer probably would have drowned. Farrell placed a life-preserver under her and by this means kept her afloat until the arrival of a rowboat that went to their assistance. He then swam to the shore.

WOMEN'S NATIONAL RELIEF ASSOCIATION.

The supplies of clothing, cordials, and delicate foods furnished annually to the stations since 1880, for the use of shipwrecked persons, have been liberally continued during the past year by the Women's National Relief Association, and have afforded such welcome melioration of the distress incident to marine disasters as can be fully appreciated only by the unfortunate men and women who have been rescued from the perils of the sea, almost invariably drenched to the skin, frequently terribly bruised or dangerously wounded by falling spars or other wreckage, and in many cases not only unconscious, but barely alive.

Within the period covered by this report 87 instances occurred in which articles supplied by the association were furnished to 294 persons, as follows.

Benefactions, Women's National Relief Association.

Date.	Station and locality.	Beneficiaries.
1900.		
July 1	City Point, Massachusetts	Five survivors from the capsized yacht Niobe.
3	Oak Island, New York	A man from a sunken catboat.
3	Milwaukee, Wisconsin	A man who fell into the water from South pier.
3	do	Four men from the capsized yacht Nellye.
6	Charlotte, New York	A boy who fell from the pier into the water.
7	Cleveland, Ohio	Six survivors from the sunken yacht Idler.
8	Plum Island, Massachusetts	Two men from a capsized boat.
8	Point Marblehead, Ohio	Six persons, crew of the disabled steamer Ida.
27	Cape Lookout, North Carolina	Three people who were drenched by a heavy rain squall.
27	Sheboygan, Wisconsin	Two men from a capsized rowboat.
29	Point Adams, Oregon	Two men from a swamped fish boat.
Aug. 2	Rehoboth Beach, Delaware	Two men, crew of the stranded schooner Starlight.
9	Galveston, Texas	Three men from a capsized boat.
11	Charlotte, New York	Three men and one woman from capsized yacht Elveah.
14	Sand Beach, Michigan	Two men from the stranded yacht Florence E.
18	Charlotte, New York	A man who attempted to drown himself.
30	Highland, Massachusetts	Master of wrecked sloop Wanda.
31	Old Chicago, Illinois	A boy who fell off a pier.
Sept. 3	Plum Island, Massachusetts	A man from a capsized boat.
10	Old Chicago, Illinois	A man and a woman who were rescued from drowning.
15	Sandy Hook, New Jersey	Two of the crew of the stranded catboat Alma.
17	Great Egg, New Jersey	A man from a stranded sharpie.
18	Gurnet, Massachusetts	Eleven men, crew of the fishing schooner Ettie.
18	Cahoons Hollow, Massachusetts	Two men from the barge Blackbird, who were hauled out of the surf.
20	Great Egg, New Jersey	A man from a wrecked catboat.
24	Baileys Harbor, Wisconsin	A man rescued from a capsized schooner.
Oct. 3	Great Egg, New Jersey	Eleven people from the capsized catboat Ella.
6	Peaked Hill Bars, Massachusetts	Five men from the wrecked schooner Katie G. Robinson.
16	Highland, Massachusetts	Five men from the wrecked schooner General Sheridan.
17	Coskata, Massachusetts	Five men from the foundered schooner David S. Siner.
18	Humboldt Bay, California	An Indian from a capsized canoe.
29	Race Point, Massachusetts	An old man who came to station wet and exhausted.
31	Cedar Creek, New Jersey	Three men from the stranded sloop Lady Louie.
Nov. 3	Sullivan's Island, South Carolina	A man from a stranded sloop which had filled in the breakers.
5	Quonochontang, Rhode Island	Two fishermen from a capsized boat.
7	Vermillion Point, Michigan	Two women from the stranded British steamer Arabian.
9	Lone Hill, New York	Four gunners who had to wade ashore from their stranded catboat.
9	Sandy Hook, New Jersey	Four men from the wrecked schooner Grover Cleveland.
13	Saint Joseph, Michigan	Four men from the stranded schooner Pride.
18	Cleveland, Ohio	A man from a capsized catboat.
21	Sturgeon Point, Michigan	Four men, crew of the disabled schooner I. L. Quinby.
Dec. 4	Point Lookout, New York	Two men from stranded sloop Ripple.
5	Fletchers Neck, Maine	Five men, crew of stranded schooner Sea Bird; five men, crew of stranded schooner Thomas B. Reed; four men, crew of stranded schooner R. P. Chase.
9	Assateague Beach, Virginia	Two men from stranded yacht Sagitta.
21	Lewes, Delaware	Four men from wrecked schooner N. H. Skinner.
21	Cape Henlopen, Delaware	Five men from wrecked schooner N. H. Skinner.
21	Dam Neck Mills, Virginia	Five survivors of the wreck of schooner Jennie Hall.
1901.		
Jan. 3	Nauset, Massachusetts	Seven men from the wreck of the British schooner Lily.
16	Velasco, Texas	An old man who was injured while working on a wreck.
17	Bethel Creek, Florida	A man who had been drenched by a heavy rain while traveling on the beach.
19	Cuttyhunk, Massachusetts	Three of the crew of the wrecked schooner George P. Davenport.
19	Cold Spring, New Jersey	Six persons, crew of the wrecked schooner John Russell.
20	Atlantic City, New Jersey	Four men taken from the rigging of the wrecked schooner A. J. Coleman.
21	Hunniwells Beach, Maine	Seven men, crew of the wrecked schooner Joseph Luther.
24	North Beach, Maryland	Five men, crew of a capsized small boat from the tug Sommers N. Smith.
Feb. 13	Blue Point, New York	A fisherman who broke through the ice.
22	Lone Hill, New York	Two fishermen who had been thrown into the water.
22	Fort Point, California	Three men from the sunken steamer City of Rio de Janeiro.
Mar. 2	Saluria, Texas	A man from a capsized sloop.
15	Sullivan's Island, South Carolina	Four men from the sloop Jubilee.
Apr. 9	Fourth Cliff, Massachusetts	Five men, crew of the wrecked schooner Geo. S. Boutwell.

Benefactions, Women's National Relief Association—Continued.

Date.	Station and locality.	Beneficiaries.
1901.		
Apr. 19	City Point, Massachusetts	A boy who had fallen into the water from a wharf near the station.
20	Chadwick, New Jersey	Eight men, crew of the wrecked British schooner <i>Mola</i> .
May 1	Old Chicago, Illinois	A boy who had fallen into the lake.
2	Bois Blanc, Michigan	A man from a capsized catboat.
5	Jerrys Point, New Hampshire	The master of the wrecked schooner <i>Helen</i> .
5	Point of Woods, New York	Nine people from the capsized sloop <i>Greyhound</i> .
8	Old Chicago, Illinois	A sick man who was drenched in a heavy rain.
10	Point Lookout, New York	Six men from the wrecked schooner <i>A. R. Keene</i> .
11	Ship Canal, Michigan	Thirty-one persons from the burned steamer <i>Bon Voyage</i> .
	Great Boars Head, New Hampshire.	A fisherman who was lost from the schooner <i>Tecumseh</i> during a fog.
19	Grand Haven, Michigan	A man who fell into the lake while fishing.
22	Cape Disappointment, Washington.	Three fishermen rescued from two capsized boats.
24	Gurnet, Massachusetts	Five men from the stranded sloops <i>Albert Drummond</i> and <i>Jennie A. Hupper</i> .
24	Point Adams, Oregon	Two men rescued from a capsized fish boat.
25	Hog Island, Virginia	A fisherman who had been drenched in a heavy storm.
25	Hammonds Bay, Michigan	A woman from the disabled schooner <i>Storm</i> , and her baby who was born after she reached the station.
29	Eatons Neck, New York	Two men from a small sloop.
30	Milwaukee, Wisconsin	A boy who fell into the water from South pier.
June 3	Cleveland, Ohio	Two men taken from a capsized skiff.
6	South Chicago, Illinois	A fisherman from a boat stranded on a submerged crib.
7	Isle of Wight, Maryland	Two young men who were drenched in a heavy rain storm.
11	Fort Point, California	Two men rescued from a scow, over which the sea was breaking heavily.
16	Rehoboth Beach, Delaware	Two men from the stranded launch <i>Emma</i> .
22	Manistee, Michigan	A young girl who fell into the lake from North pier.
22	Evanston, Illinois	A girl from a capsized rowboat.
23	Milwaukee, Wisconsin	Five boys from a capsized skiff.

NEW STATIONS, REPAIRS TO OLD STATIONS, ETC.

A new station, located at Gloucester, Massachusetts, which was in course of construction when the last report was made, has been completed and put in operation.

A new station is being erected at Harvey Cedars, New Jersey, in place of the old one, which was no longer suitable for use.

The old station at Manomet Point, Massachusetts, which was also dilapidated and antiquated, has been replaced by a new building.

New stations are now building at South Manitou Island and Sleeping Bear Point, Michigan.

Since June 30, 1901, the necessary preparations have been made for rebuilding the stations on Monomy Island, Massachusetts, and at Amagansett, Long Island, and contracts have been entered into.

In anticipation of the construction of a new station at Buffalo, New York, an opening is now being made through the south pier of Buffalo River to provide for a launchway to be built in connection with the station.

The Southampton Station, Long Island, New York, has been moved to a location better adapted to the purposes of the Service.

Sites have been selected for stations authorized by law to be erected on Fishers Island, New York, and Cape Ann, Massachusetts. A more advantageous location for the Crumple Island Station, coast of Maine, has also been selected, and action has been taken with a view to the acquisition of titles to these sites.

Stations on the Massachusetts, Long Island, Virginia, and North Carolina coasts have been extensively repaired during the year.

The increase of the Service upon the Pacific coast, where the distances to be traversed by inspecting officers are long, the means of conveyance limited, and the stations difficult to reach, has made it necessary that the district be divided into two inspection sections and an additional inspector assigned to that coast.

MANUFACTURE OF LYLE GUNS.

In the year 1899 it became necessary to provide for the fabrication of additional Lyle guns and appurtenances for the use of the Service. The assistance of the War Department was invoked, and on December 5, 1899, that department entered into a contract with the American Ordnance Company, of Bridgeport, Connecticut, for the manufacture of 100 guns and 1,560 projectiles. The fabrication and delivery of the guns, with their projectiles and other appurtenances, were completed during the past year.

A detailed report of the foundry work carried on in connection with the manufacture of the guns at the foundry of the Bridgeport Leoxidized Bronze and Metal Company was made by Mr. W. A. Kinsman, S. B., who superintended the construction for the company. Major D. A. Lyle, of the Ordnance Department, United States Army, was the inspector on the part of the Government, under whose direction the work proceeded; and in accordance with the recommendation of Major Lyle, who states that the information and data are valuable and should be preserved in printed form for future use and reference, the report is printed in another part of this volume.

COMPENSATION OF DISTRICT SUPERINTENDENTS.

Attention is again urgently called to the inadequate compensation of district superintendents, whose salaries are utterly disproportionate to the serious and exacting nature of their duties and the extent of their fiscal responsibilities. Their present salaries, which range from \$1,500 to \$1,800 per annum, were fixed as long ago as 1882. They were meager then, while since that time the Service has been largely extended, the number of stations in all districts having been increased, in some instances 100 per cent or more, and in others 50 per cent. The fiscal responsibilities of the superintendents have been correspondingly enlarged, so that they are now required to furnish bonds ranging from \$10,000 to \$50,000 in amount, and their multifarious duties are augmented to such an extent that several of them are obliged to employ clerical assistance at their own expense. They are probably the poorest paid officers under the Government.

It is earnestly recommended that the compensation of each superintendent be advanced to at least \$2,500 per annum, which is believed to be considerably less than is paid to any officers holding correspondingly responsible positions. Their claims have heretofore been recognized by both Houses of Congress, which have on different occasions passed bills proposing substantially the increase requested, although they failed to be enacted into law. In the early days of the last session the proposition passed the Senate, but owing to the shortness of the session and the vast amount of business before the House, it failed to obtain the consideration of the latter body.

SERVICES OF LIFE-SAVING CREWS.

1900-1901.

SERVICES OF LIFE-SAVING CREWS.

Under this caption are concisely noted the services performed by crews in connection with all wrecks and disasters to vessels within the scope of station operations.

These accounts are necessarily extremely brief, sometimes the work of many perilous hours, and not infrequently that of several days, being described in a very few lines.

A large number of the cases each year are among the most important, in respect to the dangers involved as well as the devotion and oftentimes the extremely heroic conduct of the crews, and it is a matter of great regret that the force of the office is not sufficient to permit the statement of these services to be written out in full detail, in which form they would be of great value not only to mariners in similar cases, but to the keepers and surfmen, who might thereby become familiar with expedients adopted and results achieved by their comrades at other stations than their own.

[Abbreviations used in this statement: bg. (brig), bk. (bark), bkn. (barkentine), elec. (electric), gas. (gasoline), lch. (launch), nph. (naphtha), sc. (schooner), shp. (ship), slp. (sloop), st. (steam), str. (steamer), yt. (yacht), Am. (American), Br. (British), Fr. (French), Ger. (German), It. (Italian), Mex. (Mexican), Nor. (Norwegian), Swed. (Swedish).]

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 1	Dory, no name	Gap Cove, Massachusetts.	Struck the rocks near the station and threw out the occupant, who was under the influence of liquor. Keeper (inactive season) assisted him to reach the shore, and then hauled the dory to a safe place.
July 1	Cat yt. Niobe	City Point, Massachusetts.	Capsized in a strong WNW. breeze, 2½ miles E. of station, and soon sank. Keeper and three surfmen were on their way to Spectacle Island at the time in the station launch, and were only ¼ of a mile from the boat when it capsized. They immediately headed for the scene, and shortly received on board six survivors, who had been picked up by three yachts which were near at hand at the time of the accident. One of the men picked up was unconscious, and although taken at once to the station, where surfmen applied the Service method of restoring the apparently drowned, could not be revived. Station crew made a diligent search in the vicinity of the disaster, but were not able to find two missing bodies, which, however, were recovered afterwards. The survivors were succored at the station until able to repair to their homes, and were furnished with dry clothing from the stores of the Women's National Relief Association.
July 1	Slp. yt. Seila .....	.....do	Lost rudder 4 miles E. of station. Police boat picked her up and towed her to the station, whence the surfmen towed her into Pleasure Bay with their launch, and made her secure at her moorings.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900.			
July 1	Dory, no name	City Point, Massachusetts.	Surfmen towed this dory in to the landing in Pleasure Bay, the occupant having broken his rudder and torn his sail.
July 1	Sloop, no name.....	Long Beach, New York ..	Capsized about $\frac{1}{4}$ a mile NW. of station. Another boat, which was close at hand, picked up the occupants and towed the capsized boat to shore, where the keeper (inactive season) assisted to right it, ball it out, and put it in sailing trim.
July 1	Am. str. Cascade....	Buffalo, New York, Lake Erie.	In collision with the tug Peerless. A large hole was stove in the bow of the Cascade, but she was beached before she sunk. The Peerless took off her crew, and surfmen took charge of the wreck until the master returned with a working party; assisted to batten down the hatches, so that they could get pumps to work. She was raised and repaired.
July 1	Am. sc. Manitowoc..	Erie, Pennsylvania, Lake Erie.	Became water-logged in a gale of wind. Surfmen went out and ran a hawser on board for a tug, which safely towed her into a dock in Erie Harbor.
July 1	Am. str. Ella M. Smith.	Two Heart River, Michigan, Lake Superior.	Lost anchor while waiting for a raft of logs, and sounded whistle for assistance. Surfmen swept for the anchor, located it, and buoyed it for the steamer.
July 1	Small boat, no name.	Ship Canal, Michigan, Lake Superior.	Sail blown away and boat drifting out into the lake with two boys on board. Station crew launched the surfboat, overhauled the drifting boat about 2 miles NW. of station, and towed it to the shore.
July 1	Sloop, no name.....	Duluth, Minnesota, Lake Superior.	Capsized about $1\frac{1}{2}$ miles SW. of station with one man on board. Surfmen rescued the man, and towed the sloop to a dock where they hauled it out.
July 1	.....do.....	Kenosha, Wisconsin, Lake Michigan.	Capsized near the station with three men on board. Surfmen picked up the men and towed the sloop to the shore.
July 2	Canoe, no name....	Duluth, Minnesota, Lake Superior.	Capsized about $\frac{1}{2}$ mile S. of station, throwing two men into the water. Surfmen quickly launched the lake-service boat, rescued the men, and towed the canoe to station.
July 2	Slp. Zephyr.....	Holland, Michigan, Lake Michigan.	Capsized in Black Lake about $1\frac{1}{2}$ miles NE. of station. The two occupants were rescued by a rowboat, which was near by at the time of the accident. Station crew righted and bailed out the sloop, and recovered a valuable fishing rod.
July 3	Sc. Rambler.....	City Point, Massachusetts.	Adrift from moorings with nobody on board. Surfmen reached her just as she struck the beach. They ran an anchor offshore, and with the assistance of the station launch floated her and towed her to safe moorings.
July 3	Am. sc. Lulu Guy ..	Point Betsie, Michigan, Lake Michigan.	Anchored in an exposed position about 1 mile N. of station. The wind having shifted to the N., making her berth dangerous, the surfmen boarded her, and as she was shorthanded they assisted to get her under way.
July 3	Slp. Ariel.....	Holland, Michigan, Lake Michigan.	Capsized in Black Lake about $\frac{1}{2}$ mile SE. of station. The sole occupant was taken from the water by a passing ferryboat. Surfmen went out and righted the sloop, bailed her out, and towed her in to a dock.
July 3	Slp. yt. Nellye.....	Milwaukee, Wisconsin, Lake Michigan.	Capsized in Milwaukee Bay about $2\frac{1}{2}$ miles ESE. of station during a heavy squall. Her crew of four men clung to the submerged boat until they were rescued by the life-saving crew, who arrived at the scene just in time to save them. Before reaching the shore, one of the men became unconscious and had to be rubbed until the surfboat arrived at station where stimulants were given to him and he revived. All the rescued men were provided with dry clothing from the stores of the Women's National Relief Association, and were soon able

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 3	Sep. yt. Nellye	Milwaukee, Wisconsin, Lake Michigan.	to go to their homes. Surfmen went out to the scene of the accident a second time, recovered the boat, towed it to the station, and on the next day turned it over to the owner. (See letter of acknowledgment.)
July 4	Gas. lch., no name.	City Point, Massachusetts.	Engine became disabled about $\frac{1}{2}$ of a mile SW. of station, the launch having eight passengers on board. Surfmen went to them in station launch and towed them to the Pleasure Bay landing.
July 4	Sailboat Caprice....	Buffalo, New York, Lake Erie.	Anchored about 3 miles SE. of station with sails blown away. Surfmen boarded her, hove up her anchors, and ran a line to a tug, which towed her to the station where the keeper took care of her until the next morning, when the owner came with a small steamer and towed her away.
July 4	Slp. Satyr.....	Old Chicago, Illinois, Lake Michigan.	Capsized outside the 4-mile crib with four men on board. Station crew immediately towed out in surfboat and picked up one man who was clinging to the capsized boat, which they righted and towed to the station where they bailed her out, and then took her to the Columbia Yacht Club. The three other occupants of the sloop were picked up by a steam launch, which happened to be in the vicinity at the time of the accident.
July 5	Am. sc. Merchant ..	Bethel Creek, Florida	Stranded on a sand flat. Keeper (house of refuge, no crew employed) assisted to release her.
July 5	Am. str. Queen	Buffalo, New York, Lake Erie.	Stranded 1 mile NW. of station. Surfmen boarded her, and then, upon the request of the master, went after a tug. Surfmen stood by to render assistance until the tug released her.
July 5	Am. str. York State.	Ludington, Michigan, Lake Michigan.	Unable to make harbor entrance with a pile driver in tow and sounded signal for assistance. Station crew notified a tug, and then pulled out to the steamer and landed two men and a line from the steamer on north pier, whereupon she swung around head to wind and was able to work herself into the harbor, but could not get the pile driver around the end of the pier. One surfman went aboard the pile driver and hove a line to the pier, thus securing it until a tug came and safely towed it into the harbor.
July 5	Rowboat, no name.	Holland, Michigan, Lake Michigan.	Adrift in Black Lake. Two surfmen pulled out in supply boat, picked it up, and towed it to a dock where they delivered it to owner.
July 5	Skiff, no name.....	Milwaukee, Wisconsin, Lake Michigan.	Adrift. Station crew picked it up, towed it to the shore, and on the following day delivered it to owner.
July 6	Slp. yt. Lark.....	Aransas, Texas.....	Capsized in fresh ESE. breeze, 2 miles NNE. of station, with two men on board. Several small yachts were racing at the time, and the keeper, fearing some mishap, had followed after them in the station supply boat. He rescued the two men and towed their boat into shoal water, where, with the assistance of a volunteer (inactive season), he righted and bailed it out.
July 6	Am. str. George W. Roby.	Lake View Beach, Michigan, Lake Huron.	Stranded $\frac{1}{4}$ miles SE. of station. Surfmen pulled out and ran a line to a passing steamer which succeeded in releasing her.
July 6	Skiff, no name.....	Beaver Island, Michigan, Lake Michigan.	Capsized near station in a heavy SSW. wind and sea. Keeper and one man pulled out, rescued the two occupants, and towed their skiff to the shore.
July 6	Sloop, no name.....	North Manitou Island, Michigan, Lake Michigan.	Broke main boom and centerboard about $\frac{1}{2}$ mile E. of station during a S. gale and heavy sea. Station crew pulled to the disabled craft in the surfboat and towed it to the pier, where they made temporary repairs which enabled it to proceed to its destination.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 6	Rowboat, no name.	Holland, Michigan, Lake Michigan.	Adrift in Black Lake. Surfmen towed it to the pier, where the owner took possession of it.
July 6	Skiff, no name.....	South Haven, Michigan, Lake Michigan.	The sole occupant of this skiff could make no headway against the strong wind and sea, and was in danger of being carried out into the lake. Station crew launched surfboat, pulled out, and towed the skiff into the harbor.
July 6	Rowboat, no name.	Chicago, Illinois, Lake Michigan.	Became water-logged about 2 miles NE. from station, and drifting seaward with three men on board during a fresh offshore wind and rough sea. Surfmen overhauled them, took them into the station boat, and returned safely to shore with their boat in tow.
July 7	Sloop, no name.....	Charlotte, New York, Lake Ontario.	Capsized about $\frac{1}{2}$ mile N. of station. The three occupants were picked up by small boats which were close at hand. Surfmen pulled out immediately and brought the rescued men and their boat to the shore.
July 7	Slp. Fram	Erie, Pennsylvania, Lake Erie.	Capsized about $2\frac{1}{2}$ miles SW. of station, during a heavy squall, while the owner and his wife were out on a pleasure sail. Surfmen hastily pulled to the scene of mishap, but a passing tug rescued the couple before their arrival. They righted and ballied out the sloop, and towed it to its moorings.
July 7	Slp. yt. Jane	Cleveland, Ohio, Lake Erie.	Dragged anchor and stranded $\frac{1}{2}$ of a mile SW. from station during a heavy squall. Surfmen went out and ran a hawser for a tug which hauled her afloat and towed her to a good anchorage under the west breakwater.
July 7	Am. sc. yt. Idler.....	.....do.....	Capsized and sunk about 15 miles WNW. from station during a severe squall. The fishing tug F. E. Smith landed six survivors at the station where the keeper furnished them with dry clothing from the stores of the Women's National Relief Association, and gave restoratives as required. Surfmen towed out to the wreck and searched in vain for the bodies of the six persons who lost their lives in this disaster. They assisted a diver to recover three bodies from the wreck, placed a light upon the mast each evening, and each day patrolled the beach looking for missing bodies. On the 13th instant they went out and ran lines for a wrecking crew, who succeeded in raising the yacht and towing it into the harbor. When the cabin was pumped out, another body, that of an infant, was found and taken to the life-saving station.
July 7	Lch. Mabel	Grand Haven, Michigan, Lake Michigan.	Machinery became disabled while out on Lake Michigan, $3\frac{1}{2}$ miles S. of station, with a crew of two men on board. Station crew went to their assistance in the surfboat, and safely towed the launch into the river.
July 8	Yt. La Viva.....	City Point, Massachusetts.	Became dismasted in a fresh SW. breeze about $\frac{1}{2}$ mile NNW. of station. Station launch towed her to Lawley's shipyard for repairs.
July 8	Sailboat, no name .....	.....do.....	Main sheet traveler carried away and occupant unable to manage the boat. Station launch towed it to Lawley's shipyard.
July 8	Br. sc. Albecore.....	Charlotte, New York, Lake Ontario.	Struck by a squall in the harbor entrance and compelled to anchor. She soon began to drag and signaled for assistance. Surfmen boarded her and helped to haul her alongside the pier.
July 8	Yt. It Is.....	.....do.....	Struck by a squall and capsized in the river near the station. Surfmen rescued the two occupants and towed the yacht to station.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 8	Yt. Spook.....	Charlotte, New York, Lake Ontario.	Struck by a squall, became unmanageable, and was fast drifting out to sea with three men on board. Station crew pulled out, took two of the men into the surfboat and made a line fast to the yacht, and then started for the shore. After proceeding a short distance a steamer came along and towed both boats to the station.
July 8	Gas. lch., no name..	Fort Niagara, New York, Lake Ontario.	Engine broke down while two men were out fishing in this launch. Station crew pulled out in surfboat and towed the disabled craft to the dock.
July 8	Yts. Rena and Windward.	Buffalo, New York, Lake Erie.	Dragged anchors and stranded near the Buffalo Yacht Club. Surfmen hauled them both afloat and towed them to safe berths.
July 8	Scow No. 8.....	Cleveland, Ohio, Lake Erie.	Dragged anchor and stranded $\frac{1}{2}$ mile SW. of station during a severe squall. Surfmen ran a hawser to it for a tug, which hauled it off the beach and towed it to a place of safety.
July 8	Am. str. Ida.....	Point Marblehead, Ohio, Lake Erie.	This steamer anchored off the W. end of Kelleys Island, 3 miles N. of station, during a severe gale. She rolled at her anchors so much that the cabin stanchions gave way, dropping the upper works onto the main deck. Her crew took refuge forward and hoisted a signal of distress. Station crew boarded her in surfboat and took the entire crew of six persons to the station where the keeper supplied them with dry clothing from the stores of the Women's National Relief Association and with food. Keeper then telegraphed to Sandusky for a tug, which soon arrived off station. Surfmen went out to the steamer in tow of the tug, securely lashed her upper works to the rail, and then ran the station hawser from her to the tug. When ready to go ahead the surfmen slipped and buoyed the anchors. The tug towed her to a dock in order that her crew might board her again, and then went on with her to Sandusky for repairs. On the 14th instant she arrived off the station under her own steam, and surfmen went out and assisted to get her anchors on board.
July 9	Lighter, no name...	Fort Niagara, New York, Lake Ontario.	Went adrift from moorings and stranded on the beach, $\frac{1}{2}$ mile NE. of station, during the night. Surfmen hauled it afloat, towed it to the station, and made it well fast in the cove.
July 10	Am. sc. Rose.....	Fletchers Neck, Maine...	Stranded on South Point, $\frac{1}{2}$ mile SW. of station, with only one man on board, who was deaf and partly blind, and who was bound to Harpswell, Maine. Keeper and volunteer surfmen (inactive season) boarded her, and, finding her partly filled with water, they patched her bottom with canvas at low tide. Then they carried out two anchors, and succeeded in hauling her afloat at high water. They beached her on the flats in the Pool, and worked on her for several days, getting her in shape to continue on to her destination. When ready for sea, the keeper sent a surfman to help take the schooner to Harpswell.
July 10	Skiff, no name.....	Monmouth Beach, New Jersey.	Capsized $\frac{1}{2}$ mile E. of station with two fishermen aboard. Keeper and a temporary surfman (inactive season) hastily pulled out in a small boat, and, with the assistance of another fishing skiff, rescued the imperiled men and saved the skiff and all its gear.
July 10	Gas. lch., no name.	Fort Niagara, New York, Lake Ontario.	Machinery became disabled about $1\frac{1}{2}$ miles N. of station, the boat having a fishing party of six people on board. Station crew pulled out in surfboat and towed the launch into the river.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 11	St. lch. Jessie.....	City Point, Massachusetts.	Engine broke down off Spectacle Island with six passengers on board. Station launch safely towed the party to their destination.
July 11	St. lch. Vim .....	.....do.....	Engine disabled off Peddocks Island. A schooner towed the crippled boat in and turned it over to the surfmen, who towed it to its moorings at the head of Dorchester Bay and landed the two occupants.
July 11	Sc. yt. Klondike....	Big Sandy, New York, Lake Ontario.	Capsized by a squall 3½ miles S. of station. Station crew pulled out in surfboat and rescued the sole occupant, whom they found on the bottom of the overturned boat. They towed the boat to shore, righted it, bailed it out, and then hauled it up on the beach.
July 11	Am. str. Walter Vail.	Sand Beach, Michigan, Lake Huron.	Sounded whistle for assistance off harbor entrance. She was short of fuel and drew too much water to enter the harbor. Surfmen landed the master and seven sailors, and helped them procure a lighter to take a load of coal out to the steamer.
July 11	Sloop, no name.....	.....do.....	Capsized near the station. A surfman rescued the single occupant and towed the sloop to the dock, where he righted it and bailed it out.
July 11	Yawl, no name.....	.....do.....	A man pulling across the harbor in this yawl lost one of his oars. There was a brisk offshore breeze, which was carrying the boat out into the lake. A surfman pulled out and recovered the oar for the man, who then was able to reach his destination.
July 11	Rowboats (2), no names.	Holland, Michigan, Lake Michigan.	Adrift in Black Lake, about ¼ mile E. of station. Surfmen towed them to the beach, secured them, and notified the owners of their whereabouts.
July 11	Am. str. Sailor Boy..	Old Chicago, Illinois, Lake Michigan.	Stranded at Lincoln Park, 4 miles N. of station, while trying to make a landing. Surfmen notified a tug of the mishap and then towed to the stranded steamer. They ran a line twice for the tug, but it parted each time, and the tug returned to town for a larger line. The master of the stranded vessel then decided to wait for the sea to subside, and soon afterwards she released herself.
July 11	St. lch. White Fawn.	Racine, Wisconsin, Lake Michigan.	An eccentric bolt having broken, the crew of this launch beached it 3 miles S. of station and went ashore. Surfmen found the boat pounding heavily on the bottom, containing much water, and likely to sustain serious damage if left longer where beached. They hauled it afloat, bailed out the water, and towed it into the harbor. Later in the day the owners came to station and claimed it.
July 12	St. lch. Genevieve ..	Big Sandy, New York, Lake Ontario.	Engine became disabled, 2½ miles N. of station, in a rough sea. The crew of three men hoisted a signal of distress. Station crew went out and towed them to the mouth of Big Sandy Creek, where, putting out the drogue astern of the steam launch, they made a safe landing through the surf.
July 12	Fish boat, no name.	Point Adams, Oregon	While sailing along near station, this boat struck a broken pile which went through the bottom. Surfmen quickly went to the aid of the two fishermen on board, and, seeing what was needed, they returned to station after a saw, some sacks, and bailing buckets. They sawed off the pile near the bottom of the boat on the inside, lifted the boat clear, and then filled the hole with sacks. By continually bailing, surfmen kept the boat afloat until they beached it, where the damage could be repaired at low water.
July 13	Rowboat, no name..	Oswego, New York, Lake Ontario.	This boat, containing four boys, tried to land through the surf, near the station, after being warned of the danger by the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 13	Rowboat, no name..	Oswego, New York, Lake Ontario.	Surfman on watch. The boat broached to and filled, and one boy jumped overboard. Surfmen went into the breakers and hauled both boys and boat safe to land.
July 13	Sailboat, no name..	Buffalo, New York, Lake Erie.	Capsized above the sand catch, about 3 miles SE. from station. The three boys on board reached the shore before the arrival of the surfman, who, however, bailed out their boat and hauled it up on the beach.
July 14	Slp. Cassey.....	City Point, Massachusetts.	Lost rudder, while bound from Thompsons Island to Commercial Point, with two passengers on board. Station launch towed the disabled craft to its destination.
July 14	Slp. yt. Dosia .....	.....do.....	Sail blew away in Dorchester Bay, $\frac{1}{2}$ mile ESE. of station, in a fresh NW. breeze, leaving the sloop in a helpless condition with six passengers on board, besides the man in charge. Station launch towed them to the float at the South Boston Yacht Club.
July 14	Slp. Everett.....	.....do.....	Stranded on the rocks off Rainsford Island, 6 miles SE. by E. from station, at high water. After being notified of the mishap by the South Boston Yacht Club, the station crew at once started for the stranded yacht with the large launch and 13-foot rowboat. They took out her ballast, calked some of her seams, planted their anchor well offshore, and then just before high water succeeded in floating her. They towed her to City Point and beached her, so that her owner could finish calking her.
July 14	Slp. Oriole.....	.....do.....	Dragged anchor and drifted toward Thompsons Island with five men on board, who were much frightened, as they could not handle the sloop in the fresh wind that was blowing. Surfmen picked them up with station launch and towed them to the landing at the Mosquito Yacht Club.
July 14	Gas. yt. Avalon	Avalon, New Jersey.....	Engine became disabled $\frac{1}{2}$ mile E. of station. Keeper and two volunteer surfmen (inactive season) safely towed her into Townsend Inlet and landed the four persons on board.
July 14	Lighter, no name...	Duluth, Minnesota, Lake Superior.	Went adrift at 4.30 a. m. during a NW. gale. Surfmen pulled out without delay and safely landed the three men. After the gale abated a tug towed the lighter back to its moorings.
July 14	Slp. Una.....	Chicago, Illinois, Lake Michigan.	This sloop, containing four men, carried away her mast in a fresh offshore breeze. Station crew towed her to the shore with surfboat, a distance of about 2 miles.
July 14	Am. nph. yt. No-hoko.	Hunniwells Beach, Maine.	Having no fuel on board and engine being out of working order this yacht anchored in a dangerous position near Jack-Knife Ledge, 3 miles SSW. from station, just before dark. Keeper and a volunteer crew (inactive season) boarded her, assisted her crew of two men to heave up anchor, and then towed her to station, where they made her fast alongside the dock. Lieutenant-Commander S. G. Hopkins, of the Naval Reserve of the District of Columbia, was a member of this volunteer crew and rendered efficient service, taking charge of the disabled craft while she was being towed to station. (See letter of acknowledgment.)
July 15	Am. sc. York State..	Beaver Island, Michigan, Lake Michigan.	Missed stays and stranded on S. point of harbor, $1\frac{1}{2}$ miles SSE. of station. Keeper (no crew employed) procured the services of the tug Margret McCann and went to her assistance. After about an hour's work the schooner was released without damage.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 15	Am. str. Philetus Sawyer.	Frankfort, Michigan, Lake Michigan.	The master of this steamer stopped off station and reported that one of his crew had fallen through the forward hatch and dislocated his shoulder. He requested the keeper to procure a surgeon to attend the injured man. The keeper summoned a surgeon and transported him to and from the steamer, which then continued on her way.
July 15	Sloop, no name.....	Saint Joseph, Michigan, Lake Michigan.	Capsized by a puff of wind about $\frac{1}{2}$ mile ESE. of station. The two occupants were rescued by a rowboat which was close at hand. Surfmen righted and bailed out the sloop for the owner.
July 15	Scow, no name.....	Racine, Wisconsin, Lake Michigan.	Parted moorings and drifted down past the station. Surfmen boarded it, ran a line to a dock, hauled it in, and secured it.
July 16	Slp. Big Beck.....	Cape May, New Jersey....	Sprung a leak and crew beached her in a dangerous position, $1\frac{1}{2}$ miles NW. of station. The master telephoned to the station for assistance. Keeper procured the services of three volunteer surfmen (inactive season) and worked on her until 11 p. m., when he had succeeded in heaving her to a safe berth in the harbor. Machinery disabled and boat in danger of being carried into the Kentucky chute of the falls of the Ohio. Station crew pulled out, made a line fast to the imperiled craft, and towed it into safe water.
July 16	Gas. lch. Success....	Louisville, Kentucky....	Machinery disabled and boat in danger of being carried into the Kentucky chute of the falls of the Ohio. Station crew pulled out, made a line fast to the imperiled craft, and towed it into safe water.
July 16	Nph. lch. Lillian....	Grindstone City, Michigan, Lake Huron.	Engine became disabled while out on a fishing trip with five people on board. Station crew pulled out in surfboat and towed the launch in to a dock without mishap.
July 16	Am. str. Thomas Maytham.	Milwaukee, Wisconsin, Lake Michigan.	Stranded in a thick fog on the S. point of White Fish Bay, 7 miles N. of station. Upon being informed of the casualty the keeper procured the services of the tug C. H. Meyer, and with his crew towed to the stranded steamer in surfboat. The tug then went back and got forty laborers who, with the help of the station crew, threw overboard 1,034 tons of coal. Surfmen ran lines for two tugs which finally floated the steamer. Station crew worked upon this vessel for thirty-five hours.
July 17	Am. str. Edward Smith.	Cleveland, Ohio, Lake Erie.	On fire at 9 p. m. and the master beached her near Avon Point, 18 miles W. of station, where her crew abandoned her. Station crew towed to the scene and worked with buckets to extinguish the fire. The tug which towed out the surfboat was soon joined by another tug, and they began to play two streams from their steam pumps upon the fire. Toward morning their united efforts extinguished the flames, the steamer's crew again took charge of her, and the surfmen returned to station.
July 17	Sloop, no name.....	Sturgeon Point, Michigan, Lake Huron.	Capsized in a squall 8 miles N. of station. The two occupants were rescued by a flat-bottomed sailboat which could not reach the land in the fresh offshore wind. Station crew sailed out in surfboat and towed the sailboat into Black River. The sloop had drifted far out into the lake, and the owner reported to the keeper that he did not care to recover the craft, as it was worthless. Surfmen from Thunder Bay Island Station also went out to rescue this imperiled crew.
July 18	Catboat Marget....	Cranberry Isles, Maine...	Stranded on NW. point of Suttons Island, 4 miles NW. of station. Surfmen boarded her, removed the rocks from under her bottom, put some planks under her, ran her anchor out into deep water, and then, upon the flood tide, hauled her afloat without damage.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 18	Sloop Celia	City Point, Massachusetts.	Dragged anchor during a heavy squall. Owner and another man boarded her, but could not handle her, as she had no rudder. Station launch gave them a line and towed the sloop to a safe berth in Pleasure Bay.
July 18	Gas. lch., no name.	. . . . .do	Engine became disabled and launch stranded on Thompsons Island with thirteen persons on board. The wind was blowing in heavy NW. squalls, with a thick downpour of rain, the tide was ebb, and the sea was rough and breaking over the boat at times. Surfmen anchored the station launch to windward of the crippled craft, to which they ran a line with their Whitehall boat. Then two surfmen went into the water and carried all the men to the shore, leaving four women on board. The station launch then pulled, the surfman in the water lifting at the same time, and succeeded in floating the stranded boat. They transported the men ashore back to their launch and towed it to City Point, where the party safely landed.
July 19	Cat yt. Lizzie	Great Egg, New Jersey	Stranded in the beach thoroughfare, $\frac{1}{2}$ mile W. of station. Keeper and a volunteer (inactive season) boarded her, ran out her anchor, but were not able to float her on account of ebb tide. They took the man in charge and four passengers to the shore. At high water they boarded her again, with the master, and succeeded in hauling her afloat, taking her up the thoroughfare to a safe anchorage.
July 19	Skiff, no name	Fort Niagara, New York, Lake Ontario.	Two women, in this skiff, were unable to stem the current and were drifting out into the lake. Station crew launched the surfboat and towed them into the river.
July 19	Rowboat, no name	Grand Marais, Michigan, Lake Superior.	Painter parted and boat carried out into the lake by a brisk offshore wind. Keeper sailed out about 3 miles, secured it, and towed it to the shore.
July 21	Slp. yt. Rilma	City Point, Massachusetts.	Carried away mast during a yacht race. Surfmen boarded her and helped to get the sail rigging, and broken spar in-board. Then they towed her to the float of the Boston Yacht Club with the station launch.
July 21	Rowboat, no name	Erie, Pennsylvania, Lake Erie.	Station lookout heard cries for help come from the bay about midnight. Surfmen hastily pulled out in the surfboat and found a drifting rowboat containing a man who had broken one of his oars while pulling across the bay. They towed him to the station, secured his boat, and ferried him across the channel so that he could walk to his home.
July 22	Catboat, no name	Tiana, New York	Capsized $\frac{1}{2}$ mile WNW. from station. Keeper and a volunteer surfman (inactive season) sailed to the scene, rescued the sole occupant, towed the boat to the shore, and bailed it out.
July 22	Ger. str. St. George.	Cape Hatteras and Creeds Hill, North Carolina.	Stranded on the SW. point of the Outer Diamond shoals, 9 miles SE. from Cape Hatteras Station. Keepers and volunteer crews (inactive season) from both Cape Hatteras and Creeds Hill stations boarded her, assisted to float her, and piloted her clear of the shoals, leaving her on a safe course.
July 22	Rowboat, no name	Fort Niagara, New York, Lake Ontario.	At 10.50 p. m. station lookout heard a cry for help come from the river. Station crew launched surfboat, pulled in the direction of the cry, and found a rowboat, near the Canadian shore, containing two men under the influence of liquor, who told the keeper that a man named Billy Mason had fallen overboard from their boat while trying to recover

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 22	Rowboat, no name..	Fort Niagara, New York, Lake Ontario.	a lost oar, and had taken the other oar with him. Surfmen found one oar and a skiff picked up the other, but they could find no trace of the missing man. They towed the boat to the Canadian shore and safely landed the two men. [See caption "Loss of Life."]
July 22	Am. str. W. J. Hingston.	Erie, Pennsylvania, Lake Erie.	Stranded about 3 miles E. by N. from station, and sounded whistle for assistance. Keeper telephoned information of the casualty to a small tug, which started for the scene at once, towing 2 surfmen in station small boat. The surfmen ran hawser for the tug, which soon succeeded in releasing the stranded vessel.
July 22	Shanty boat, no name.	Louisville, Kentucky.....	In danger above the falls of the Ohio River, having on board four persons who were totally unacquainted with the water about the falls. Station crew pulled out, made a line fast to the shanty boat, and towed it into safe water.
July 24	Sloop, no name.....	Sand Beach, Michigan, Lake Michigan.	Anchor line parted and sloop went drift. A surfman pulled out to it and sailed it to a dock, where he made it well fast.
July 25	Am. sc. Freeport ...	Crumple Island, Maine...	Stranded during a dense fog at E. end of Moosabec Reach, 8 miles NE. by E. from station. Keeper procured the services of a volunteer crew (inactive season) and went to her assistance. Ran out her anchor and hove taut on windlass. After the tide began to flood, she slipped off the rocks and keeper took her into Jonesport only slightly damaged.
July 25	Am. sc. William Churchill.	Damariscove Island, Maine.	Stranded on Little River Point, 8 miles N. by E. from station, during a thick fog. Keeper mustered a volunteer crew (inactive season) went to the wreck, and helped the schooner's crew to land in their own boats with their personal effects. No further assistance being required of the life-saving crew, they returned to station. The schooner became a total loss.
July 25	Am. str. Appomattox.	Sand Beach, Michigan, Lake Huron.	Stopped outside the harbor and signaled for assistance. Surfmen pulled out to her and were requested to procure a physician to attend a sick woman on board. They transported a physician to and from the steamer.
July 26	Sloop, no name.....	Duluth, Minnesota, Lake Superior.	Became dismasted about 1/2 mile SW. of station, in a fresh breeze, with 3 boys on board. Surfmen towed it to the boathouse dock, where they put it in trim for the boys, who then sailed back to their clubhouse.
July 26	Skiff, no name.....	South Chicago, Illinois, Lake Michigan.	While crossing the Calumet River at 9.30 p. m., this boat was run down by an outward-bound steamer. Station lookout gave the alarm and surfmen hastily pulled to the scene, recovered the boat, and picked up the sole occupant, who had swum to a pier on the other side of the river.
July 27	Dory, no name.....	City Point, Massachusetts.	Adrift in the bay. Surfmen picked it up, took it to station, and on the next day restored it to owner.
July 27	Rowboat, no name ..	Sheboygan, Wisconsin, Lake Michigan.	Capsized near the new breakwater. A tug which was close at hand picked up the two occupants, one of whom was completely exhausted. Keeper took them to station in surfboat and furnished them with dry clothing from the stores of the Women's National Relief Association.
July 28	Shell, no name.....	Duluth, Wisconsin, Lake Michigan.	Capsized by the swell from a passing tug while engaged in a race. Fearing that some accident would happen during the regatta, the surfmen had gone to the course in their lake-service boat and were in a position to quickly rescue the two imperiled men. They righted and bailed out the shell, then the men pulled to the club boathouse.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 28	Slp. yt. Mirella.....	Old Chicago, Illinois, Lake Michigan.	Collided with the outward-bound steamer Manitou. Surfmen hastily pulled to the scene, rig the yacht's towline from a passing tug, and towed her into a slip where they secured her alongside of a dock. The eight persons on board were safely landed, only the sails, rigging, and spars of the yacht being damaged by the collision.
July 29	Yt. Sally Brass.....	City Point, Massachusetts.	Tried to make harbor under a jury rig in a head wind, her mast having carried away. Station launch picked her up and towed her to the South Boston Yacht Club float, where the two women on board landed; then the surfmen helped to secure the yacht to her moorings.
July 29	Slp. yt. Fanchon.....	do	Mast carried away at the partners. Police boat towed her to station and turned her over to the life-savers who took her to her moorings in Pleasure Bay.
July 29	Slp. yt. Verona.....	Charlotte, New York, Lake Ontario.	Struck by a squall which carried away part of her standing rigging and damaged her sails, rendering her unmanageable. She drifted down the lake until finally the three men on board fetched her up with her anchor. Surfmen towed them to the end of E. pier, where they landed and tracked their boat to a safe berth.
July 29	Sailboat Valiant.....	Louisville, Kentucky.....	The wind died out, leaving this sailboat in a dangerous position near the Kentucky chute of the falls of the Ohio River, with three men on board. Station crew pulled out and towed them to their clubhouse.
July 29	Sailboat, no name..	White River, Michigan, Lake Michigan.	Capsized near station. The sole occupant was picked up by a boat which was near by at the time. Surfmen pulled out, took the rescued man into their boat, and towed the capsized boat to the station, where they put it in trim.
July 29	Fish boat, no name..	Point Adams, Oregon	At 11 p. m. this fish boat was swamped by a heavy breaker near Clatsop Spit while its crew were hauling their net. The oars and other gear were washed away, and the boat drifted helplessly into the breakers on the rocks off the Government jetty and began to go to pieces. The crew of two men managed to climb up onto the jetty, and, early on the next morning, reached the life-saving station, where the keeper provided them with dry clothing from the stores of the Women's National Relief Association. Surfmen went to the scene of the casualty and recovered the net for the men. The boat was a total loss.
July 30	Slp. Corona.....	Great Boars Head, New Hampshire.	Anchored in a dangerous position, $\frac{1}{4}$ miles SW. from station. Keeper boarded her and piloted her to a safe anchorage, the master being unacquainted with the coast.
July 30	Yawl yt. Dodo	Lake View Beach, Michi- gan, Lake Huron.	The crew of this yacht sought shelter ashore during a heavy rain storm, leaving her anchored near the beach in an exposed position. Her cable parted, she drifted on shore, and lay pounding on the beach. Surfmen boarded her, ran out an anchor, and hove her afloat. Part of her crew then boarded her and took her to Port Huron.
July 31	Sloop, no name.....	Kenosha, Wisconsin, Lake Michigan.	Sprung a leak and became water-logged about $\frac{1}{2}$ mile SE. of station. Surfmen started to the rescue of the sole occupant without delay, but a sailboat that was close by at the time took him on board before their arrival. They towed the sloop into the harbor and turned it over to the owner.
July 31	Scow, no name.....	Racine, Wisconsin, Lake Michigan.	At 2 a. m. this scow, loaded with stone and lying moored at the pier near the harbor entrance, parted its stern line and

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. July 31	Scow, no name	Racine, Wisconsin, Lake Michigan.	swung out athwart the channel. Surfmen on watch warned an outward-bound steamer that the channel was blocked, and then boarded the scow and hauled it alongside the dock, making it well fast.
July 31	Fish boat, no name.	Point Adams, Oregon	Capsized during squally weather near Fort Columbia, 4 miles NNE. of station. The crew of two men were safely taken from the bottom of the capsized craft by a shore boat from the fort. Surfmen tried several times to right the boat, but the choppy sea and tangled gear made their efforts unsuccessful. Then they attempted to tow it to shore, but the strong ebb tide compelled them to cast it off and it drifted seaward and became a total loss.
Aug. 1	Am.sc. Nellie Grant.	White Head, Maine	Stranded during thick fog on Otter Island Ledge, 4½ miles NE. of the station. Surfmen boarded her and worked two days, in conjunction with a tug, when they succeeded in floating her.
Aug. 1	Catboat Onway	Cleveland, Ohio, Lake Erie.	Broke away from its moorings and went ashore 1 mile ENE. of station. Surfmen pulled to the scene, hauled the boat afloat, and towed it to the station, notifying the owner of its whereabouts.
Aug. 2	Am.sc. Starlight	Rehoboth Beach, Delaware.	Ran ashore 200 yards N. of station while the crew were asleep. Surfmen laid out an anchor preparatory to hauling her off at high water, but she leaked too much and the attempt had to be abandoned. On the following day the owner arrived and took her in charge, repairing her bottom. Station crew then assisted in heaving her afloat. The two members of the schooner's crew were furnished with dry clothing from the supplies of the Women's National Relief Association, their own having been drenched.
Aug. 2	Bateau, no name ...	Sullivans Island, South Carolina.	Stranded on the beach about a mile W. of station. Surfmen hove it off without damage.
Aug. 3	Nph. lch. Haller	City Point, Massachusetts.	Fouled Castle Island bridge and was in danger of breaking up. Station launch towed her to her moorings.
Aug. 3	Fish boats (3), no names.	Sullivans Island, South Carolina.	While attempting to land through the surf, these boats, with two men in each, filled with water. Station crew ran down to the beach and assisted the fishermen to make a landing, saving boats and fish.
Aug. 4	Nph. lch. Alida	Cleveland, Ohio, Lake Erie.	Set on fire by explosion of naphtha, and flames communicated to boathouse. Station crew hurried to the scene with hose and fire extinguisher and succeeded in putting out the fire before the arrival of the city fire department. It became necessary to sink the launch, but they afterwards raised it and bailed it out.
Aug. 4	Sailboat, no name..	Sand Beach, Michigan, Lake Huron.	Capsized near the station. Crew took off the two occupants in a small boat, righted the sailboat, and bailed it out.
Aug. 4	Nph. lch. Edna T ...	Manistee, Michigan, Lake Michigan.	Beached 4 miles N. of station, machinery being disabled. Their assistance being asked, surfmen went to the scene and helped to launch the boat, starting for Manistee with her in tow. When about halfway to the city another boat came along and towed them in.
Aug. 4	Gas. lch. Francis F..	White River, Michigan, Lake Michigan.	On fire. By the time the station crew arrived the launch was enveloped in flames. They accordingly towed her to shoal water and upset her, thereby extinguishing the fire. Then they righted her, bailed her out, and towed her back to her wharf.
Aug. 5	Slp. Alethea	Gap Cove, Massachusetts.	Stranded in the gap, 300 yards E. of station. Surfmen boarded her, laid out a line, and succeeded in floating her without damage.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Aug. 5	Catboat Sprite.....	City Point, Massachusetts.	Capsized near pumping station, 1½ miles SW. of station and 60 yards from shore. Surfmen went to her assistance, but before they reached her the two men on board had reached shore by swimming. Station crew towed the boat ashore, bailed her out, and turned her over to owner.
Aug. 6	Catboat Anna W ...	Little Beach, New Jersey.	Stranded in the thoroughfare ¼ mile SW. of station. Surfmen went to her assistance, but could do nothing on account of low water. Weather threatening, took her four men to the station for shelter over night, and in the early morning returned and hauled her afloat on the flood tide.
Aug. 6	Nph. lch. Ocean Wave.	Hereford Inlet, New Jersey.	Parted mooring and stranded ½ mile from station during squall. Two of station crew assisted owner in running out an anchor and cable, so that the boat would float off at high water.
Aug. 6	Slp. yt. Elizabeth ...	Holland, Michigan, Lake Michigan.	Rudder carried away and sloop unable to make port. Surfmen went out and towed her in to Ottawa Beach dock. Her canoe had broken adrift and gone ashore. Surfmen secured it, bailed it out, and returned it to the owner.
Aug. 7	Small boat, no name	Shark River, New Jersey .	In attempting to land from a yacht anchored off the station a man was thrown into the surf by the capsizing of this boat. Two of the station crew assisted him ashore by wading to his assistance. When he wished to return to the yacht, keeper launched surrboat, carrying him out and towing his boat.
Aug. 8	Smallboat, no name.	Plum Island, Massachusetts.	An intoxicated man started out through the breakers in a small boat and succeeded in crossing out, but soon fell backward into the boat and remained there, drifting back into the breakers. By the time the station crew reached him he was in serious danger. They took him and his boat to the station, where they furnished him with dry clothing from the supplies of the Women's National Relief Association, and put him to bed. He became sober enough in the course of a couple of hours to be allowed to go home. The boat was turned over to its owners.
Aug. 8	Tug Pamlico	Portsmouth, North Carolina.	Stranded on Royal Shoal, 6 miles NW. of station. In answer to her signal, surfmen pulled out to her, finding only 3 feet of water alongside. Nothing could be done at the time, but on the next high tide they moved weights from aft forward, manned the windlass, got her anchor, and finally succeeded in heaving her off the shoal. (See letter of acknowledgment.)
Aug. 8	Sailboat, no name ..	Beaver Island, Michigan, Lake Michigan.	Capsized during a squall ¼ mile from the station. Keeper and another man started out in a small boat, reaching the sailboat at about the same time as three men in another boat. They all assisted in righting the capsized craft, bailing it out and picking up the floating gear.
Aug. 9	Slp. Kit Carson	Lone Hill, New York.....	Grounded on a shoal ¼ mile from the station, with picnic party on board. Surfmen laid out an anchor, but the tide was too low to work her off. On the following high water they floated her without damage.
Aug. 9	Br. str. Palestro	Cape Hatteras, North Carolina.	Stranded on Outer Diamond Shoal during thick weather at about 7 a. m. and was discovered by lookout at Cape Hatteras Station as soon as the weather cleared, about 2 p. m. Keeper sent word to Creeds Hill and Big Kinnakeet to assist, and then started for the wreck. On the way out the crew ran across two of the ship's boats with twenty men on their

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Aug. 9	Br. str. Palestro.....	Cape Hatteras, North Carolina.	way ashore. Keeper signaled the boat from Creeds Hill to take charge of these boats and then proceeded to the wreck to bring off the master, third officer, and three men who had remained by her. The second officer and four men, who had left in a small boat, landed without assistance about a mile from Cape Hatteras Station. The vessel was a hopeless wreck and the keeper brought ashore those who had remained by. The keeper of Creeds Hill Station towed the two boats in his charge to a safe landing place, and the crew from Big Kinnakeet Station arrived in time to transport all baggage to the Cape Hatteras Station. The shipwrecked crew of thirty men were sheltered at this station until the 11th, when they were transported to Norfolk by a schooner.
Aug. 9	Boat belonging to light-ship Galveston.	Galveston, Texas.....	Capsized during squall about 2 miles ENE. of station. Surfmen pulled out and rescued the three men who had been in the boat, but were unable to tow or right it. Keeper accordingly anchored it with station anchor and painter, but the boat sank as soon as the anchor brought it up. Keeper searched for it on the next two days, but could not locate it. It was afterwards learned that a steamer ran into the craft and broke it in two. Keeper furnished dry clothing to the three men.
Aug. 10	Am. str. Frank and Lloyd.	Quoddy Head, Maine.....	Stranded in Lubec Channel while attempting to go alongside a wharf. Station crew ran line for a tug and assisted in releasing the vessel.
Aug. 10	Slp. M. and R. Remde.	Great Egg, New Jersey....	Stranded on sand bar in beach thoroughfare. Water was too low to float her at the time, so surfmen landed master and two passengers. On the next high tide crew returned to the sloop and hove her into the channel.
Aug. 10	Slps. Tartar and Ethel III.	Holland, Michigan, Lake Michigan.	Stranded near the station during a yacht race. Surfmen went to their assistance and towed them into deep water.
Aug. 10	Am. sc. Neptune....	Southside, California.....	Stranded on the beach about 2 miles S. of station during light breeze and strong current. Surfmen hastened to the scene, but could do nothing further than to take the master ashore for a tug. The vessel pounded heavily and went high up on the beach, eventually becoming a total loss.
Aug. 11	Am. bk. Abiel Abbot.	Point Lookout, New York.	Stranded 3 miles SE. of station during thick weather. Surfmen boarded her, but the sea was smooth and the crew did not wish to leave. At request of master keeper sent for wrecking tug, which arrived in due time and released the bark.
Aug. 11	Slp. Elveah.....	Charlotte, New York, Lake Ontario.	Capsized about 150 yards W. of station during heavy squall of wind and rain at 8.30 p. m. Surfmen pulled out, and though the night was very dark, they soon located the sloop and rescued the three men and one woman who had been precipitated into the water. Took them and their sloop ashore and furnished them with dry clothing from the supply of the Women's National Relief Association and with stimulants from the station medicine chest.
Aug. 11	Catboat, no name...	Fort Niagara, New York, Lake Ontario.	Capsized in a squall about $\frac{1}{2}$ mile from the station, throwing two men into the water. They managed to cling to the bottom of the boat until rescued by the life-savers, who also righted the catboat and towed it ashore.
Aug. 11	Sailboat Ucansee...	Sand Beach, Michigan, Lake Huron.	Parted painter and drifted against a wharf, where it was in danger of breaking up. Surfmen took it to a safe place and moored it securely.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Aug. 11	Am. sc. Thomas Gawn.	Ship Canal, Michigan, Lake Superior.	While being towed through the canal, tow-line parted and the vessel grounded on a bar. Surfmen ran a line to a tug, which soon pulled the schooner afloat.
Aug. 11	Sips. Wizard and Imp.	Holland, Michigan, Lake Michigan.	Grounded near the station. Surfmen ran lines and assisted in heaving the sloops into deep water.
Aug. 11	Slp. Leo	Old Chicago, Illinois, Lake Michigan.	Capsized $\frac{1}{2}$ mile S. of station in puff of wind, throwing three men into the water. Surfboat and a steam launch arrived about the same time, the latter picking up two men and the former one. Keeper put the man rescued by the surfmen on board the launch, righted the sloop, bailed it out, and took a line from it to the launch, which then towed it to its wharf.
Aug. 11	Slp. Alfonso .....	.....do.....	Capsized in a squall $\frac{1}{2}$ mile S.E. of the station at 8.15 p. m. A passing sailboat took off the two men before the surfmen could reach them. Station crew righted the boat, bailed it out, and returned it to owners.
Aug. 11	Slp. Indian	Evanston, Illinois, Lake Michigan.	Capsized in a puff of wind about $\frac{1}{2}$ mile from station. Surfmen manned two small boats and pulled to the scene, rescuing the two men who had been on board. They towed the sloop ashore, righted it, and bailed it out.
Aug. 11	Am. sc. Little Georgy.	Sturgeon Bay Canal, Wisconsin, Lake Michigan.	Entered canal leaking badly. Surfmen assisted her to a wharf and pumped her out. Leak stopped as soon as she reached smooth water.
Aug. 12	Small boat, no name.	City Point, Massachusetts.	Sail carried away while $\frac{1}{2}$ mile S. of station. Keeper sent out one of the launches, which towed the disabled boat to a landing.
Aug. 12	Sc. yt. Ivanhoe.....	Monomoy, Massachusetts.	Stranded on the shoals $\frac{1}{2}$ miles S. of station. Surfmen went to her assistance, laid out an anchor, and when the tide came in hauled her into the channel. Piloted her clear of the shoals.
Aug. 12	Am. str. Connetquot and catboat B. C. Pennington.	Barnegat, New Jersey	These two vessels stranded in Barnegat Inlet during a heavy squall at night, but owing to the darkness were not seen from the station until the following morning. Crew then went to their assistance, and as soon as the tide served helped to heave them both afloat.
Aug. 12	Sailboat, no name..	Sand Beach, Michigan, Lake Huron.	Filled and sunk at moorings, and in danger of breaking up. No one on board. Station crew hauled the boat up on the shore and left it safe.
Aug. 12	St. yt. Lily	South Chicago, Illinois, Lake Michigan.	Sprung a leak by pounding against the pier in the Calumet River, and was in danger of sinking. Surfmen bailed her out, patched the leak, and moved her to a safe berth.
Aug. 12	Am. sc. Henry Cowles.	Milwaukee, Wisconsin, Lake Michigan.	Water-logged and abandoned by her crew $\frac{1}{2}$ miles S. of the station. Upon receiving report of the casualty, late at night, keeper engaged a tug and went in search of the vessel. Owing to the intense darkness they were unable to locate her and had to return to the station. On the following morning they went out again and found the vessel. They ran a line to the tug, boarded the schooner, slipped her cable, and took her into port, turning her over to her master.
Aug. 12	Am. sc. Charlie J. Smith.	Kewaunee, Wisconsin, Lake Michigan.	Missed harbor entrance during fresh breeze and let go anchor to leeward of the piers, in a dangerous position. Station crew kedged her into the channel and assisted in hauling her to her berth.
Aug. 12	Skiff, no name	Humboldt Bay, California.	Adrift with two drunken men in it, and in danger of swamping in the strong eddies. Two surfmen manned a station boat and brought skiff and men to the station. Put them to bed until sober.
Aug. 14	Slp. Mess Mate.....	Burnt Island, Maine	Stranded on Stone Island, 3 miles N. of station. Surfmen boarded her and assisted in floating her and getting her under way.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Aug. 14	St. yt. Florence E...	Sand Beach, Michigan, Lake Huron.	Driven ashore by heavy squall 3½ miles NW. of station. Surfboat towed to the place behind the Government tug Sand Beach. Ran a line to the stranded vessel and took charge of her while the tug floated her. She was then towed to the harbor. Furnished the crew of two men with dry clothing from the stores of the Women's National Relief Association.
Aug. 14	Sailboat Willie.....	Ottawa Point, Michigan, Lake Huron.	Blown ashore in Tawas Bay, 1 mile N. of station. Surfmen pulled to the place and assisted the crew of the boat to heave it off the beach.
Aug. 15	Am. sc. Humboldt ..	Fletchers Neck, Maine...	Crew deserted, leaving the vessel at anchor near Stage Island. At request of master station crew boarded her, got her under way, and worked her into Biddeford Pool.
Aug. 15	Slps. Anthony and Petrel.	Gurnet, Massachusetts ...	About 8 p. m., during a fresh SSE. wind, these two sloops went ashore on Browns Island shoal, ¼ mile SSW. of the station. Surfmen brought ashore a woman and two men from the Anthony, then returned and laid out anchors for both vessels, and as soon as the tide served hove them off into deep water. The Anthony was leaking considerably, and the keeper detailed two surfmen to take her to Plymouth, sheltering her five people overnight at the station.
Aug. 15	Sailboat Varuna....	Point Marblehead, Ohio, Lake Erie.	Keeper received report that this boat was ashore on Starve Island reef, 9 miles NW. of the station, and immediately set out in the surfboat under sail and oars. Found her pounding on a rocky bottom and already full of water. Her crew had left her, but soon returned with a tug. Surfmen bailed out the boat, stopped the leaks, ran a line to the tug, and assisted in heaving the boat afloat. Tug took her to Put-in Bay.
Aug. 15	Yawl of yt. Evelyn.	South Haven, Michigan, Lake Michigan.	Broke adrift from yacht while the latter was making for the harbor during a heavy squall. Surfmen pulled out and recovered the boat, returning it to the yacht.
Aug. 16	Skiff J. S.....	Louisville, Kentucky.....	Caught in a storm near the Falls of the Ohio. Keeper sent out a crew in one of the station boats and they brought the skiff safely ashore.
Aug. 19	Gas. lch. Leo	City Point, Massachusetts.	Feed pipe burst and boat ran into Castle Island Bridge. Crew went out in station launch and towed the boat to its moorings.
Aug. 19	Slp. Nautilus	Cuttyhunk, Massachu- setts.	Dragging anchor and in danger of going ashore in Cuttyhunk Harbor. Station crew boarded her, got under way, and piloted her clear of danger.
Aug. 19	Nph. lch. Lakeside.	Point Marblehead, Ohio, Lake Erie.	Machinery disabled while the launch was ¼ mile off the station. Surfmen pulled out and towed it to a shop for repairs.
Aug. 20	Gas. lch., no name..	Fort Niagara, New York, Lake Ontario.	Out of fuel and adrift. Surfmen pulled to her assistance and towed her to a landing, where fuel could be procured.
Aug. 20	Slp. Gloria.....	Saint Joseph, Michigan, Lake Michigan.	Capsized at the harbor entrance, throwing two boys into the water. Surfmen rescued the boys, righted the boat, bailed it out, and towed it to the station.
Aug. 21	Slp. Jessie	City Point, Massachusetts.	At anchor, pitching heavily in rough sea, and unable to shift berth on account of a broken rudder. One of the station launches towed her to a safe mooring.
Aug. 21	Slp. yt. Speedway ..	Ocean City and Great Egg, New Jersey.	Capsized 5 miles ENE. of Great Egg Station. Crew of that station at once proceeded to the rescue and reached the wreck in time to save the four persons who had been precipitated into the water. Took them ashore immediately to give them proper treatment, leaving the wreck where it was. It eventually drifted over the bar and stranded in the thoroughfare near Ocean City. Crew of

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Aug. 21	Slp. yt. Speedway ..	Ocean City and Great Egg, New Jersey.	Great Egg Station took the four rescued men to the place, but were unable to right the yacht. The men then went to the Ocean City Station. Crew of that station righted the yacht on the following day and put her crew on board. They pumped her out and she floated at high water.
Aug. 21	Am. str. Elfin Mere.	Ship Canal, Michigan, Lake Superior.	Stranded $\frac{1}{2}$ mile N. of station. Surfmen pulled to the place, took soundings, and assisted a tug in floating the vessel.
Aug. 21	Slp. Berdie H.	South Chicago, Illinois, Lake Michigan.	Dragged anchor during a thunderstorm and stranded $\frac{1}{2}$ miles S. of station. Surfmen went to her relief, laid out anchors, and after four hours' work succeeded in getting her afloat. Towed her to a safe mooring.
Aug. 22	Am. sc. Freddie L. Hamblen.	Durants, North Carolina.	Dragged anchor and stranded $\frac{1}{2}$ miles W. of station. The vessel was in no immediate danger, so surfmen left her where she was until the weather should favor operations. On September 11 and 12 they dug away the sand, laid out an anchor, and after a hard pull were successful in moving her into deep water.
Aug. 22	Flat, no name	Louisville, Kentucky.....	In danger near the Kentucky chute of the Falls, with five boys on board. One of the station boats being sent out, the surfmen took three of the boys into their boat and towed the flat to the station.
Aug. 22	Slp. Emma	Plum Island, Wisconsin, Lake Michigan.	Stranded at night $\frac{1}{2}$ miles N. of station. Responding to signal of distress, surfmen went to her assistance, but she was afloat before their arrival. The people on board being unacquainted with the locality, and the night being very dark, keeper took charge of the sloop and sailed her to a safe anchorage in Detroit Harbor.
Aug. 23	Sc. yt. Shamrock ...	New Shoreham, Rhode Island.	Stranded in the early part of the night $\frac{1}{2}$ mile from the station. Surfmen boarded her, laid out an anchor, and hove a strain on the cable, but were unable to move her. Shortly after midnight they ran a heavier anchor, and as the tide was in their favor were successful in working the vessel off the rocks. Took her to a safe anchorage.
Aug. 24	Slp. yt. Lassie.....	City Point, Massachusetts.	Stranded on a shoal $\frac{1}{2}$ miles E. of station. Surfmen went to her assistance in the big launch, finding her hard and fast ashore. Laid out two anchors and took a line to the launch, and hove away as the tide came in. Vessel floated with no apparent damage.
Aug. 25	Catboat Laura.....	Coskata, Massachusetts...	Lost rudder when 3 miles WNW. of station. Crew pulled out and loaned a pair of oars to the occupant of the boat, thereby enabling him to proceed to Nantucket.
Aug. 25	Gas. lch. Winnie....	Metomkin Inlet, Virginia.	Machinery broke down while the boat was crossing the bar. Responding to a signal of distress, surfmen pulled to her assistance. Towed her to a safe berth inside and then took the engineer to the mainland for the necessary tools to make repairs.
Aug. 25	Am. sc. James Mowatt.	Ship Canal, Michigan, Lake Superior.	Towline parted and vessel stranded $\frac{1}{2}$ mile N. of station. Surfmen ran lines to the shore and hove her into deep water. A tug then towed her away.
Aug. 25	Yawl of sc. George A. Marsh.	Baileys Harbor, Wisconsin, Lake Michigan.	Dismasted $\frac{1}{2}$ mile off the station. Surfmen pulled out and towed the boat back to the schooner.
Aug. 26	Fish boat, no name.	Coquille River, Oregon...	Capsized while crossing in over the bar, throwing two fishermen into the water. One of them managed to swim to the jetty and crawl out, and the other clung to the boat until rescued by the life-savers, who arrived in a very short time and took boat and men to the station.
Aug. 28	Am. str. Seattle.....	Buffalo, New York, Lake Erie.	Stranded in Niagara River during a dense fog. Hearing her signals for help, surfmen pulled to the place and found her

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Aug. 28	Am. str. Seattle	Buffalo, New York, Lake Erie.	hard aground. A tug arrived about the same time, and the surfmen ran a line from her to the steamer. Line parted and tug went for another. Upon her return, surfmen ran the hawser, but the tug was unable to move the vessel. She then blew for assistance and two more tugs responded. Station crew ran lines, and after a hard pull the three tugs succeeded in releasing the steamer. (See letter of acknowledgment.)
Aug. 29	Am. sc. Lizzie C. Rich.	White Head, Maine.....	Stranded on Grindstone Ledge, 7 miles ENE. of station. Surfmen boarded her, pumped for four hours, and the rising tide then floated her off. The leaks stopped shortly after the vessel was floated, and she proceeded on her way.
Aug. 29	Am. sc. Hard Times.	Galveston, Texas.....	Stranded on Bolivar Flats, 1½ miles NNW. of station. Surfmen went on board, laid out an anchor, and assisted the crew to heave the vessel off.
Aug. 30	Am. sc. Mary A. Brown.	Fletchers Neck, Maine...	Stranded on Negro Island bar, 1 mile from station. Surfmen boarded her, bent on a masthead tackle, and as soon as the tide came in she floated without apparent injury. Keeper piloted her clear of dangers.
Aug. 30	Slp. Wanda.....	Highland, Massachusetts.	Stranded 2 miles E. of station. Surfmen laid out a line and made an attempt to float her, but the force of the current and waves parted the line and the sloop broke up. Keeper furnished dry clothing to the master out of the supplies of the Women's National Relief Association.
Aug. 30	Slp. Penrose.....	Avalon, New Jersey.....	Stranded on north bar of Townsend Inlet. Surfmen landed the passengers and crew, twelve in number, and at high water hove the sloop off the bar and sailed her to safe anchorage.
Aug. 30	Slp. Wing.....	Metomkin Inlet, Virginia.	Stranded on Flounder Point and centerboard broken. Surfmen boarded her, hove her afloat, and assisted in repairing the centerboard.
Aug. 30	Nph. lch. Galveston.	Galveston, Texas.....	Machinery disabled in Bolivar Roads. Surfmen responded to signal of distress and towed the launch to Galveston, a distance of 3½ miles.
Sept. 2	Catboat, no name ..	Long Beach, New York ..	Capsized ¼ mile NW. of station and the crew landed safely by a boat which was near at hand. Surfmen hauled the capsized boat up on the beach, righted it, balled it out, resteped the mast, and reefed the sail, thus putting the boat in trim so that its crew could sail to their homes.
Sept. 2	Small boat, no name.	Fairport, Ohio, Lake Erie.	Capsized near the station. Surfmen pulled out, rescued the four occupants, and towed the boat to station, where they righted it and balled it out.
Sept. 2	Yawl No. 62.....	Bois Blanc, Michigan, Lake Huron.	The assistant keeper of the Poe Reef light-ship lost one of his oars while returning to the light-ship in this yawl, and went adrift in a fresh SW. breeze. After a long and hard pull, the surfmen overhauled the yawl and towed it to the light-ship.
Sept. 2	Sailboat, no name..	Grand Marais, Michigan, Lake Superior.	Mainmast carried away by a puff of wind while a pleasure party of three persons were sailing near the station. Keeper (station not manned) pulled out and assisted to work the disabled boat in to W. pier, then he rigged a jury mast and sail so that the party was able to sail into the harbor.
Sept. 2	Gas. lch. T. & J. No. 3.	Muskegon, Michigan, Lake Michigan.	Machinery disabled and boat stranded 4 miles SE. from station. Surfmen went to her in tow of a tug, but after consultation with owner it was decided to let her lie where she was until the sea moderated. They boarded her again on the next evening and, finding her badly damaged, they assisted to haul her up on

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 2	Gas. lch. T. & J. No. 3.	Muskegon, Michigan, Lake Michigan.	the beach for temporary repairs. On the 9th instant they assisted to launch her, float her over the bar, and take her into the harbor.
Sept. 2	A. m. sc. Winnie Weaver.	South Haven, Michigan, Lake Michigan.	Sprung a leak just after leaving harbor. She put back and made fast alongside dock in shoal water. Surfmen pumped her out and partially stopped the leak.
Sept. 2	Slp. yt. Bessie	Old Chicago, Illinois, Lake Michigan.	Capsized in a squall about 4 miles N. of station. Life-savers started to the rescue in the surfboat in tow of a tug, but before their arrival a small steamer had picked up the capsized crew and was towing their boat toward shore. Surfmen hauled the boat up on the beach and bailed it out.
Sept. 2	Cat yt. Otis	Evanston, Illinois, Lake Michigan.	Capsized in a squall about ¼ mile S. of station with two men on board. One of the men was upset on the bar while trying to land in a small boat, and was caught under the boat, from which perilous position the surfmen rescued him. They righted the boat and hauled it up on the beach, and then bailed out the sailboat and worked it over the bar to a safe anchorage.
Sept. 3	Small boat, no name.	Plum Island, Massachusetts.	Capsized 1½ miles E. of station, throwing two men into the water. A yacht close by rescued the men and took the boat in tow for Newburyport. One of the men being exhausted, was put into the surfboat and taken to station, where succor and dry clothes from the supplies of the Women's National Relief Association were furnished to him.
Sept. 3	.....do .....	.....do	Capsized near the station by a gust of wind. Surfmen pulled out and rescued the two boys whom they found clinging to the upset boat. They righted and bailed out the boat, secured all its gear, and then towed it to the shore.
Sept. 3	Slp. Bess	City Point, Massachusetts.	Capsized by a flaw of wind in Dorchester Bay, 1 mile E. of station, with two people on board, who were rescued by a small boat just before the arrival of the station launch. Surfmen bailed her out, stepped her mast, and rigged her for sailing, whereupon her crew started in her for their home at Nahant.
Sept. 3	Rowboat, no name.	North Scituate, Massachusetts.	One of the oarlocks of this boat broke while a man and a woman were out rowing. They reached the Minot's Ledge lighthouse, the keeper of which set a signal for assistance. Surfmen pulled out, took the man and woman into their boat, and returned to the station with the disabled boat in tow.
Sept. 3	A. m. sc. Lizzie Smith.	Monomoy, Massachusetts.	Stranded on the shoals, 5 miles SW. of station, and began to burn, being loaded with lime. Life-saving crew pulled out to her, took off the crew and their personal effects, and landed them all safe at Chatham. The schooner was a total loss.
Sept. 3	Am. str. Mosquito..	Point Lookout, New York.	Stranded 2 miles E. of station with one hundred and ten passengers on board. She was high and dry on the beach when the station crew reached her, and the passengers had all walked ashore. Surfmen carried out an anchor and then stood by until high water at midnight, when they succeeded in floating her without damage.
Sept. 3	Nph. lch. Wm. Speilder.	Ashtabula, Ohio, Lake Erie.	Engine disabled and launch drifted ashore about 1 mile E. of station during a fresh NW. breeze. Surfmen hauled it afloat and towed it into the harbor.
Sept. 3	A. m. sc. Kate E. Howard.	Baileys Harbor, Wisconsin, Lake Michigan.	Anchored off station with foresail torn to pieces, and master requested surfmen to help repair it. Four of station crew went on board, and after working for sixteen hours, had the sail in condition for use.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 5	Slp. Lucy B	Gap Cove, Massachusetts.	Stranded about 11 p. m. on a rock outside Rockport breakwater, the party on board safely reaching shore in a dory. She was badly heeled over and full of water when the station crew boarded her at high water on the next day. They righted her up, bailed her out, hauled her afloat, and towed her into Rockport Harbor, where they made her fast alongside a wharf.
Sept. 6	Am. sc. Stampede ..	Baileys Harbor, Wisconsin, Lake Michigan.	Sprung a leak during heavy weather and arrived off station in a water-logged condition. She anchored and hoisted a signal for assistance, which caused the surfmen to board her at once. They relieved her crew at the pumps, removed part of her cargo, stopped the leak with sawdust, and then pumped her nearly dry. At 11 p. m. the master made sail for Sturgeon Bay.
Sept. 7	Slp. Attempt.....	City Point, Massachusetts.	Missed stays and fouled the stone pier at the end of the City Point bridge. She was pounding heavily against the pier when the station launch reached her. Surfmen gave her crew a line and hauled her clear.
Sept. 8	Catboat Pearl W....	San Luis, Texas	Capsized and washed up on the beach 5 miles WSW. of station during the great hurricane. Surfmen launched it off the beach and towed it to a safe anchorage. Keeper succored the owner at the life-saving station until he could put his boat in sailing trim.
Sept. 8	Gas. lch. Alice S....	Duluth, Minnesota, Lake Superior.	Fuel became exhausted about $\frac{1}{4}$ of a mile SW. of station, and the two men on board were unable to work the launch to the shore with the one oar which they carried. Surfmen towed the launch to a dock where the men could replenish their fuel tank.
Sept. 9	Am. str. John Endicott.	North Scituate, Massachusetts.	Stranded on Gull Ledge, 2 $\frac{1}{2}$ miles NW. of station, having two hundred and sixty-five passengers and crew on board. Station crew landed forty people in the surfboat, the rest landing safely in the steamer's boats and in the boat of the Massachusetts Humane Society, manned by a volunteer crew. Keeper telephoned to the underwriters for the master. The steamer was floated by a wrecking company on the 14th instant, but while being towed to Boston she filled and sunk off Hardings Ledge in 10 fathoms of water, becoming a total loss.
Sept. 9	Am. slp. Dart.....	Atlantic City, New Jersey.	Drifted onto the middle ground of the inlet during calm and misty weather, and stranded. Surfmen boarded her and saw at once that they could not float her until the tide turned. The twelve passengers on board were anxious to get ashore, so the keeper landed them in the surfboat and then returned to the stranded sloop. He ran out an anchor and hauled her afloat, without damage, after the tide began to flood.
Sept. 9	Am. sc. Mary E. Morse.	Bethel Creek, Florida....	Stranded 14 miles N. of station, loaded with lumber, water-logged, and abandoned. Keeper proceeded to the wreck, which was lying about 700 yards offshore, and with two volunteers (house of refuge, no crew employed) swam on board. He built a raft and after much difficulty established communication with the shore. Wired to the underwriters that there was a possibility of saving the vessel, and then with the aid of volunteers he carried out an anchor on his raft to hold the schooner's head to the sea. He and the volunteer crew stood by the wreck, on short rations, until a tug arrived on the 14th instant. They ran the towline for the tug which

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 9	Am. sc. Mary E. Morse.	Bethel Creek, Florida	released the water-logged craft after pulling about eight hours. Keeper and volunteers stayed on board the schooner until the tug reached Brunswick with her, although they suffered much from lack of food and clothing and from sickness caused by exposure.
Sept. 9	Slp. yt. Virginia....	Chicago, Illinois, Lake Michigan.	Stranded near the station and half filled with water, the crew consisting of two boys who were unable to manage their craft. Surfmen pulled out, took the boys into their boat, floated the sloop, and towed it into the harbor.
Sept. 10	Am. sc. Tacoma	Damariscove Island, Maine.	Stranded on Spruce Point Ledge, 6 miles N. by E. of station. Surfmen boarded her, and then the keeper took the master to Boothbay Harbor to procure the services of a tug. At high water the schooner was floated by the tug and life-saving crew and towed into the harbor for repairs, having been badly strained while on the rocks.
Sept. 10	Cat yt. George M ...	Atlantic City, New Jersey.	Stranded on the bar; smooth sea and ebb tide. Surfmen pulled out and hauled her afloat, undamaged, and then she proceeded to a wharf.
Sept. 10	Br. str. Moonstone...	Cape Henry, Virginia	Stranded on Cape Henry spit, 1,200 yards N.E. by E. from station, during thick, smoky weather, at 11.45 p. m. Keeper notified the Merritt Wrecking Company of the casualty, and then went on board the steamer. The wrecking tug arrived four hours later, and early on the next morning succeeded in releasing her, the surfmen rendering assistance as required. The steamer continued her voyage apparently uninjured.
Sept. 10	Rowboat, no name.	Old Chicago, Illinois, Lake Michigan.	At 10.10 p. m. this rowboat capsized about 1/4 mile S.E. of station. The surfman on lookout heard a cry for help and immediately rang the alarm bell. Surfmen hastily pulled in the direction of the cry and soon came upon an upset boat with a man and woman clinging to it. They took them into the station boat and returned to station with the capsized boat in tow. The rescued persons were given dry clothing from the stores of the Women's National Relief Association and were succored at the station until they were able to go to their homes.
Sept. 11	Slp. Gracie.....	Great Boars Head, New Hampshire.	Anchored in a dangerous position too close to some outlying rocks. Surfmen boarded her and took her to a safe anchorage.
Sept. 11	Fish boat, no name.	Old Harbor, Massachusetts.	Broke adrift from moorings in Chatham Roads. Surfmen pulled out and overhauled the boat, sailed it to a safe anchorage, and notified the owner of its whereabouts.
Sept. 11	Small boat, no name	Sand Beach, Michigan, Lake Huron.	Became unmanageable in a high wind and heavy surf, and in danger of being dashed to pieces against the breakwater. Surfmen went out, rescued the two occupants, and landed them with their boat at a dock in the harbor.
Sept. 11	St. yt. J. A. Valentine.	Hammonds Bay, Michigan, Lake Huron.	The station crib to which this yacht was moored began to break up during a strong N.E. gale. Surfmen cut the mooring lines and hauled her into shallow water, where they opened her sea cock and let her fill. On the 14th they floated the yacht apparently uninjured.
Sept. 11	Am. sc. Horace H. Badger.	.....do	About 11 p. m., during a heavy NNE gale, the station patrol discovered a schooner drifting toward the beach, her anchor chain having parted. Surfmen at once started along the shore with the beach cart, finding the schooner stranded about 50 feet offshore and lying easy. The master and crew not wishing to leave her, the surfmen returned to station with the beach cart. On the 14th

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 11	Am. sc. Horace H. Badger.	Hammonds Bay, Michigan, Lake Huron.	they pulled out and grappled the schooner's anchor chain and buoyed it. Upon the request of the master, they assisted in efforts to release the schooner at various times between the 19th and 30th, she being successfully floated on the latter date.
Sept. 11	Am. sc. Belle W. Culbert.	Ludington, Michigan, Lake Michigan.	While this schooner was moored to the pier near the station a heavy swell began to set in, causing her to pound hard and to part her mooring lines. A tug was sent for, but would not come out. Keeper put a crew of surfmen on board, cut the mooring lines which could not be cast off, and then made sail. After being carried some distance below the station by the strong tide, she gathered headway and sailed inside the harbor, where the surfmen made her well fast in a slip.
Sept. 11	Rowboats (2) and scows (3), no names.	.....do.....	These small craft were pounding together in a cove behind the north pier, and were in danger of being seriously damaged. Surfmen rigged a tackle and hauled them all clear of the strong surf that was rolling in.
Sept. 11	Am. sc. Day Spring	Pentwater, Michigan, Lake Michigan.	Mooring lines parted during a gale, and schooner went drifting up the channel. Surfmen ran new lines to the pier and assisted to make her well fast.
Sept. 11	Rescue lifeboat.....	Muskegon, Michigan, Lake Michigan.	This craft, which was moored in a small bay opposite the station, went adrift during a gale and fouled some rocks and piles which stove a hole in its bottom, the keeper having previously advised the owner to move his boat to a safe berth. Surfmen ran a line across the channel, and after their boat had filled and capsized twice succeeded in cutting the mooring lines, which had become foul and held the disabled boat on the rocks; then they hove it clear and towed it up the channel, mooring it in a sheltered position.
Sept. 11	Slp. yt. Elizabeth...	Holland, Michigan, Lake Michigan.	Dragged anchor and fouled a dock. Surfmen boarded her, ran out their spare anchor to windward, hauled her clear of the dock, and left her anchored in safe berth after having made everything snug on board.
Sept. 11	Nph. lch. and rowboats, no names.	South Haven, Michigan, Lake Michigan.	These boats, belonging to a local boat liveryman, were pounding together in the heavy sea. Surfmen assisted to haul the rowboats out on the dock and to secure the launch.
Sept. 11	Rowboat, no name..	South Chicago, Illinois, Lake Michigan.	Drifting out into the lake before a SW. gale, the single occupant being unable to make the shore. Surfmen pulled out, took the occupant into their boat, and returned to the station with the rowboat in tow.
Sept. 11	Slp. yt. Argo.....	Old Chicago, Illinois, Lake Michigan.	Dragged anchor during a heavy SW. gale and drifting toward the south pier, no one being on board. Surfmen boarded her, buoyed her anchor chain and let it go, and then tried to tow her up the harbor. After gaining some distance a heavy gust of wind drove them back to the entrance. They made another attempt and, by hoisting the staysail on the yacht, succeeded in getting her to the lee side of the south pier, where they made her fast until a tug came and towed her into the harbor.
Sept. 11	Slp. yt. Dione .....	.....do.....	This yacht dragged away from her moorings just after the surfmen had the Argo in a safe berth. One surfman boarded her with a line which the others made fast to the pier, thus holding her until a tug came and took charge of her.
Sept. 11	Am. sc. D. K. Clint..	Plum Island, Wisconsin, Lake Michigan.	This barge anchored 2½ miles S. of station after being cut adrift from a steamer which was trying to tow her up Green Bay against a heavy gale. The keeper

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 11	Am. sc. D. K. Clint ..	Plum Island, Wisconsin, Lake Michigan.	piloted the steamer to her on the next morning, upon the request of the master, and surfmen assisted to get the barge's anchor and run a towline to the steamer.
Sept. 11	Small boat, no name.	.....do.....	This boat, containing the light keeper and his assistant, capsized about $\frac{1}{4}$ a mile NW. of station while returning to the island from Detroit Harbor during a NW. gale. Surfmen quickly sailed out to render relief, but the men had gained shoal water before the station boat reached them. Surfmen hauled the upset boat up on the beach without damage, and on the next day they assisted the light keeper to launch it.
Sept. 12	Am. sc. Mystic Tie..	Burnt Island, Maine.....	Dragged anchor during a gale and stranded 5 miles NNE. from station at high water. Surfmen boarded her, but could do nothing to float her until the time of spring tides. On October 8 they carried out anchors, hove her afloat, and towed her to a wharf with the surfboat. She was slightly damaged by the casualty.
Sept. 12	Sailboat, no name..	Hunniwells Beach, Maine.	Dragged from moorings by a strong wind, there being no one on board. Surfmen pulled out and towed it to a safe berth.
Sept. 12	Slp. yt. Bonnie Doon.	Fletchers Neck, Maine...	Dragged anchor in a gale of wind and stranded on the rocks at the western point of Wood Island. Surfmen boarded her and ran out two hawsers to hold her during the night, leaving her in the charge of the master. On the next morning they boarded her again, took out her ballast, dug away the rocks from underneath her keel, and planted her anchors anew. At high water they hove in, using a lever under her keel at the same time, released her with only slight damages, and towed her to a wharf in the Pool.
Sept. 12	Slp. yt. Trouble and yt., no name.	Jerrys Point, New Hampshire.	Parted moorings during the gale and grounded on the rocks near Gerrish's Island. Surfmen hauled them afloat, and when the wind moderated, sailed them to a safe harbor near the station, turning them over to the owner on the next day.
Sept. 12	Sailboat, no name.	.....do.....	Parted moorings and in danger of drifting on the rocks. Surfmen went out and towed it to the station, where they held it to await the owner.
Sept. 12	Dories (2), no names.	Rye Beach, New Hampshire.	Surfmen pulled out about a mile and picked up two dories, which had gone adrift. They returned them to the owners.
Sept. 12	Dory, no name.....	Salisbury Beach, Massachusetts.	This dory, containing two lobster fishermen, was anchored about 4 miles NE. of station during the heavy SW. gale of this date. The sea was breaking over the boat, and the fishermen were lying flat in its bottom for safety. Surfmen pulled out to them and offered to take them into the surfboat, but they decided to try to pull the dory to the shore in company with the surfboat. The station crew found it impossible to pull back to windward, but after hard work they managed to reach the mouth of Hampton River, where they left both boats and walked to station.
Sept. 12	Am. sc. James Baker.	Plum Island, Massachusetts.	Dragged anchor in the gale and fouled the schooner Herbert M. Rogers. Surfmen telephoned for a tug, but none came. They went on board the Baker and succeeded in clearing the vessels. Just afterwards, however, the schooner G. M. Hopkins dragged down and fouled the Baker, tearing away the rail and breaking in the top sides. By slacking away on the starboard chain and hoisting the jib the surfmen cleared the Baker. Then they shifted part of her cargo to port to lift the leak out of water, and pumped her out.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 12	Slp. yt. Dewey.....	Plum Island, Massachusetts.	Dragged anchor in the gale, and in danger of fouling an old pier. Surfmen went aboard and ran out a heavy anchor, fetching her up just clear the dock.
Sept. 12	Slp. yt., no name.....	.....do.....	Drifting down the river during the gale, the anchor having become foul. After a hard pull against the tide the surfmen boarded the sloop and ran out a line to a vessel at anchor near by. They cleared the foul gear, reefed the sail, and then turned the craft over to its owner, who came for it.
Sept. 12	Am. sc. J. V. Wellington.	Gap Cove, Massachusetts	Flying a signal of distress about 7 miles offshore from station. Keeper sent a surfman to Rockport for a tug, and then pulled out to her with the rest of his crew. She was leaking, her sails blown away, and she was drifting to leeward rapidly. Surfmen set all the canvas that was left, headed her for Thatchers Island, and then manned the pumps. A tug arrived about dark and safely towed her to Gloucester.
Sept. 12	Slp. yts. Mary and Nelka and sc. yt. Ellen M.	City Point, Massachusetts.	During the SW. gale of this date these yachts dragged together and became considerably damaged. Surfmen went to them in the station launch, hauled them apart, secured the wreckage, and anchored them in new berths, where they safely rode out the gale.
Sept. 12	Slp. yts. Ocean Lily and Mallard and sc. yt. Raven.	.....do.....	Dragged anchors and in danger of stranding or of fouling other craft. Surfmen boarded each of them, finding on each another anchor, which they let go. Then they cleared the anchors already down, and the yachts held on throughout the remainder of the gale.
Sept. 12	Slp. yts. Bohemian and Metric.	.....do.....	The Bohemian parted her moorings and drifted afoul the Metric, carrying away her main boom, tearing her mainsail, and breaking the bowsprit of the latter craft. Surfmen boarded the Bohemian, hauled her clear, and let go a large anchor, which held her during the rest of the gale. Then they boarded the Metric, hauled the wreckage on board, and let go another anchor.
Sept. 12	Slp. yts. Everett and Sans Souci.	.....do.....	Parted moorings and drifted afoul the City Point pier, where they lay pounding in the rough sea. Surfmen hauled them clear with the station launch and securely anchored them.
Sept. 12	Am. slp. Lena.....	.....do.....	A yacht dragged afoul this sloop while she lay at anchor, carrying away her mast and bowsprit. Surfmen boarded her and snugly stowed the mast, bowsprit, boom, and sail, which were hanging over the side. Then they let go another anchor with plenty of scope and she rode out the gale all right.
Sept. 12	Slp. yt. Marquette .....	.....do.....	Blown ashore during the first part of the gale. Surfmen made a line fast to her, ran out their anchor ahead of station launch, and then four surfmen got into the water and lifted on her stern while the launch pulled. She slid off, and station crew towed her to a safe anchorage.
Sept. 12	Gas. lch. Dirigo .....	.....do.....	Parted moorings and drifting toward shore. Surfmen overhauled her before she struck and towed her to the float of the South Boston Yacht Club, where the owner took charge of her.
Sept. 12	Slp. Emily .....	.....do.....	Parted moorings and stranded on City Point. Surfmen ran out an anchor and hove taut in order to keep her from going higher up on the beach. Then at high water, just before midnight, they floated her and towed her to a wharf in Pleasure Bay.
Sept. 12	Catboat Faustina....	Highland, Massachusetts.	During the heavy gale this large catboat began to drag seaward from its anchorage off the station, and hoisted a signal

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 12	Catboat Faustina...	Highland, Massachusetts.	of distress. Station crew put their large anchor and hawser into the surfboat and pulled out, letting go the anchor well inshore and paying out the hawser until they reached the catboat. They made the hawser fast to the mast, thus stopping the drift, and then mended the sail, which had been blown to pieces. When the wind shifted to the NW, the man in charge ran for Chatham, where he made a safe harbor.
Sept. 12	Sailboat Pumpkin...	Monmouth Beach, New Jersey.	Capsized about 1/4 mile SW. of station, in a strong NW. breeze, with three men and one woman on board. Surfmen hastened to the scene, took the woman from the water where she was clinging to the side of the boat, and carried her to a place of safety. The men were all good swimmers and helped the surfmen to right the boat and get her alongside of a dock.
Sept. 12	Br. sc. Albacore....	Oswego, New York, Lake Ontario.	A tug with this schooner in tow began to drift to leeward, toward the breakers, while trying to make the harbor entrance during a westerly gale. The tug cut the towline and saved herself, and the schooner let go her anchor, but the chain parted and she stranded near the station. Surfmen fired a shot line across her, set up the beach apparatus, and safely landed her crew of seven men in the breeches buoy. They then hauled out to the wreck a surfman, who sent ashore all the clothing that he could find on board. The shipwrecked crew were taken to a hotel, but the master, who was badly bruised, was succored at the station until the next day. The schooner was left on the beach for the winter.
Sept. 12	St. lch. Brownie....	Charlotte, New York, Lake Ontario.	Parted moorings and drifting out into the lake. Life savers pulled out in the surfboat and towed it to the station, where the owner took charge of it later in the day.
Sept. 12	Scows (2), no names.	Buffalo, New York, Lake Erie.	Upon the request of the master of a tug surfmen pulled to the Stony Point breakwater and made fast the lines of a scow which the tug towed in from an exposed position at the end of the breakwater. Before the scow was secured one surfman was washed off the breakwater twice, but was safely picked up each time. While returning to station the surfmen ran a line three times to another scow which had stranded and which tugs were trying to release. The line parted each time and the tugs gave up the job.
Sept. 12	Am. sc. Penobscot..	Kenosha, Wisconsin, Lake Michigan.	Anchored 10 miles SE. of station, with flag flying at half-mast. After a hard pull of two hours the surfmen boarded her. She had lost her foremast, mainmast, bowsprit, and jib boom, and the wreckage was hanging over the side. After working for five hours surfmen got all the gear on board, made things snug, and hove up the anchors. The steam barge Chas. Reitz, bound for Milwaukee, then came along and took her in tow.
Sept. 12	Am. sc. York State.	Sheboygan, Wisconsin, Lake Michigan.	Sprung a leak during a gale and made harbor for shelter. The master requested assistance of the station crew, his crew having been hard at work at the pumps all night. Surfmen manned the pumps, put alongside some sawdust, which stopped the leak, and then pumped her dry.
Sept. 14	Sloop, no name.....	Burnt Island, Maine.	Became dismasted about 2 1/2 miles NW. from station. Surfmen towed the disabled craft into Port Clyde Harbor with the surfboat.
Sept. 14	Sloop, no name.....	City Point, Massachusetts.	This sloop capsized about 1 1/2 miles N. of station in a puff of wind. Surfmen rescued the sole occupant and towed the boat into shoal water, where they put it in sailing trim.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 14	Fish boat, no name.	Sullivan's Island, South Carolina.	Surfmen bailed out and put in trim this fish boat which had run on the rocks and capsized about 1½ miles W. of station, the two occupants having been rescued by some soldiers who were close at hand.
Sept. 14	Yacht, no name	Point Betsie, Michigan, Lake Michigan.	Filled with water and drifted aground 1 mile N. of station; the six people on board safely wading to the beach. Surfmen bailed it out, hauled it up on the shore, and repaired rudder. Keeper took the crew of the yacht to the station and gave them food and lodging until the next morning.
Sept. 14	Lighter, no name	South Haven, Michigan, Lake Michigan.	This lighter and a raft of lumber were drifting down the river. Surfmen pulled out, towed them to a dock, and notified the owner of their whereabouts.
Sept. 14	Sailboat, no name	Kewaunee, Wisconsin, Lake Michigan.	A man who had been out sailing in this craft was unable to beat back into the harbor on account of the rough sea. Station crew went out in the surfboat and towed him inside.
Sept. 15	Catboat Alma	Sandy Hook, New Jersey.	The station patrol discovered this boat ashore on the point of the Hook at 11 p. m. Surfmen went to it and found that the tide had left it high and dry on the beach. Keeper gave hot coffee to the crew of four men and furnished two of them with dry clothing from the stores of the Women's National Relief Association and with lodging at the station, the other two remaining in a shanty on the beach. On the next morning the surfmen ran an anchor well off shore, hauled the catboat out through the surf, sailed it into the bay, and turned it over to its crew.
Sept. 15	Am. sc. Willie	Little Beach, New Jersey.	At 6.40 p. m. the station patrol observed this schooner to be dangerously near the breakers and at once burning a warning signal. She anchored in the breakers and surfmen pulled out to her, finding the sea breaking heavily over her and her crew anxious to abandon her. After difficult work in the heavy breakers, surfmen managed to get the crew of four men into the surfboat and landed them at station, where keeper succored them until the next day. The wind shifted offshore during the night, and on the next morning the schooner was riding safely at her anchor. Surfmen took the crew out to her, assisted to heave up anchor and get her under way, and sailed her out into deep water.
Sept. 15	Nph. lch. Charley	South Chicago, Illinois, Lake Michigan.	Machinery became disabled and launch drifted against a pier, where its crew made it fast. Surfmen towed it into Calumet Harbor with the surfboat.
Sept. 15	Sch. Clara	do	At 1.30 a. m. this schooner loaded with household goods fouled the end of north pier and lay pounding against it in a moderate sea. The pier lookout called up the station crew, who tracked the schooner along the pier into smooth water and pumped her out. Then they towed her across the Calumet River with the surfboat and moored her in slip where she was safe.
Sept. 15	Am. sc. Winnie Weaver.	Kenosha, Wisconsin, Lake Michigan.	Flying a signal of distress about a mile SE. of station during a strong SE. wind and heavy sea. Upon boarding her surfmen found that she was leaking, had 3 feet of water in her hold, and that her pump was disabled. Her crew, consisting of the master and a boy, were exhausted from hard work. Surfmen sailed her into the harbor and pumped her out.
Sept. 15	Am. sc. Massasoit	Sturgeon Bay Canal, Wisconsin, Lake Michigan.	Steering gear carried away and hawsers parted about 10 miles S. of station while being towed up the lake by the steamer Panther during a moderate gale. Keeper

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 15	Am. sc. Massasoit	Sturgeon Bay Canal, Wisconsin, Lake Michigan.	sent to Sturgeon Bay for a tug, and then launched the 34-foot lifeboat and started for the disabled schooner, which was rolling about helplessly in the heavy sea. The tug from Sturgeon Bay overtook the lifeboat and gave her a tow out to the schooner. As the schooner had a cargo of iron ore and drew too much water to enter Sturgeon Bay Canal, the tug towed her inshore where she anchored for the night. At the request of the master the surfmen stayed on board all night and manned the pumps, for the vessel was leaking seriously and the crew had had no sleep for three nights. On the next morning the master went ashore and procured a tug to tow his vessel to Manitowoc.
Sept. 15	Row boat, no name.	Cape Arago, Oregon.....	A man became exhausted in this small rowboat while trying to pull from the breakwater to Empire City against a strong breeze. The boat half filled with water and drifted ashore, where the keeper picked up the man in a fainting condition and took him to the station. When he recovered his strength, keeper sent two surfmen to take him and his boat to his destination.
Sept. 16	Catboat Leader.....	Gap Cove, Massachusetts.	Dragged anchor and was in danger of going on the rocks, nobody being on board at the time. Surfmen ran out an anchor, hauled her clear, made sail, and took her into Rockport Harbor, where they secured her to a dock to await owner.
Sept. 16	Slp. yt. U. & I.....	City Point, Massachusetts.	Parted moorings and went adrift in the bay. Surfmen towed her to a safe berth with the station launch, and anchored her.
Sept. 16	B. r. sc. Nellie Blanche.	Race Point, Massachusetts	Anchored close to Race Point with foremast carried away. Keeper sent a surfman to notify a tug at Provincetown, and then boarded the schooner with the remainder of his crew. Surfmen cleared away the hanging piece of the broken mast, set up the jib stay, strengthened the mast, mended the sails, and assisted to get her under way. A tug then arrived and towed her into the harbor.
Sept. 16	Sloop, no name.....	Cape May, New Jersey.....	Cable parted in a heavy squall and sloop driven on the beach. Surfmen worked it off on the flood tide and took it into Hughes jetties for a harbor.
Sept. 16	Am. sc. Mary E. Perew.	Lake View Beach, Michigan, Lake Huron.	Sprung a leak while towing down the lake during heavy weather, and hoisted a signal for assistance when off station. Her steam pump was choked and her crew were worn out by hard work. Surfmen boarded her and manned the hand pumps until the steam pump was ready for action again.
Sept. 16	Sailboat, no name..	Grand Marais, Michigan, Lake Superior.	Cable parted and boat drifted onto the beach, where it lay broadside to the sea, which broke over it and soon filled it with water. Surfmen took a purchase to the boat and hauled it up clear of the water so that it would not pound to pieces.
Sept. 16	Am. sc. Indian Bill.	Holland, Michigan, Lake Michigan.	Stranded near the E. end of the south pier while a tug was trying to shift her to a safer berth. The tug had to leave her on account of shoal water. Surfmen ran a line to the north pier, hauled her afloat, and moored her to the Ottawa Beach dock.
Sept. 16	Am. sc. Burt Barnes.	Two Rivers, Wisconsin, Lake Michigan.	The master of this schooner, having weathered the storm at anchor outside the piers, requested the keeper to help him to get his anchor, as he was shorthanded. Surfmen went on board and hove in fifty fathoms of chain; then a tug came and towed the schooner into the harbor the surfmen running the mooring lines to the pier with their boat.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 17	Sharpie no name...	Ocean City, New Jersey...	Rudder carried away and boat stranded on a bar in the inlet. The tide was flooding and the sea was breaking over the bar, endangering the life of the sole occupant of the sharpie, who was signaling for assistance. Surfmen pulled out and took him into the surfboat; then with the assistance of the Great Egg crew, who had reached the scene of the mishap, they floated his boat and towed it to the Great Egg Station. The man was succored at that station and furnished with dry clothing from the supplies of the Women's National Relief Association.
Sept. 17	Catboat, no name ..	Turtle Gut, New Jersey ..	Stranded on the lee bank of the lower thoroughfare while out with a pleasure party on board. Surfmen shoved the boat afloat, and then, on account of the inexperience of the party, the keeper detailed two of the station crew to sail the boat to Cape May City.
Sept. 17	Am. sc. Emma B ...	Santa Rosa, Florida	Missed stays and stranded 4 miles NNW. of station. Surfmen boarded her, carried out an anchor with the surfboat, and manned the windlass, but failed to release her on account of the ebb tide. Afterwards a tug came along and offered assistance, and surfmen ran a line to her. The tug floated the schooner without damage.
Sept. 18	Police boat, no name.	City Point, Massachusetts	Adrift in the bay about 1½ miles E. from station. Surfmen picked it up with the station launch and returned it to the police.
Sept. 18	Am. sc. Ettie	Gurnet, Massachusetts ...	This fishing schooner came in during the night and anchored close to Browns Island. The wind began to freshen and a rough sea began to roll in from the NE., making her berth very perilous. Her master hoisted a signal for assistance, and surfmen responded without delay. On account of the mainsail being carried away, it was deemed dangerous to try to get the schooner under way in the gale with so little space for casting. Her crew of eleven men requested to be landed, and keeper took them to station, where he gave them food and dry clothing from the stores of the Women's National Relief Association. At 5 p. m., the wind and sea having moderated, surfmen took the crew out to the schooner and helped them to get safely under way.
Sept. 18	Am. Barge Black Bird.	Cahoons Hollow, Massachusetts.	The towline having parted, the tug went on and left this barge rolling about in a heavy sea, during a NE. gale. Her master anchored her 2 miles S. of station and about ½ mile offshore. Surfmen took the beach apparatus abreast the barge and stood by to render assistance. The barge's crew of three men tried to land in their own boat in spite of the warnings of the surfmen, who, foreseeing inevitable disaster, went into the surf with life lines about their bodies. The boat capsized in the breakers, and surfmen rescued two of the men, expelling water from the stomach of one of them, and took both to station, where keeper gave them succor and dry clothing from the stores of the Women's National Relief Association. The third man was lost. The barge held on at her anchorage, and, on the next day, a tug came and towed her away. (See letter of acknowledgment, and for detailed account see caption "Loss of Life.")
Sept. 18	Am. sc. N. M. Skinner.	Coskata, Massachusetts ..	Dragged anchor and hoisted signal of distress about 7 miles NW. of station during a heavy NNE. gale. Surfmen boarded her after a hard pull of five and

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 18	Am. sc. N. M. Skinner.	Coscata, Massachusetts ..	one-half hours, but before they reached her a kedge anchor and eighty fathoms of hawser had brought her up close to the Handkerchief Shoal. She had lost her foresail and fore staysail, and the sea had washed her decks of everything movable. Surfmen stayed by her until daylight, and then helped to get her anchors. A tug came along and towed her to Vineyard Haven.
Sept. 18	Am. sc. Grace Bailey.	Holly Beach, New Jersey.	Parted anchor chain while anchored off Absecon bar. The schooner ran for Delaware Breakwater, but could not make it on account of a heavy NW. wind and sea. She ran back and hoisted a signal of distress off Holly Beach. Surfmen boarded her and supplied the master with a hawser, with which he anchored for the night. Surfmen pulled out on the next morning and got their hawser, and, the wind and sea having moderated, the master made sail for the breakwater.
Sept. 18	Sloop Rebecca.....	Durants, North Carolina..	Stranded 4 miles N. by W. from station. Surfmen pulled to her, ran out her anchor, repaired her sail, and then hauled her afloat.
Sept. 18	Yacht Argo.....	Old Chicago, Illinois, Lake Michigan.	This yacht lost her mainsail while cruising in the lake about a mile S. of station. Surfmen went out in their boat and towed her alongside of a dock.
Sept. 18	Am. str. C. F. Biel- man.	Plum Island, Wisconsin, Lake Michigan	Stranded on Fish Island, 10 miles N. of station, having on board a cargo of coal. Station crew sailed to her in their Mackinaw boat, and stood by to land the crew in case that the weather should become more bolsterous, the master having gone to Washington Harbor on a tug to procure more help. At 6 p. m., the tug not returning and the wind and sea increasing, the steamer's crew became uneasy and requested to be landed. Surfmen took them (sixteen men and one woman) to Washington Harbor, where they received succor on the light-house tender Dahlia. On the next morning the master returned with a wrecking tug, and surfmen transferred thirty-six coal trimmers from the tug to the stranded steamer. About one-half her cargo of coal was thrown overboard and a leak in her bottom was stopped with the assistance of the life-saving crew. On the 22d instant she was released and towed toward Milwaukee. (See letter of acknowledgment.)
Sept. 19	Am. sc. John Shay ..	Cape Henlopen and Lewes, Delaware.	Stranded near the point of Cape Henlopen shortly after midnight. The station patrols called up both the Cape Henlopen and Lewes stations and both crews reached the wreck at 2 a. m. They safely landed the crew of six men and one woman in the surfboat and gave them shelter for the rest of the night. On the next morning surfmen boarded the wreck and saved the yawl, some stores, and the personal effects of the shipwrecked crew. The schooner became a total loss.
Sept. 19	Am. sc. Birdle	Holland, Michigan, Lake Michigan.	Landed alongside the north pier where the heavy SW. swell would soon have pounded her to pieces, there being only one man on board to handle her. Surfmen pulled across to the north pier and towed her to a safe berth.
Sept. 20	Catboat, no name...	Great Egg, New Jersey ...	Stranded about 1 mile SW. of station at 7.40 p. m. The single occupant was nearly exhausted when the station patrolman waded out and assisted him to reach the shore. He was succored at the station and given dry clothing from the stores of the Women's National

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 20	Catboat, no name...	Great Egg, New Jersey ...	Relief Association. At low water on the next morning the surfmen saved the man's effects; but, the bottom of the catboat having broken in, they could only take ashore its spars and sails, the hull becoming a complete wreck.
Sept. 20	Schooner Swallow...	Grindstone City, Michigan, Lake Huron.	Stranded on a reef about 5½ miles W. of station. Surfmen pulled to the reef and anchored the surfboat about 100 yards from the stranded schooner, the water being too shoal to approach nearer. They waded to the wreck, bailed it out, and succeeded in hauling it afloat. Then they made sail, and, with the surfboat in tow, proceeded to Port Austin.
Sept. 20	Br. sc. Singapore ...	Ottawa Point, Michigan, Lake Huron.	Stranded at 12.30 a. m., while trying to make the harbor during a SE. gale. After the station patrol had answered the distress signal with a Coston light, he turned out the station crew, who at once pulled out to the stranded vessel. Keeper took the captain's wife and child and a female passenger into the surfboat and landed them at station. Surfmen stayed by the schooner until daylight, when they took the master ashore to telegraph to the owners of cargo and to procure the services of a tug. They returned with the tug to the schooner, jettisoned her deck load of lumber, pumped her dry, and then the tug released her. Surfmen put the women and child back on board and saved the lumber which had been thrown overboard. (See letter of acknowledgment.)
Sept. 20	Am. sc. L. M. Mason.	Manistee, Michigan, Lake Michigan.	Foresail carried away at 8.30 p. m., while the schooner was trying to enter the harbor in a fresh WNW. breeze. She drifted to the N. of north pier, and let go her anchor in dangerous proximity to the beach. Keeper telephoned for a tug, and then the station crew boarded her. A tug soon came out, but could not approach within 200 yards of the schooner. Surfmen ran a towline to the tug, helped to heave up the schooner's anchor, and then the tug towed her safe into the harbor.
Sept. 21	Dory, no name	Salisbury Beach, Massachusetts.	Two of the station crew went into the surf, assisted a lobster fisherman to land, and hauled his dory up on the beach.
Sept. 21	Am. sc. Loring C. Ballard.	Plum Island, Massachusetts.	Stranded on the bar while being towed into the mouth of the Merrimac River. Surfmen took the master's wife and her clothing to the shore, because there was danger of the sea making and pounding the vessel to pieces; sent a telegram at request of the master, and then ran lines to three tugs which had arrived upon the scene. Surfmen pumped the schooner out, as she was leaking, and soon afterwards the tugs floated her and towed her inside to a safe anchorage.
Sept. 21	Catboat, no name ..	Point of Woods, New York.	Capsized ¼ mile E. of station, having on board two boys. One of the surfmen, who was out in his boat, rescued the boys and bailed out and righted the boat.
Sept. 21	Small boat, no name.	Sand Beach, Michigan, Lake Huron.	Drifting out of the harbor, having on board one man, who had broken one of his rowlocks. Two surfmen pulled out and towed the boat to the shore.
Sept. 22	Rowboat, no name.	Fort Niagara, New York, Lake Ontario.	Surfmen pulled out into the lake, recovered this rowboat, which was adrift, towed it to the shore, and notified the owner of its whereabouts.
Sept. 22	Lighter, no name...	Buffalo, New York, Lake Erie.	Upon the request of the owner, surfmen ran a line from a tug to this lighter, which had gone ashore in a recent storm. After they had run the line twice, the tug released the lighter and towed it away.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 23	St. yt. Ampere	City Point, Massachusetts.	The machinery of this yacht became disabled off the NE. end of Thompsons Island. Station launch went out and towed her to her moorings. There were six people on board at the time of the casualty.
Sept. 23	Yt. Bertha Lee	Great Egg, New Jersey ...	Became becalmed while trying to pass out of the inlet, drifted into the breakers on the bar, and capsized, with eight people on board. A yacht which was near at hand picked up all the people. Surfmen pulled out from Great Egg and Ocean City stations, righted the yacht, bailed her out, and sailed her into the inlet. (See letter of acknowledgment.)
Sept. 24	Slp. yt. Mary	City Point, Massachusetts.	Dragged anchor and stranded on Thompsons Island. After the tide had begun to flood, surfmen went to her in the station launch, hauled her afloat, and towed her to an anchorage near the station, where the owner took charge of her later in the day.
Sept. 24	Slp. yt. Nonpareil .....	.....do	This yacht, which went ashore on Thompsons Island in the gale of the 12th instant, was floated by the surfmen and towed to Borden's shipyard.
Sept. 24	St. lch. Beatrice	Toms River, New Jersey ..	Flying a signal of distress off the life-saving station. Surfmen pulled out to the launch, and the master reported that he was out of water. Surfmen carried out to him a supply from the station.
Sept. 24	Am. sc. Ida Keith ..	Cleveland, Ohio, Lake Erie.	This schooner was lying at a coal dock, which was on fire. Surfmen went to the scene and moved her out of danger.
Sept. 24	Sailboat, no name ..	Sand Beach, Michigan, Lake Huron.	Rudder disabled. Surfmen took the boat to station, hauled the stern up on their launching ways, and repaired the rudder. The man in charge of the boat, being destitute, was given lunch and dinner at the station.
Sept. 24	Slp. yt. Nymph	Evanston, Illinois, Lake Michigan.	Made signal of distress off station. Surfmen boarded her, and, at the request of the owner, who was seasick, they took charge of her. They landed the owner and then anchored the yacht with the station anchor and line, she having no ground tackle on board. On the 26th, the wind having become fair, surfmen bailed her out and one of them assisted the man who came for her to sail her back to Chicago.
Sept. 24	Sloop, no name	Baileys Harbor, Wisconsin, Lake Michigan.	Dismasted in a fresh breeze and drifting toward the beach. Surfmen pulled out and towed her to station; they furnished the single occupant with dry clothing from the stores of the Women's National Relief Association and with food and lodging until the 26th instant.
Sept. 25	Am. sc. Mary D	Ottawa Point, Michigan, Lake Huron.	Sprung a leak 12 miles S. of station. She anchored off the station and surfmen boarded her and pumped her out. On the 28th surfmen put her on the bar, listed her over with heavy tackles, and succeeded in calking the leak.
Sept. 25	Am. sc. Stampede	Kewaunee, Wisconsin, Lake Michigan.	Sprung a leak while anchored 5 miles N. of station. The master of the schooner, not being able to hoist his anchor, slipped his cable and ran for Sturgeon Bay Canal, where his vessel was recalced. On October 7 the schooner returned to get her anchor, and the master requested aid of the life-saving crew. Surfmen located the anchor, shackled the chain, and assisted to heave it on board.
Sept. 26	Am. sc. Eugene H. Cathrall.	Turtle Gut, New Jersey ..	This schooner had been recently launched off the beach, where she had been laid up for several months. Her crew hailed the station patrol at 10 p. m. and told him that she was leaking seriously. He ran her anchor to the shore with a small boat, and at high water he helped the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Sept. 26	Am. sc. Eugene H. Cathrall.	Turtle Gut, New Jersey...	crew to beach her. Surfmen went to her at midnight, pumped her out, and on the next morning hauled her out to an anchorage in the stream, her crew then being able to keep her free of water.
Sept. 27	Am. sc. Florida	Cuttyhunk, Massachusetts.	Struck on Great Ledge in Buzzards Bay, 7½ miles N. by E. ¼ E. from station. Surfmen went to her and, by handling sail to the best advantage, succeeded in getting her clear of the ledge without injury.
Sept. 27	Am. tug Sport	Grande Pointe au Sable, Michigan, Lake Michigan.	Steam pipe carried away and engineer badly scalded. Surfmen pulled out and took the injured man to the station, where the keeper treated the scalded parts. Then the keeper took the man to Ludington with his horse and buggy, and put him under the care of a doctor.
Sept. 27	Am. sc. Sehome.....	Fort Point, California	Burned a signal for assistance off Point Diablo at 8.30 p. m. Surfmen pulled out to her, leaving word with the station lookout to send for a tug if they should burn a Coston light. The schooner lay dangerously near the rocks, and they fired the signal, which soon brought a tug to her assistance.
Sept. 28	Am. slp. Carrie.....	Barnegat, New Jersey....	Stranded 1 mile NNW. of station. After her crew had failed to float her at high water, the station crew went to her and succeeded in hauling her off without apparent damage.
Sept. 28	Gas. yt. Clitheroc ...	Louisville, Kentucky.....	Adrift in the river and on fire. Surfmen pulled out and tried to extinguish the flames with their fire apparatus. Failing in that, however, they sank the yacht, then raised it, towed it to the shore, and baled it out.
Sept. 29	Small boat, no name.	City Point, Massachusetts.	Capsized near the NE. end of Thompsons Island, out of sight from station. Two boys rescued the single occupant, who was drunk. Upon being informed of the casualty, surfmen went to the scene, righted and baled out the boat, and towed it to Spectacle Island, where the rescued man worked.
Sept. 29	Am. sc. Cora	Baileys Harbor, Wisconsin, Lake Michigan.	Stranded about a mile NW. of station, the master not being acquainted with the harbor. Surfmen went on board and ran out a kedge anchor; then by working the sails properly they floated the schooner and took her to a good anchorage.
Sept. 30	Catboat Bounding Billow.	Old Harbor, Massachusetts.	Anchored in shoal water, about 2 miles S. of station, during a thick fog. When fog lifted, the man in charge did not dare to go out between the shoals on account of the high surf, and therefore he made a signal for assistance. Surfmen pulled out to the boat and towed it between the shoals into the channel.
Oct. 1	Sloop, no name	Duluth, Minnesota, Lake Superior.	Broke adrift, capsized and sunk near one of the city wharves. Surfmen righted her, baled her out, and hauled her up clear of the water.
Oct. 2	Rowboat, no name.	Monmouth Beach, New Jersey.	Capsized near the station, throwing one man into the water. Keeper took a small boat and pulled out, rescuing the man and bringing his boat safely ashore.
Oct. 2	Pile driver, no name.	Ludington, Michigan, Lake Michigan.	On fire. Station crew went on board and played stream from station pump on the flames, and after about half an hour succeeded in putting out the fire.
Oct. 3	Catboat Ella.....	Great Egg, New Jersey...	Capsized in thoroughfare with four men, two women, and five children on board. Two boats, which were close by, rescued the eleven people, and the surfmen arrived in time to straighten the catboat up and take it to the station. The boat's party were all taken to the station and furnished with dry clothing from the stores of the Women's National Relief Association while their own was being dried.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 4	Am. sc. Lizzie Williams.	White Head, Maine.....	While at anchor in Seal Harbor the schooner sprung a leak and set a signal for assistance. Surfmen went on board and tried to pump her out, but the water constantly gained on them. Got under way and ran her up on the mud flats, but still were unable to gain on the water. Then sailed her to Port Clyde, 10 miles away, where she was repaired.
Oct. 5	Am. sc. Diadem....	Burnt Island, Maine.....	Storm bound and out of provisions. Keeper succored the master and his two hands until the 7th, when the storm abated, and the vessel proceeded to her destination.
Oct. 5	Am. sc. Eastern Queen.	Cape Elizabeth, Maine...	Stranded during thick fog on Trundys Reef, 2½ miles N. of station. Upon learning of the disaster, the surfmen started out with the beach apparatus for the scene. The vessel was lying about 150 yards from shore, and the first shot carried a line aboard her. The gear was set up, and the two men comprising the crew were safely landed in the breeches buoy. The master was cared for at the station until the 10th, but the other rescued man remained in the vicinity of the wreck in a cottage. The vessel was a total loss.
Oct. 5	Am. sc. Onward....	Wallis Sands, New Hampshire.	During thick weather the schooner stranded about a mile NE. of the station about 9 p. m. As soon as she was reported by the patrol, the surfmen started out in the surfboat to her assistance, arriving about 9.30. The weather was too stormy to do anything for the vessel, and the only service the life-savers could render was to land the three men from the vessel. Took them to the station and sheltered them until transportation could be secured to their homes. The schooner became a total loss.
Oct. 6	Am. sc. Stephen Bennett.	North Scituate, Massachusetts.	Stranded about 1.30 a. m. on a sunken ledge ¼ mile from the station. She burned a signal, which was answered by the patrolman, who then hurried to the station and reported to the keeper. Surfmen boarded the vessel, but as she was in no immediate danger they remained inactive until the tide flooded, when the schooner slid off without assistance and was anchored to await daylight. Keeper then took charge, slipped the cable, and piloted her clear of the obstructions.
Oct. 6	Am. sc. Katie G. Robinson.	Peaked Hill Bars, Massachusetts.	Ran ashore 1 mile ESE. from the station about 6 a. m., during a thick fog and high sea. Surfmen immediately launched, and after a hard pull succeeded in boarding the vessel. Landed the seven men from the wreck, but could do nothing for the vessel, which became a total loss. Succored the crew at the station for three days and furnished five of them with clothing from the stores of the Women's National Relief Association.
Oct. 6	Catboat Minnie.....	Barnegat, New Jersey....	Dismasted in Barnegat Bay, 2¼ miles NW. of station. One of the surfmen chanced to pass in that direction and landed the two men from the boat, leaving her at anchor. On receiving report of the casualty, the keeper took part of his crew and went on board, rigging up a temporary mast, under which the boat was sailed to Barnegat City.
Oct. 6	Am. scs. Coquelle and Reliance.	Coquille River, Oregon...	These two schooners were standing in over the bar at low water and with scant breeze. The Reliance was about 300 yards in the lead, and when she reached the bar she took bottom and swung across the channel. The Coquelle tried to pass clear, but lost steerage way and collided with the Reliance, both vessels

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality	Nature of casualty and service rendered.
1900. Oct. 6	Am. scs. Coquelle and Reliance.	Coquille River, Oregon...	drifting down on the jetty. Surfmen had foreseen an accident and were already on the way to the place, and soon ran lines to the opposite jetty and hauled the vessels into the channel. A tug now arrived and took both in tow.
Oct. 8	Am. sc. Josie	Crumple Island, Maine...	Stranded 2 miles N. of station during thick weather. Surfmen boarded her but could not work her afloat, and at master's request keeper went to Jonesport for a tug. Tug came, but was unable to move the schooner, and surfmen returned to station. On the following day they boarded the vessel again, and at high water succeeded, with the assistance of the tug, in floating her. Started to Jonesport with her, but when about halfway there she filled and rolled over on her beam ends. Signaled another tug, which ran alongside and held the schooner up until she could reach port.
Oct. 8	Slp. Georgia Lee....	Metomkin Inlet, Virginia.	Stranded on Flounder Point, 1/4 mile SW. of station. Surfmen ran an anchor into deep water and hauled the sloop afloat. Then towed her to a safe berth.
Oct. 8	Am. sc. Annie.....	Velasco, Texas	Parted cable and stranded 7 miles NE. of station. Surfmen teamed the surfboat to windward of the vessel and boarded her. Laid out an anchor and hove her afloat, recovered the lost anchor and cable, and piloted the schooner to a safe anchorage.
Oct. 9	Yt. Bertha.....	Great Egg, New Jersey ...	Stranded on sand bar near the inlet. Surfmen boarded her and hove her afloat, but the current cut her back on the bar again. Stock of her anchor being broken, surfmen procured another from a yacht near by and laid it out. Then by pushing on oars and heaving on cable, they worked the yacht into deep water. Her rudder was found to be broken, and the master hired another yacht to tow his vessel to her destination.
Oct. 9	Slp. Speedway.....	Holly Beach, New Jersey.	Encountered a succession of heavy squalls which carried away most of her sails and threatened to swamp her. She anchored, water-logged, about 2 miles east of the station shortly before 9 p. m., and her crew of four men abandoned her and went ashore in their boat. They made their way to the station, where they were given dry clothing from the stores of the Women's National Relief Association, and one of their number, who was verging on physical collapse, was treated with stimulants and hot applications. They were all sheltered for the night, and on the following morning the station crew boarded the sloop, taking a spare mainsail with them, cleared away the wreckage, repaired the shrouds, bent the sail, and worked her to an anchorage near the station. Secured a pilot from Anglesea and took the craft to Hereford Inlet. Her crew remained at the station until the 11th.
Oct. 9	Am. sc. Mary Wood.	Durants, North Carolina.	Stranded 4 miles N. of station. Surfmen boarded her, laid out an anchor, and succeeded in heaving her afloat with but slight damage.
Oct. 9	Am. tugs Carrie Mather and Elizabeth G.	Sheboygan, Wisconsin, Lake Michigan.	These two tugs were lying at the Sheboygan coal dock when, at 2.45 a. m., the dock took fire, threatening their destruction, there being no one on board. Surfmen hastened to the place and towed the tugs to another dock, where they made them fast.
Oct. 9	Am. sc. Sea Gem....	.....do	Arrived in port with a severe leak. Surfmen boarded her, manned the pump, and kept at work until she was dry. They also strewed sawdust all around the vessel, thus filling the seams and temporarily stopping the leaks.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 10	Am. sc. Sarah A. Reed.	Quoddy Head, Maine.....	Driven into Quoddy Bay by stress of weather, anchored, and at low water took bottom, tearing off her rudder and causing a serious leak. In answer to her signal, surfmen boarded her, pumped her out, and then pulled to Lubec for a tug. Upon the arrival of the tug they got her under way and she was safely towed into port.
Oct. 10	Catboat Annie.....	Gay Head, Massachusetts.	Parted moorings and went ashore in Menemsha Bight at high water. As she was in no immediate danger and the weather was stormy, surfmen left her there until the 12th, when they hove her afloat.
Oct. 10	Slp. Speedway.....	Hereford Inlet, New Jersey.	Arrived off the inlet with broken rudder and set signal for help. Surfmen pulled out and fished the rudder, convoyed the sloop over the bar, and helped to furl sail as soon as she anchored.
Oct. 10	Am. sc. Little Georgy.	Baileys Harbor, Wisconsin, Lake Michigan.	Stranded on a reef 2 miles SW. of station. Surfmen boarded her, laid out an anchor, clapped a tackle on it, and after two hours' work succeeded in heaving her afloat uninjured.
Oct. 11	Am. sc. Hattie S. Collins.	Burnt Island, Maine	Parted chain and stranded 3 miles NE. of station. Crew decided to let her remain on the shore until the weather moderated, and surfmen assisted to make her fast. On the following day they again went to the vessel, laid out an anchor, and succeeded in heaving her afloat. Took her to the marine railway at Fort Clyde.
Oct. 13	Rowboat, no name.	Cold Spring, New Jersey.	While this boat containing four men was landing through the surf near the iron pier at Cape May City, one of the men pitched overboard and then tried to wade ashore. A surfman on his way to the post-office saw the accident, rushed into the water to assist the man, and managed to haul him out upon the beach. Surfmen worked over the body for one and one-half hours but could not restore life, although the man was in the water only three minutes before he was hauled out. Two physicians pronounced life extinct and keeper turned the body over to the coroner. (For detailed account, see caption "Loss of Life.")
Oct. 14	Sc. Annie and Adaline.	White Head, Maine	Lying in a dangerous berth and dragging anchor. Surfmen boarded her, reefed sail, got under way, and beat her to a safe anchorage.
Oct. 14	Slp. Boreas	City Point, Massachusetts.	Stranded 1 mile SW. by W. from station. At high water one of the station launches hauled her afloat and towed her to an anchorage.
Oct. 14	St. lch. Gov. Morton.	Buffalo, New York, Lake Erie.	During a thick fog the police boat Morton ran aground near the north end of the north breakwater. Surfmen went out in tow of a tug and ran a line to the launch. Tug then released the boat.
Oct. 15	Gas. lch., no name..	Marquette, Michigan, Lake Superior.	Engine broke down and the launch drifted ashore 2 miles SSW. of station. Surfmen responded to a call over the telephone and pulled to the place. Rigged a tackle and hauled the boat up on the shore.
Oct. 15	Sc. Lillian C.....	Plum Island, Wisconsin, Lake Michigan.	Dragged anchor and stranded on a reef abreast of the station. Surfmen ran heavy anchor and hawser out into deep water and hauled the vessel off. Took her to safe anchorage. She was not much damaged.
Oct. 16	Sc. Twilight.....	Quoddy Head, Maine.....	Dragged anchor and sunk 1 mile ENE. of station about 11 p. m. The casualty was reported to the keeper by one of the two persons who had been on board. The vessel was only about 50 yards from shore and both men had reached shore in safety. Surfmen worked for three

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 16	Sc. Twilight	Quoddy Head, Maine.....	days, at the end of which time they had her into shoal water, where she was dry at low tide.
Oct. 16	Slp. Wabasso	City Point, Massachusetts.	Halyards foul and crew unable to take in sail. They signaled to the station for help, and one of the launches went to her assistance. Two surfmen climbed the mast, cut the halyards, and took in the sail. The launch then towed the sloop to an anchorage.
Oct. 16	Am. sc. General Sheridan.	Highland, Massachusetts.	While on the way from Perth Amboy to Boston with a cargo of piping, this schooner was driven ashore in a gale about 9 p. m., 2 miles E. of station. She was discovered at 9.40 by the surfman on patrol, who immediately flashed a Coston signal and started for the station to give the alarm. Keeper called up Pamet River Station by telephone and requested the assistance of that crew. He then procured a team of horses and hauled the beach apparatus abreast the vessel, arriving about 11.30 p. m. The Pamet River crew arrived about the same time, and the gun was soon in position. The night was so dark and stormy that the life-savers could not see where to aim until a Coston signal was burned. This lighted up the scene long enough to enable Keeper Worthen, of the Highland Station, to aim and fire. The shot passed between the masts and the line was caught by the crew of the schooner. They did not seem to know what to do with it, however, and it was with some difficulty that the surfmen made them understand by signals to haul off. When they got hold of the whip they were again ignorant of what they had to do, and the surfmen were unable to make them understand. Finally Keeper Worthen decided to send the team for the surfboat, but before the trip could be made the sailors set up the whip by both parts to the flying jib stay, with the apparent intention of attempting to reach shore by sliding down the whip. The surfmen surmised their purpose and at once hauled taut the whip. The vessel was only about 75 yards from shore, and soon the master of the vessel made his descent in safety. He was followed by the other members of his crew, and all were safely landed, although one, a man over 70 years old, was completely exhausted. Surfmen took them to the Highland Station and gave them stimulants and dry clothes. The vessel broke up and became a total loss. (See letters of acknowledgment.)
Oct. 16	Slp. Fenella	Rockaway, New York....	Boom carried away and vessel went ashore $\frac{1}{2}$ mile W. of station. Surfmen boarded her, but by that time the wind had driven her afloat. The nine persons on board were afraid the sloop would be driven to sea, so station crew made her fast with a strong line and landed the people, sheltering them at the station overnight. On the following day a tug towed the sloop away.
Oct. 16	Am. sc. Carrie E. Pickering.	Lewes, Delaware	Stranded at 9.15 p. m. on the point of Cape Henlopen. Patrolman called up both Lewes and Cape Henlopen stations and the two crews responded without delay. The wreck gun was made ready, but the first shot broke the line. The second shot laid the line across the vessel and the gear was soon set up. The crew of six persons were then landed in the breeches buoy and were taken to Cape Henlopen Station for shelter. All left on the following day except the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900.			
Oct. 16	Am. sc. <i>Carrie E. Pickering</i> .	Lewes, Delaware	master, who remained until the 22d. The vessel broke up and became a total loss.
Oct. 16	Am. sc. <i>Brunette</i>	Erie, Pennsylvania, Lake Erie.	While towing down the lake behind the steamer <i>Wetmore</i> in a heavy NW. wind, line carried away and the schooner drifted toward shore. The steamer proceeded to Erie and asked assistance from the station crew for the schooner. Crew started out at once and sailed up, about 15 miles, to the vessel, finding her at anchor in a heavy sea, but able to ride out the gale. Master declined to land and crew returned to station. (See letters of acknowledgment.)
Oct. 16	Raft of logs	Lake View Beach, Michigan, Lake Huron.	Broke away from the tug <i>Gladiator</i> and drifted ashore about a mile south of station. On the following day the tug returned for the raft and the surfmen helped to recover lines and ran them to the tug. She then steamed away with what logs still remained in the booms.
Oct. 16	Am. sc. <i>I. L. Quinby</i> .	Sand Beach, Michigan, Lake Huron.	Entered port with steering gear broken and signaled for help. Let go anchor, but dragged afloat of pier and was in danger of breaking up. Surfmen procured a tug, but neither the tug nor the schooner had line enough to reach between them, and the water was too shoal for the tug to go close in. Surfmen thereupon took station hawser and ran it from the schooner to the tug, and the endangered vessel was then hauled clear of the pier. Station line carried away before deep water was reached, but the schooner anchored in a safe berth and rode out the gale.
Oct. 16	Am. sc. <i>Canton</i>	Ottawa Point, Michigan, Lake Huron.	Surfmen made out this vessel coming down the lake with topmasts carried away and signal of distress flying. She anchored near the can buoy off East Tawas and was soon boarded by the life-savers. Master wished to go ashore to communicate with owners, and as his boat had been stove by a falling spar, surfmen took him ashore in surfboat. Made arrangements for the aid of a tug, but the master of the tug was absent. Surfman <i>Browne</i> being a licensed master, keeper detailed him to take charge, and the tug then steamed out and brought the schooner into port. Station crew assisted to get her topmasts on deck and to straighten up the gear. (See letter of acknowledgment.)
Oct. 16	Sailboat, no name ..	Grand Marais, Michigan, Lake Superior.	Dragged ashore in a northerly gale, filled and sank $\frac{1}{2}$ mile from the station. Crew went to the scene with pike poles and kept the drift logs away from the boat, and as soon as the sea moderated they built coamings around the gunwales, bailed the boat out and assisted to heave her out on the beach.
Oct. 16	Am. tug <i>William Maxwell</i> .	Michigan City, Indiana, Lake Michigan.	On fire about a mile up the river from the station. Crew turned out with buckets and kept the fire under control until the arrival of the city fire department, which soon extinguished the flames.
Oct. 17	Am. sc. <i>Mary Lee Newton</i> .	Quoddy Head, Maine	Parted cables and went ashore 1 mile ENE. from station about 4.45 a. m., during a northerly gale and snowstorm. Patrol reported her to keeper, who at once started for the scene with crew and beach apparatus. Rigged apparatus, fired line over the vessel, and soon had gear set up. Landed the four men in the breeches buoy without incident, but the vessel was a wreck and had to be abandoned.
Oct. 17	Am. sc. <i>Olive G</i>	Cross Island, Maine	Parted chain during strong N. wind and went ashore on the north side of Cross Island about 4 a. m. Master sent word

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 17	Am. sc. Olive G	Cross Island, Maine	to the station and asked for assistance to float the vessel at high water. Crew responded, laid out two anchors, and succeeded in floating the schooner with but slight damage. Sailed her into Cross Island Harbor. On the following day the crew swept for and recovered the lost anchor.
Oct. 17	Am. sc. S. Sawyer . .	White Head, Maine	Anchored in a dangerous position in Muscle Ridge Channel and dragged near Yellow Ledge. Surfmen boarded her, laid out an anchor, hove her into the channel, and assisted to get her under way for Rockland.
Oct. 17	Am. sc. Chester R. Lawrence.	Jerrys Point, New Hampshire.	Anchored off the station and set signal of distress. Surfmen boarded her and found that she had lost her sails during the blow. A tug came along shortly and the surfmen assisted in running line to her, got the schooner under way, and escorted her to Portsmouth.
Oct. 17	Am. sc. W. C. Norcross.	Gap Cove, Massachusetts.	Sails blown away by strong wind while off the Isles of Shoals, and the vessel put back under bare poles. Arriving off Gap Cove, she was taken in tow by a tug for Pigeon Cove, but just as the tug was rounding her to, the towline parted and she went onto a ledge of rocks. The wind and sea being against the surfmen, keeper took his crew to the place on foot. Before their arrival the crew of the schooner had been landed and the vessel was a wreck, but they boarded her and secured most of the personal effects. The vessel was stripped on the following day, and the keeper secured free passes for the shipwrecked men to their homes.
Oct. 17	Slp. Thistle	City Point, Massachusetts.	Lost sail during a squall and came to anchor $1\frac{1}{2}$ miles S. of station. Shortly afterwards a signal was made for help and one of the launches was dispatched to her assistance. Towed her to her mooring at the Mosquito Yacht Club.
Oct. 17	Lighter Sampson . . .	Point Allerton, Massachusetts.	While working on a sunken steamer near Nantasket Beach, 6 miles from the station, lighter had her moorings carried away during a blow and went ashore on the rocks. As there is a boat belonging to the Massachusetts Humane Society in that vicinity, the surfmen hired a team and proceeded to the scene. Procured the society boat, launched, and ran alongside, although there was a heavy sea on at the time. Took off the four men and landed them, afterwards taking them to the station. The lighter was saved by private parties, but was considerably damaged.
Oct. 17	Am. sc. Lawrence Haines.	Chatham, Massachusetts.	Anchored 3 miles S. of station in a strong breeze, which increased and threatened to carry the vessel down upon Pollock Rip Shoal. Master set signal of distress, in answer to which surfmen boarded the schooner through a heavy surf. As soon as the tide served the surfmen got the vessel under way and took her out clear of danger. (See letter of acknowledgment.)
Oct. 17	Am. sc. Snow Flake.	Monomoy, Massachusetts.	Caught out in the gale and had her sails partly blown away; anchored near Stone Horse Shoal and set signal of distress. At daylight surfmen made her out and at once started out for a 5-mile pull to her. Upon arriving alongside they boarded her, assisted to repair sails, and as soon as the wind moderated got her under way. She proceeded to Vineyard Haven.
Oct. 17	Am. scs. T. W. Cooper and J. Arthur Lord.	Coskata, Massachusetts . . .	These two schooners were driven ashore by stress of weather on the west side of Coskata and to the northward of the station. The surfmen boarded the Lord

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 17	Am. scs. T. W. Cooper and J. Arthur Lord.	Coskata, Massachusetts...	first and landed the master and his wife, and telegraphed to Nantucket for a tug. Then they boarded the Cooper, brought the master ashore, and telegraphed to the underwriters' agent at Nantucket. The vessels were in no immediate danger and were floated later in the day by steamers.
Oct. 17	Boat from sc. David S. Siner.	.....do	Shortly before noon a boat was seen approaching the island from the N.E., running before the gale for a harbor. Surfmen hurried to the place for which the boat seemed to be heading, and arrived just as a landing was being made. The boat was from the schooner David S. Siner, which foundered in the gale 2 miles W. of Pollock Rip light vessel at 3 a. m., and contained the five men who had been on board at the time. They were all nearly exhausted, and the surfmen assisted them to the station, gave them food and dry clothing, and later had them conveyed to Nantucket.
Oct. 17	Br. sc. Swallow.....	Point Judith, Rhode Island.	Shortly before daylight patrolman reported distress signals from a vessel lying in the breakwater. Station crew at once responded, and upon boarding her found her to be the British schooner Swallow, of St. Johns, New Brunswick, which had dragged afoul of the breakwater and was unable to get clear. Surfmen ran out a kedge anchor with sixty fathoms of cable, and in about an hour succeeded in heaving the vessel away from the pier. Got under way and stood out of the harbor of refuge, and the master then resumed charge.
Oct. 17	Catboat Jessie Lee..	Point of Woods, New York.	Driven ashore by high winds. Surfmen went to the place on foot and after an hour's work succeeded in heaving her afloat.
Oct. 17	Slp. Mary Emma.....	.....do	Driven ashore 1 mile E. of station. Surfmen worked on her on the 17th, 18th, and 19th, and finally were successful in releasing her.
Oct. 17	Slp. Idaho	Monmouth Beach, New Jersey.	Lost mainsail and anchor in the gale and went ashore about a mile S. of station at 1.30 a. m. Patrol passed that way in a short time and assisted the two men to reach the beach, the sloop being only a few feet from the water's edge. Took them to the station, where they were cared for two days. The sloop was a total wreck.
Oct. 18	Lighter, no name ..	Erie, Pennsylvania, Lake Erie.	Drifting out of the harbor at 2.10 a. m. Lookout got a line to it and made it fast to the station wharf. On the next morning it was towed away by the owner.
Oct. 18	Br. str. R. C. Britain.	Ottawa Point, Michigan, Lake Huron.	Stranded on Ottawa Point 1½ miles SW. of station shortly after midnight. Patrol discovered her and reported to keeper, who turned out his crew, manned the surfboat, and boarded the vessel. After vainly sounding distress signals, master decided to try to reach Tawas, where tugs could be procured. Surfmen took him into their boat and pulled to Tawas, 4 miles distant, and engaged two tugs. Then pulled back to the steamer and waited for the tugs. Soon after daylight they came out, and the surfmen were busy from that time to 12.30 p. m., when the vessel was floated, carrying messages, running lines, and transporting people between the tugs and the steamer. (See letter of acknowledgment.)
Oct. 18	Canoe, no name	Humboldt Bay, California.	Capsized in the bay ¼ mile SE. of station, throwing an Indian, the only occupant, into the water. Hearing his cries for help, surfmen pulled out to the rescue. They took him into their boat, righted the canoe, and towed it to the station.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 18	Canoe, no name	Humboldt Bay, California.	Gave the Indian dry clothes from the supply of the Women's National Relief Association, and put the canoe in trim.
Oct. 19	Am. sc. Marvin D. White.	Core Bank, North Carolina.	While standing down Core Sound the schooner took bottom and carried away her foremast. Keeper and part of crew boarded her and assisted her to port for repairs.
Oct. 19	Catboat Wantagh ..	Mosquito Lagoon, Florida.	Stranded in Mosquito Lagoon, $\frac{1}{2}$ mile NW. of station. Keeper boarded her and attempted to float her, but failed. There being no sleeping accommodations on board, he took the two men from the catboat to the station for the night. On the following morning they again boarded the boat, and after lightering her of part of her cargo succeeded in working her into the channel. Keeper then replaced lightered cargo and piloted the boat into clear water.
Oct. 21	Yawl, no name	City Point, Massachusetts.	Capsized and sank $1\frac{1}{4}$ miles ESE. of station. A boat near by picked up the three men from the water and brought them to the station, where they were given food and allowed to dry their clothes. Launch went out with crew, who righted the yawl and brought it to the station.
Oct. 21	Skiff, no name.....	Atlantic City, New Jersey.	Capsized on south bar, but crew were picked up and landed by another boat. Surfmen pulled out and brought the boat to a safe anchorage.
Oct. 21	Am. sc. Ellen	Ottawa Point, Michigan, Lake Huron.	Stranded shortly after midnight $1\frac{1}{4}$ miles SW. of station. Patrol reported at once, and station crew boarded her. Being unable to float her without assistance, pulled to East Tawas for a tug. No tug being obtainable, hired a schooner and lightered part of the Ellen's cargo of potatoes. Then ran out anchors, and at 6.30 a. m. succeeded in floating the schooner. Assisted to reload the lightered cargo.
Oct. 21	Am. str. C. Hickox..	Thunder Bay Island, Michigan, Lake Huron.	Stranded on North Point reef, 4 miles SW. of station, at 6 p. m. Surfmen heard signals for help and pulled to the place in the lifeboat. The vessel was pounding heavily on the rocks and the master decided to jettison his deck load of lumber. Station crew helped in this work, but even then the vessel stuck fast. Surfmen then went to Alpena for a tug, but upon their arrival at that place received a telephone message that the vessel had backed off under her own power.
Oct. 23	Am. sc. Westport....	Brenton Point, Rhode Island.	Stranded at 8 p. m. 5 miles NE. of station. On the next morning keeper received information of the casualty, and at once procured a team and hauled the lifeboat and beach apparatus to the place. Boarded the schooner and tried to float her, but the tide was too low, and the attempt had to be abandoned. Took the crew to the station and cared for their wants until the afternoon flood tide, when the surfmen returned and worked the vessel afloat.
Oct. 23	Am. str. Lyric.....	Duluth, Minnesota, Lake Superior.	Stranded on a sunken crib in the harbor. Surfmen went alongside and took the master to the city, where he procured a tug. Tug hauled the vessel afloat without damage.
Oct. 23	Am. sc. Mary L.....	Balleys Harbor, Wisconsin, Lake Michigan.	Parted chain and went ashore 2 miles W. of station. Crew boarded her at once and ran out a line to the pier, clapped on a watch tackle, and after two hours' work had the vessel afloat without damage.
Oct. 24	Slp. Viola.....	Damariscove Island, Maine.	Stranded near the station. Surfmen boarded her, ran out an anchor, and hove away, but could not release her. When the tide flooded they hove her off and she proceeded into the harbor.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 24	Am. sc. James G. Blaine.	Ship Canal, Michigan, Lake Superior.	While towing through the canal behind the steamer <i>Niko</i> the schooner collided with a mud scow and had a hole stove in her bow. Station crew at once ran lines from her to the dock and made her fast; then covered the hole with a tarpaulin to keep her afloat. Upon the arrival of a diver, the surfmen assisted him to make temporary repairs so that the vessel might continue her passage. (See letter of acknowledgment.)
Oct. 25	Am. sc. Little Georgy	Baileys Harbor, Wisconsin, Lake Michigan.	Sprung a leak and burned a signal of distress while lying at the pier. Surfmen boarded her and manned the pump, but the leak continued. Then threw her cargo of pease onto the pier and located the leak. Keeper and crew cut away part of the deck planking and partially stopped the leak. Then wined the vessel and loaded the pease onto her port side so as to list her over, and calked her seams.
Oct. 26	Gas. launch Haller	City Point, Massachusetts.	Machinery broke down 1½ miles NE. of station. One of the launches towed her to her mooring place at South Boston.
Oct. 27	Am. sc. Mary T. Powers.	North Scituate, Massachusetts.	Stranded on a sunken ledge ¼ mile NE. of station during thick fog and just at night-fall. Two men went ashore in one of the boats and were found by the patrolman from the station. He burned a signal and hurried to report to the keeper, who had the surfboat launched at once. Surfmen boarded the schooner, laid out an anchor, and with the assistance of the crew of the Massachusetts Humane Society Station, hove the vessel afloat. A towboat was then seen in the offing, and the life savers pulled out and intercepted her. Keeper piloted the tug close in, and then ran a line to the schooner. She had taken bottom again, but the tug soon released her and proceeded with her in tow to Boston.
Oct. 27	Am. str. Cecelia Hill.	Baileys Harbor, Wisconsin, Lake Michigan.	Lost in the fog and blowing signals for help. Station crew pulled out, and the keeper detailed one of the men to pilot the steamer into the harbor.
Oct. 28	St. yt. Dewey	Racine, Wisconsin, Lake Michigan.	Machinery disabled and occupants unable to reach port. Surfmen pulled out and towed her to a wharf in the harbor.
Oct. 28	Am. str. Gipsy	Fort Point, California	While standing in for the Golden Gate in a heavy seaway the vessel was boarded by a succession of seas, which washed overboard some lines. The lines were picked up by the propeller, and the steamer was soon totally disabled, whereupon she anchored off the Southside Station and burned signals of distress. The surf was too heavy for the crew of that station to make a launch, and they telephoned Fort Point Station. Keeper called a tug and proceeded in tow to the scene of the casualty. Ran a line to the <i>Gipsy</i> , and the tug took her safely into San Francisco Harbor.
Oct. 29	Am. sc. Freighter ..	Hunniwells Beach, Maine.	Stranded on Stage Island, ¼ mile E. of station, at 5 p. m. Surfmen at once boarded her, ran a line to the opposite side of the channel and attempted to float her, but tide was ebbing too fast and they had to give up for the time being. Hove her stern up to keep her from pounding, and at low water calked her seams. As the tide flooded they tended lines and hove her off, taking her to a safe anchorage to await daylight. After daybreak they boarded her again and hung the rudder, which had been unshipped. (See letter of acknowledgment.)
Oct. 30	Br. sc. Wallula	Burnt Island, Maine	Missed stays and went ashore in Port Clyde Harbor, 3½ miles NE. of station. Surfmen promptly boarded her and assisted in working her off and getting her under way.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Oct. 30	Gas. lch. Lula	City Point, Massachusetts.	Parted mooring and went adrift, fouling another boat. Station launch towed her to a safe berth and moored her securely.
Oct. 30	Am. sc. Valentine Koon.	Short Beach, New York..	Mistook channel and stranded on Jones Inlet bar, 2 miles WSW. of station, about 6 p. m. Some three hours later she made a signal of distress and crew boarded her. Remained on board until after midnight and succeeded in working her over the bar and into deep water. On the following morning surfmen recovered the schooner's anchor, which had been slipped.
Oct. 30	Slp. yt. Truant.....	Core Bank, North Carolina.	Mistook channel and grounded in Core Sound, 2 miles NW. of station. Part of crew boarded her, laid out an anchor and hove her into the channel.
Oct. 31	Slp. Lady Louie ...	Cedar Creek, New Jersey.	Stranded on the beach $\frac{1}{2}$ mile S. of station at 12.30 a. m., and was discovered by patrolmen ten minutes later. Two of the three men had gone ashore and the other was in the cabin sick. The sloop was in no danger, so patrol went to station and reported. Surfmen went to the scene, made the sloop fast and took the three men to the station, where they were provided with dry clothing from the stores of the Women's National Relief Association. At 7 a. m. crews of Cedar Creek and Forked River stations hauled the sloop out on the beach, clear of the tides. Kept the men at the station until November 6, when the crew launched the sloop and one of the surfmen piloted her to Barnegat Inlet.
Oct. 31	Am. str. F. & P. M. No. 2.	Ludington, Michigan, Lake Michigan.	While standing out of the harbor at 11.30 p. m., the steamer collided with a tow of barges bound in, and swung athwart the channel. Tug cleared the barges and surfmen tended the steamer's lines for one hour, enabling her to warp out into the channel. (See letter of acknowledgment.)
Oct. 31	Skiff, no name.....	Manistee, Michigan, Lake Michigan.	Three men went out in this boat to fish, but found the sea so high that they were unable to manage it. The station crew pulled out, took the men into the surfboat, and towed the skiff into the harbor.
Nov. 1	Scow Huron.....	Cleveland, Ohio, Lake Erie.	In danger of going to pieces while unloading stone at Edgewater Park, a strong wind having suddenly begun to blow from off the lake. Surfmen went to the scow and ran a line to a tug which towed it into the harbor safe.
Nov. 1	Am. scs. Ida Jane and Birdie.	Pentwater, Michigan, Lake Michigan.	Broke away from moorings near the station during a SW. gale. Surfmen took their lines, hauled them to safe berths, and securely moored them.
Nov. 1	Sc. yt. Gazelle.....	Saint Joseph, Michigan, Lake Michigan.	Dragged anchor and went ashore near the railroad bridge during the SW. gale. Surfmen ran a line to her from the light-house dock, hauled her afloat, and then secured her in a safe berth.
Nov. 1	Small boat, no name.	Old Chicago, Illinois, Lake Michigan.	This small boat filled with water about 200 yards from station, while two men were pulling out to a schooner in it. The men safely reached the station incline and requested help. Surfmen hauled the boat up and found a loose bottom plank and several open seams. They nailed fast the plank and calked these seams, and then the men proceeded on their way.
Nov. 3	Am. sc. Emma A. Chesebro.	Little Egg, New Jersey...	Struck on the bar and sprung a bad leak while entering the inlet. Her master was compelled to anchor on the lee side of the channel as his main boom was broken and the main sail was dragging overboard. Surfmen from both Little Egg and Little Beach stations boarded her, hauled the boom and sail inboard, fitted up a lug mainsail, manned the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 3	Am. sc. Emma A. Cheesebro.	Little Egg, New Jersey ...	pumps, and on the flood tide worked her into the harbor and ran her aground on a soft mud bottom. The mud stopped most of the leaks, and then surfmen ran out her anchors and on the evening of the 5th they succeeded in floating her. After her spars and sails were repaired, she sailed for her destination.
Nov. 3	Am. sc. A. L. Lee ..	Ocean City, New Jersey..	Stranded on bar, $\frac{1}{2}$ mile NNW. from station, while trying to make Ocean City wharf during a strong NNE. wind with rain. Surfmen boarded her, ran out her kedge anchor, hauled her afloat, and piloted her in to the wharf.
Nov. 3	Sloop, no name....	Sullivans Island, South Carolina.	This small sloop could not carry sail on account of the strong wind and rain, therefore the single occupant beached it about $\frac{1}{2}$ mile SW. of station. The life-saving crew hauled it up clear of the surf, and after the wind moderated they helped the man launch it. Another squall struck it, however, and it became unmanageable and filled with water; station crew went into the surf and again hauled it up on the beach, finding its rudder broken. They took the man to station, provided him with dry clothing from the stores of the Women's National Relief Association, repaired the rudder, and then launched the boat, which, with its occupant, reached its destination without further accident.
Nov. 3	Skiff, no name.....	Louisville, Kentucky....	This skiff, with a boy in it, was in danger of being carried over the falls of the Ohio. Station crew pulled out, caught the skiff, and towed it to a wharf.
Nov. 3	Am. sc. Little Georgy.	Baileys Harbor, Wisconsin, Lake Michigan.	Stranded while leaving the harbor. Surfmen boarded her, ran out two kedge anchors, and, after working for two hours, succeeded in heaving her off the shoal. They helped to make sail and to work her out of the harbor.
Nov. 4	Yawl, no name.....	Charlevoix, Michigan, Lake Michigan.	Broke adrift from a schooner and capsized. Surfmen towed the yawl to the shore and turned it over to a tug which came after it. There was no one in the yawl when it went adrift.
Nov. 4	Am. str. Annie D....	Baileys Harbor, Wisconsin, Lake Michigan.	This steamer sounded a whistle of distress while anchored off station. Surfmen pulled out to her and found that the master had become ill very suddenly. They transported him to the station, cared for him during the night, and on the next day he was able to return to his vessel.
Nov. 5	Fish boat, no name.	Quonochontaug, Rhode Island.	This boat, containing two fishermen, capsized in the heavy breakers while trying to land $\frac{1}{2}$ of a mile SSE. of station. Surfmen hastily pulled out and rescued the men, who were hanging on to the upset craft. They took them to station, gave them hot stimulants and a good rubbing, and provided them with dry clothing. Station crew then got a line to the boat, which was rolling about in the surf, and hauled it up on the beach. (See letter of acknowledgment.)
Nov. 5	Am. sc. Fred L. Wells.	Oswego, New York, Lake Ontario.	Driven ashore, 4 miles E. of station, by the high wind and sea at 7 p. m. Station patrol answered her torch with a Coston light, and then the surfmen pulled out and to the eastward, finding the schooner stranded in the breakers about 500 feet from the shore. The crew had lowered their yawl and put their clothing into it, but it broke adrift and capsized. Surfmen safely landed the crew, and then recovered the yawl, which they hauled up on the beach. The schooner was a total loss.
Nov. 5	Am. str. John S. Parsons.	Charlotte, New York, Lake Ontario.	While towing a barge down the lake the machinery of this steamer became disabled about 3 miles NE. of station, and burned a torch for assistance. Keeper

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 5	Am. str. John S. Parsons	Charlotte, New York, Lake Ontario.	notified the master of a tug, and then launched the lifeboat and pulled out to the Parsons in a stiff squall. The steamer Hecla was holding the tow to the wind when the lifeboat arrived, and surfmen held on to the barge until the tug Mary E. Hall came out and towed the disabled steamer and the barge into the harbor.
Nov. 5	Small boat, no name.	Fort Point, California	Upon hearing a signal for assistance from a barge at work removing Arch Rock, surfmen pulled out, recovered the contractor's small boat, which had gone adrift, and towed it back to the barge.
Nov. 6	Am. sc. Helen M....	Parramore Beach, Virginia.	Carried away foremast head, anchored 2½ miles E. of station, and displayed a signal for assistance. Surfmen boarded her, helped to stow snug everything on board, secured a preventer stay from the mainmast head to the windlass forward, and then, as the weather was foul and threatening and the crew wished to land, the keeper took them to station in the surfboat. Early on the next morning, the wind becoming fair, surfmen put the crew back on board the schooner, and assisted them to get under way and start for their destination, which they safely reached in due season.
Nov. 7	Am. sc. J. Arthur Lord.	Gurnet, Massachusetts....	Stranded on Browns Island Shoal, on the ebb tide, at 4:30 p. m. Surfmen went off to assist her, taking along their kedge anchor and hawser, which they ran out into deep water. They also planted the schooner's small anchor, and, after the tide turned, they succeeded in floating her without injury.
Nov. 7	Br. str. Arabian.....	Vermilion Point, Michigan, Lake Superior.	Just before midnight this steamer stranded about 3 miles E. of station during a thick snowstorm. Surfmen immediately started toward her with the beach apparatus, but her crew of fifteen men and two women safely landed, by using a ladder from her bow, before their arrival. Keeper took them all to station, furnished them with food and lodging, and provided the two women with dry clothing from the stores donated by the Women's National Relief Association. On the 16th surfmen put the crew and an insurance agent on board the stranded vessel. On the 17th they ran lines for a tug, which made an unsuccessful attempt to float her. On the 20th she worked herself off the beach with her own steam, undamaged, and surfmen put the two women on board.
Nov. 8	Catboats Nellie and Fleetwing.	Cuttyhunk, Massachusetts.	These catboats ran into Cuttyhunk Pond for shelter and, their crews being unacquainted with the locality, stranded in the eastern part of the pond. Surfmen boarded both of them, hauled them afloat, and secured them to two spare mooring stakes, where they safely rode out the gale which followed.
Nov. 8	Am. str. Nebraska ..	Middle Island, Michigan, Lake Huron.	Dragged anchor during a NE. snowstorm and stranded ¼ of a mile W. of Presque Isle light. Surfmen went to her in lifeboat in tow of a tug which came with a lighter from Alpena. They put the lighter alongside the steamer, unloaded about three hundred tons of merchandise, and ran lines to the tug. The steam pumps were kept going, as she had seven feet of water in her hold, and at 9 p. m. the tug released her, considerably damaged, but able to reach Alpena under her own steam. While working on this vessel surfmen pulled out and recovered one of the steamer's yawls which had gone adrift containing two men who were unable to pull back to the vessel.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 8	Am. sc. Abyssinia...	Ship Canal, Michigan, Lake Superior.	Keeper received a message which informed him that this schooner was dragging her anchors at Eagle Harbor, 30 miles E. of station, during a heavy NNE. snowstorm. Keeper took surfboat and beach apparatus to Eagle Harbor by special train, a tug having refused to go on account of the gale, and boarded the schooner, whose master requested him to stand by throughout the night in order to render assistance in case she should continue to drag her anchors. On the next morning, the wind having moderated, surfmen assisted the schooner's crew to bend the mainsail to the foremast, the foresail having blown away, and make other minor repairs. They helped to hoist the anchors and ran lines to a tug, which towed her out to a steamer that was towing her down the lake. (See letter of acknowledgment.)
Nov. 8	Sailboat, no name..	South Haven, Michigan, Lake Michigan.	Adrift. Surfmen pulled out and towed it to a dock, where they made it well fast.
Nov. 8	Aus. str. Olga	Golden Gate Park, California.	Stranded about 2 miles S. of Point Lobos at 4 p. m., during a thick fog. Keeper telephoned for tugs and then boarded her, the tugs and life-saving crews from Fort Point and Southside stations arriving soon afterwards. Surfmen sounded around the stranded vessel, ran lines to three tugs, and then, upon the request of the master, the Golden Gate Park crew went ashore and telephoned for more help. Four more tugs with seventy men on board came out on the next morning, and surfmen transferred to the steamer the men, who at once began to jettison her cargo. Surfmen ran lines and otherwise assisted until the tugs released her, at 11 a. m., and towed her into the harbor. (See extract from newspaper, under caption "Letters of acknowledgment.")
Nov. 9	Am. str. Mizpah	Crumple Island, Maine...	Parted anchor chain in a SW. gale and drifted ashore on Old House Point, 7 miles N. by E. of station. Surfmen discovered her condition while on their way to Jonesport to get station mail. She was lying on her beam ends, had a hole in her port side, and was badly strained. The owner requested the assistance of the life-saving crew. They jacked her up and calked the open seams. Then they lashed empty oil barrels under her counter and along the lee side and ran out a kedge anchor to windward. By using a fourfold purchase on the hawser they succeeded in hauling her afloat and in taking her to a place of safety.
Nov. 9	Catboat Lily	City Point, Massachusetts.	Parted moorings during a strong W. wind, drifted against a pier, and filled with water. Surfmen bailed her out, towed her into Pleasure Bay, and secured her to a mooring buoy.
Nov. 9	Sloop, no name	do	Parted anchor line and drifted afloat the public landing. Surfmen towed the sloop clear and secured it to moorings near the landing.
Nov. 9	Catboat Gisella	do	Parted moorings and drifting before the strong westerly breeze. Surfmen went on board, and, finding no ground tackle, brought her up with the station anchor.
Nov. 9	Am. str. Gazelle	do	Stranded and sunk on the Lower Middle Ground, her crew landing safely in their dory. Surfmen went to her in station launch and saved a few movable articles. On November 11 she was raised and taken to the city.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 9	Catboat Faustina...	Chatham, Massachusetts.	Dragged anchor and stranded in Stage Harbor, 1 mile N. of station, during a very strong WSW. wind. She was lying well up in the marsh when the surfmen went to assist the owner to launch her. They put rollers under her bottom, and then by using a tackle, succeeded in floating her without damage.
Nov. 9	Am. slp. Martha....	New Shoreham, Rhode Island.	Parted cable and drifted ashore on the eastern side of the harbor during heavy storm. The sloop was lost, but the crew of three men reached shore safe and keeper succeeded them at station for five days.
Nov. 9	Sloop, no name.....	Blue Point, New York....	Dragged anchor and stranded 1 mile E. of station during westerly gale. On the 12th, surfmen went to the sloop with the man in charge of it and successfully launched it. There was nobody on board this craft when it stranded.
Nov. 9	.....do.....	Point of Woods, New York	Parted moorings and stranded near station during the strong NW gale. Surfmen hauled it afloat and sailed it to a safe berth, where they secured it.
Nov. 9	Fish boat, no name.....	.....do.....	On board this boat there was a man who was unable to reach the shore on account of the heavy wind and sea. Surfmen pulled out and landed him safe.
Nov. 9	Sailboats (2), no names.	.....do.....	In danger of foundering in the gale. Surfmen pulled out to them, let go extra anchors, and bailed the water out of one of them. The other filled and sank, notwithstanding the efforts of the station crew, but they raised and bailed it out on the following day.
Nov. 9	Catboat Jessie Lee, and sloop, no name.	.....do.....	These boats were blown ashore 1½ miles W. of station by the heavy gale. On the 13th instant, after working on them about six hours, the station crew succeeded in floating them undamaged.
Nov. 9	Am. slp. Lida F. Price.	Long Beach, New York...	Dragged anchor and fouled the railroad trestle about 2 miles east of station, where she lay pounding against the piling. Surfmen went to her, showed her clear, and secured her in a safe berth.
Nov. 9	Am. sc. Grover Cleveland.	Sandy Hook, New Jersey.	Lying alongside the Government wharf during a heavy NW gale, having on board a cargo of lumber. As she was lying broadside to the wind and sea surfmen ran a hawser across the slip for the purpose of heaving her head to the wind, but afterwards the master decided not to allow them to move her. She began to pound hard, the deck load went overboard and onto the wharf, and then she soon filled and sank head first. The cargo in her hold burst her open and she became a total loss. Keeper took the master and his three sons to station, furnished them with dry clothing from the stores of the Women's National Relief Association, and gave them food and lodging at the station. On the 23d the station crew went out and towed to the shore from this wreck two spars which were a menace to navigation.
Nov. 9	Nph. lch. John T. Oakley.	.....do.....	Lying at the wharf in an exposed berth, and in danger of being pounded to pieces by the high wind and sea, the owner having gone to New York. Surfmen rigged falls from spars on the wharf, hoisted her clear of the sea, and secured her to the stringpiece of the dock.
Nov. 9	Sloop, no name.....	.....do.....	Filled and sank at moorings behind the Government pier. Surfmen waded out to it, worked it in shore until its hatch coamings were above the water, and then bailed it out and secured it to a mooring pile, where it rode out the rest of the gale in safety.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 9	Am. slp. Victorine	Spermaceti Cove, New Jersey.	Stranded about 1½ miles N. of station during the NW. gale. Surfmen assisted the master to get his clam rakes and crab dredges stowed snugly on board, and then, as the tide was falling and would soon leave the sloop high and dry on the beach, they took the crew of two men to station and succored them for the night. Surfmen dug a basin around the stranded craft, and on the 20th, the tide coming in very full, they succeeded in floating the sloop out of the basin without damage.
Nov. 9	Houseboat, no name.	Forked River, New Jersey.	Parted moorings and stranded ¼ mile N. of station on a high storm tide. Surfmen went on board, but could do nothing toward floating the craft until the storm lulled. They took the man in charge to station and gave him food and lodging for the night. On the 26th, when spring tides were running, surfmen floated the houseboat, took it to a safe harbor, and telephoned for the owner to come and get it.
Nov. 9	Cat yt. Lila.....	.....do.....	This yacht, with nobody on board, parted its moorings during the strong NW. gale and stranded ¼ mile N. of station. Surfmen ran out an anchor, hauled the yacht afloat, and secured it in a safe berth.
Nov. 9	Slp. yt. Virginia....	Little Beach, New Jersey.	Cables parted during the gale, and sloop stranded 2½ miles NNW of station. Surfmen boarded her after a hard pull, searched for and recovered the lost anchors, bent new cables, and ran the anchors out into deep water, and then returned to station with the crew of two men, whom they succored for the night. On the next day surfmen went to the sloop, succeeded in floating her at high water, and moored her in a creek near the station to await the return of the master from Tuckeron.
Nov. 9	Am. sc. Joetta.....	Great Egg, New Jersey...	Dragged anchor in the gale and stranded on the east side of the beach thoroughfare. Station crew carried out her anchor and ran a line to a jetty; then they hove on both the anchor line and the jetty line for two hours, but failed to release her. On the 11th they tried again to float her, but owing to neap tides their efforts were futile. On the 12th they succeeded in floating her undamaged.
Nov. 9	Am. sc. Ida B. Gibson.	Avalon, New Jersey.....	Anchored about 5 miles offshore and flying a signal of distress. Surfmen boarded her in the westerly gale, which was blowing, and found her water-logged, breaking to pieces, and her sails blown away. They started back to shore with the crew of six men, but were picked up at 6 p. m. by the steamer North America, which lay by the wreck all night. On the next morning surfmen returned to station and the steamer went south with the wreck in tow.
Nov. 9	Am. sc. Ella Creef..	Kill Devil Hills and Kitty Hawk, North Carolina.	Dragged anchor during a strong NW. wind and stranded in Kitty Hawk Bay. On the 15th surfmen from both Kill Devil Hills and Kitty Hawk stations assisted the master to pry her up and put skids under her bottom, but they were unable to move her into the water. On the 17th surfmen from both stations again went to her aid, with the aid of some fishermen, succeeded in launching her without injury.
Nov. 9	Am. sc. Jupiter.....	Point Marblehead, Ohio, Lake Erie.	Stranded on the bar while entering Sandusky Harbor. Tugs failed to release her, and a NW. gale having sprung up, she began to leak and became water-logged. The crew were taken to San-

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 9	Am. sc. Jupiter	Point Marblehead, Ohio, Lake Erie.	dustry on a tug. Upon receiving a request for assistance from the master, surfmen sailed to her in the lifeboat, hoisted her anchors, and ran a hawser to a tug, which hauled her off and towed her to Sandusky.
Nov. 9	Am. sc. Belle of Epoufette.	Bois Blanc, Michigan, Lake Huron.	Parted cable and stranded on the N. side of Bois Blanc Island, 8 miles NNW. of station, during a heavy snowstorm. The master requested surfmen to help save his vessel as soon as the weather moderated. On the following day they went to her, hove her down until they could place skids under her keel, rigged up a capstan, put a wire cable around each end of the schooner and began to heave her out of the water. On the 14th they had her clear of the water and blocked up for repairs. (See letter of acknowledgment.)
Nov. 9	Am. sc. Gracie Belle.	.....do	Stranded 8 miles NNW. of station during a heavy snowstorm. After hauling out the schooner Belle of Epoufette (preceding case), surfmen shifted their tackle to this craft and succeeded in heaving her up on the beach out of all danger.
Nov. 10	Slp. yt. Empire.....	City Point, Massachu- setts.	Moorings parted by the strong W. wind. Surfmen boarded the drifting sloop and let go an anchor which they found on board, veering out plenty of anchor line. The anchor held her safe until the owner came and took charge of her.
Nov. 10	Slp. yt. Fearless .....	.....do	Parted moorings and drifting toward station. Surfmen went on board and let go an anchor which held her all right; and then, as she was half full of water, they balled her out.
Nov. 10	Sloop Thistle .....	.....do	This sloop went adrift from its moorings and fouled the City Point pier. The mast was broken just below the deck and the boat was considerably chafed. Surfmen cleared away the wreckage, hauled the boat away from the dock, and anchored it in a safe berth.
Nov. 10	Am. slp. Mascotte ..	Wallops Beach, Virginia .	Stranded on Williams Shoal, 2½ miles E. of station. Station crew boarded her, carried out her anchor and hove her afloat, uninjured, as soon as the tide turned. She lay in a very dangerous position on the shoal.
Nov. 10	Am. slp. Jordan	Cobb Island, Virginia	Went aground on the E. point of New Inlet Shoals, 5 miles S. by E. of station. Station crew pulled out to her, slung her anchor to the stern of the surfboat and carried it out to the full length of her hawser, and then went aboard the sloop and hove her up to it. After running out the anchor three times, they succeeded in getting her in deep water.
Nov. 10	Scow No. 30.....	Duluth, Minnesota, Lake Superior.	Towline parted and scow stranded between the old and new piers at the entrance to the canal, where the heavy sea breaking over the cribs prevented the lifeboat from going alongside of it. Surfmen got a hawser to a tug by the use of a heaving line, but the tug went ahead before the men on the scow secured it properly and it slipped off. The scow became submerged soon afterwards and further efforts to release it were deferred until the sea became smoother, the men on board having safely reached the pier. Two men fell off the pier into the canal during the excitement and the life-saving crew rescued them. On the following day the surfmen ran hawsers to the scow for three tugs, but the hawsers parted. Then a tug went alongside the scow, pumped it out, and succeeded in hauling it afloat.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 10	Am. sc. E. R. Blake..	Baileys Harbor, Wisconsin, Lake Michigan.	The master of this schooner having lost his bearings in a heavy snowstorm, sounded a signal of distress with his fog horn. Surfmen pulled out and after searching for some time found the schooner lying off the reefs, about 7 miles from station. They worked her into the harbor and anchored her for the bewildered master.
Nov. 11	Am. sc. Emma A. Chesebro.	Little Egg, New Jersey...	This schooner drifted ashore in the light wind, 1½ miles SW. from station, while bound out of the inlet. Surfmen boarded her and by backing the sails forced her afloat, apparently undamaged.
Nov. 11	Am. sloop Wm. E. Cox.	.....do.....	At 1.30 a. m. this sloop stranded on the S. point of the beach while passing out of the inlet. Station patrol aroused the surfmen who at once boarded her with the surfboat and ran her anchor and cable out into deep water. After much hard heaving they succeeded in releasing her and she continued on her way.
Nov. 12	Br. sc. Temperance Belle.	Huntwells Beach, Maine	Missed stays and stranded on the rocks at the S. end of Stage Island at 9.30 p. m. She was lying in heavy breakers when the surfmen reached her, but after much difficulty they managed to run out her kedge anchor which, however, did not hold to haul her off. Then, after more hard work in the heavy breaking sea, they succeeded in carrying out another anchor and in heaving her clear the rocks. The tug White Wings, which had been summoned by telephone, started into the river with her in tow, but when off Coxs Head she rolled over on her beam ends and the tug towed her in this condition to the flats near the head of Perkins Island. Surfmen went to station at 6.30 a. m. for their breakfast, after which they returned to the schooner and worked during the flood tide at righting her. The schooner's crew were given food and lodging at the station for two days. The schooner was badly damaged, and a hole was stove in the surfboat while running out the anchors through the heavy breakers. (See letter of acknowledgment.)
Nov. 12	Am. sc. Sadie	Great Egg, New Jersey...	Stranded on a sand bar on the E. side of the beach thoroughfare. Surfmen went to her but the tide having fallen, could not shove her afloat. At high water on the next day she was floated without injury.
Nov. 12	Am. sc. Harold.....	Ship Canal, Michigan, Lake Superior.	Towline parted and schooner stranded at the entrance to the canal. Station crew ran lines to a tug and steamer which hauled her off.
Nov. 12	Am. sc. Wolverine..	Ludington, Michigan, Lake Michigan.	Entered harbor leaking seriously and crew worn out with work at the pumps. Surfmen went on board and manned the pumps. Keeper sent a man after a skiff load of sawdust, which he used successfully to stop the leak.
Nov. 13	Am. sc. Ofelia.....	Galveston, Texas	Stranded 1½ miles WNW. from station, the strong tide having set her on the beach. Surfmen ran out two anchors, hove her afloat and sailed her to a good anchorage.
Nov. 13	Am. str. City of New York, and Am. sc. William Grandy.	Ottawa Point, Michigan, Lake Huron.	This steamer and her consort stranded about 6.30 p. m. on Ottawa Point, 1½ miles SW. of station. Station crew boarded her at once, and then, at the master's request, went to East Tawas for a tug. They towed back to the stranded vessels behind the tug and assisted in handling hawsers until both floated about 2 a. m. apparently undamaged.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 13	Skiff, no name.....	Duluth, Minnesota, Lake Superior.	This skiff, with one occupant and a load of firewood, ran on a submerged crib and stuck fast. Surfmen pulled out and released it without injury.
Nov. 13	Am. sc. Samuel H. Foster.	Muskegon, Michigan, Lake Michigan.	During a heavy NW. gale a steamer tried to tow this schooner into the harbor for shelter, but the master of the schooner had to cut the towline in order to prevent his vessel from striking the end of the south pier. The steamer went on into the harbor and the schooner anchored in a dangerous position to leeward of the pier where she was aground. Surfmen ran a hawser from the schooner to the pier and made it fast—a job involving no little peril on account of the heavy sea which was breaking over the pier. Keeper arranged a system of signals by means of which the master could summon the life-savers to his aid in case of need. Surfmen boarded her on the next morning in response to a signal and ran more lines to the pier, the storm having increased in violence. The wind moderated in the afternoon and a tug floated the schooner and started down the lake with her in tow, the surfmen running the hawser and tending the lines on the pier. (See letter of acknowledgment.)
Nov. 13	Am. sc. Pride	Saint Joseph, Michigan, Lake Michigan.	Touched bottom while entering the harbor at 6 p. m. and disabled her steering gear. She drifted on the middle ground, stuck fast, and a heavy sea rolling in soon filled her with water. Surfmen ran a line to Graham's dock and then sent for a tug, which arrived at 7 p. m. After running a hawser to the tug three times it fouled her propeller, disabled her, and she drifted aground. Surfmen ran a hawser to the tug, clapped on a luff upon luff and succeeded in floating her, but she refused to work further upon the schooner until daylight. Surfmen landed the schooner's crew, provided them with dry clothing from the stores of the Women's National Relief Association, and lodged them at the station for the night. Before this schooner floated on the 17th the life-saving crew worked at the pumps and in running lines for twenty hours.
Nov. 14	Am. sc. Henry Clausen, jr.	Hunniwells Beach, Maine.	Compelled by a sudden shift of wind to anchor in dangerous proximity to some rocks while trying to enter the river. Surfmen boarded her, took her hawser to Sugar Loaf Island where they secured it and then they hove it well taut with her capstan. Keeper telephoned for a tug, which soon came and towed her to a place of safety, the hawser holding her clear of the rocks until the tug's arrival.
Nov. 14	Rowboat, no name.	City Point, Massachusetts.	This boat, containing an intoxicated man who had lost one of his oars, was drifting out of the harbor. Surfmen towed the boat to the shore with the station launch and safely landed the man.
Nov. 14	Gas. lch. P. V	Duluth, Minnesota, Lake Superior.	Engine became disabled about $\frac{1}{2}$ mile W. of station. Surfmen pulled out to the launch and at the request of the man on board towed it to the city dock.
Nov. 15	Am. sc. Lygonia....	Hunniwells Beach, Maine.	At 6 p. m. this schooner anchored off the entrance to the river to await daylight. During the night the wind shifted and increased in force, and at 4 a. m. she began to drag toward the breakers on Whaleback. The master burned a torch for assistance, which the station patrol answered by flashing a Coston signal, and then surfmen pulled out to her as quickly as possible. They hoisted her

Services of crews—Continued.

Date.	Name and national' y of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 15	Am. sc. Lygonia....	Hunnwells Beach, Maine.	anchors, made sail, and took her to a safe anchorage in the river. (See letter of acknowledgment.)
Nov. 15	Am. sc. E. G. Irwin.	Sandy Hook, New Jersey.	Missed stays and stranded on Romer Shoal, 3 miles N.E. of station. She was leaking when the surfmen reached her, and soon afterwards the wind began to blow heavy. Surfmen helped to man the pumps while two tugs pulled on her; they released her on the rising tide, and towed her up the bay.
Nov. 15	Am. sc. Puritan	Assateague Beach, Virginia.	Station crew boarded this schooner in answer to a signal of distress. She had been blown off the coast by a heavy gale, her sails and rigging were badly damaged, and she was without water and provisions. Surfmen helped to repair the sails and rigging, and then they procured supplies for the master, and transported them off to the schooner.
Nov. 15	Am. sc. Ahira Cobb.	Cleveland, Ohio, Lake Erie.	Made a signal for assistance while lying alongside of the E. breakwater. Surfmen went to her in tow of a tug, and the master requested them to let go the mooring lines on the breakwater, over which the heavy sea was breaking, his crew not being able to land. Surfmen cast off the lines, and the tug towed her into the harbor.
Nov. 15	Sloop Harmony	Frankfort, Michigan, Lake Michigan.	Planking cut through by the ice, and sloop in a sinking condition at a dock about 1/2 mile up Betsie Lake. Surfmen unloaded her cargo of apples, pumped her out, and helped the owner repair the damage.
Nov. 16	Am. sc. Annie Sargent.	White Head, Maine	Ran on Hay Island Ledge while beating into Seal Harbor in a strong NW. wind. Surfmen boarded her, kedged her off the ledge on the next flood tide, and sailed her to a safe anchorage in the harbor.
Nov. 16	Small boat, no name.	Duluth, Minnesota, Lake Superior.	Fast in the ice at boathouse dock. Surfmen assisted the owner to haul it across Minnesota Point and launch it in clear water.
Nov. 17	Am. sc. C. M. Gillmor.	White Head, Maine	Stranded on a ledge near Spruce Head while beating out from Seal Harbor. Surfmen ran out her anchor, hove her afloat, and assisted to work her out clear of all danger.
Nov. 17	Steamer Mona.....	Hunnwells Beach, Maine.	At 7 p. m., while 2 miles to the westward of Seguin, the engine of this small fishing steamer became disabled. Her crew tried to tow her into the mouth of the Kennebec with their small boat, but had to anchor her in dangerous proximity to Stage Island on account of the strong wind which had sprung up. Surfmen saw by her light that she was in peril, and they at once boarded her and ran a kedge to windward to help hold her clear the rocks. Then they went after a tug, which came and towed the disabled steamer into the river, the station crew assisting to get her anchors on board.
Nov. 17	Scow, no name	Umpqua River, Oregon...	Stranded on the south beach of Umpqua River while engaged in loading freight, the small tug in charge of the scow not being able to release it. At high water surfmen ran lines for a larger tug, which hauled it afloat.
Nov. 18	Catboat, no name ..	Cleveland, Ohio, Lake Erie.	Capsized in the river near the station. Surfmen pulled out and rescued the single occupant and towed the boat to station, where they bailed it out and furnished the rescued man with dry clothing from the supplies of the Women's National Relief Association.
Nov. 18	Lighter, no name...	Grand Marais, Michigan, Lake Superior.	A large tug was holding on to this lighter while it lay on the beach, 15 miles E. of the life-saving station, where a crew of eleven woodsmen were unloading its cargo of railroad iron. At 11.30 p. m. a fresh NW. wind caused the master of the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 18	Lighter, no name...	Grand Marais, Michigan, Lake Superior.	tug to start for shelter with the lighter, and the woodsmen not understanding his signal remained on board. The heavy seas broke over the lighter and, the hatches being open, it soon became water-logged. Five men were washed overboard and the part of the cargo remaining on board was lost. The master of the tug stated that he did not know that the men were on the lighter until he was about a mile from the life-saving station, and then he blew his steam whistle for assistance. Surfmen responded at once, and when informed of the situation quickly pulled to the lighter and rescued the six men remaining on board. One of these men was so stiff and exhausted by the cold that it required two hours of hard rubbing to bring him to. The bodies of men drowned were not recovered.
Nov. 18	Am. sc. Wolverine ..	Milwaukee, Wisconsin, Lake Michigan.	The master of this schooner came to station and reported that he had arrived in port with his vessel in a leaking condition, and he requested the surfmen to man the pumps until he could hire a crew. Surfmen manned the pumps for five hours, and then a hired crew relieved them.
Nov. 18	Am. sc. J. A. Holmes.	Two Rivers, Wisconsin, Lake Michigan.	While trying to enter Manitowoc Harbor at 9 p. m., this schooner struck the south pier, upon which her crew jumped, and then she stranded. On the next morning the master telephoned to surfmen for assistance, and they went to the stranded craft at once under sail and oars. A heavy sea was washing over the schooner and she was full of water, but surfmen went on board, stowed the sails and running gear, hoisted the booms clear of the water, and transported to the shore everything of value in the cabin. On the following day, the sea having smoothed down, her deck load of lumber was transferred to a scow, the water was pumped out of her, and she was floated and towed to a dry dock by two steamers.
Nov. 18	Am. sc. Nancy Dell .	Baileys Harbor, Wisconsin, Lake Michigan.	Lost some of her sails and rigging in a heavy N.E. snowstorm, anchored dangerously near Baileys Harbor Reef about 7 miles S. of station, and hoisted a signal for assistance. Surfmen went out to her and tried to raise her anchor, but the chain parted; they managed to set some of the frozen canvas left on board, and ran off before the heavy wind and sea for Sturgeon Bay Canal, 25 miles distant. They reached the canal without further mishap, and surfmen returned to station by team, leaving one of their number at the canal in charge of the surfboat. On the 24th instant, surfmen recovered the lost anchor and turned it over to the master of the schooner.
Nov. 19	Nph. lch. Lakeside .	Point Marblehead, Ohio, Lake Erie.	Engine became disabled about ¼ a mile W. of the station. Station lookout made out the distress signal of the three people on board the launch, and surfmen immediately pulled out and towed them to Lakeside Pier with the surfboat.
Nov. 19	Am. str. Zillih and Am. sc. Connelly Bros.	Thunder Bay Island, Michigan, Lake Huron.	About midnight this steamer stranded on North Point Reef, ¼ miles SW. of station, while towing the schooner up the lake in a thick fog. Surfmen heard her whistle of distress and immediately pulled to her. Upon the request of the master, they returned to station and telephoned for two tugs, and then went back and stood by the steamer until daylight, when the tugs arrived. They ran the hawsers for the tugs, which soon released the steamer, and she continued her voyage with her consort in tow.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 20	Am. sc. Mary E. Lynch.	Aransas, Texas.....	Surfmen pulled about a mile up the channel and dragged for and recovered an anchor which this schooner had lost on the previous day.
Nov. 20	Scow No. 2.....	Sturgeon Bay Canal, Wisconsin, Lake Michigan.	Towline parted while a tug was towing this scow loaded with stone out of the canal at 5.30 p. m. The scow struck heavily against the revetment of the canal, stove in its bow, and sank, blocking navigation. Surfmen maintained a lookout on the pier during the night to warn vessels of the obstruction, and afterwards they assisted the authorities to remove the wreckage.
Nov. 21	U. S. steamer General Meigs.	Sandy Hook, New Jersey.	Air pump became disabled while lying at the Government wharf at Sandy Hook in a high sea. The steamer pounded heavily against the wharf and threatened to part her mooring lines and strand on the rocky lee shore. At the request of the master, surfmen took their hawser to the wharf and ran out additional fasts that held her until the arrival of two tugs, which came to her assistance in response to a telephone message. Surfmen ran hawsers to the tugs which towed the disabled craft to New York for repairs.
Nov. 21	Am. slp. Luona.....	do.....	At 11.30 p. m. station patrol heard cries for help come from this sloop, which was pounding on the beach and leaking. Surfmen pulled out to her and safely landed her crew of five men.
Nov. 21	Am. slp. Jaquette...	Spermaceti Cove, New Jersey.	Lost mainsail and then stranded while trying to make the mouth of Shrewsbury River during a SW. gale. Her crew reached the shore safe just before the arrival of the surfmen, who took them to the station and gave them food and lodging for the night. The sloop was floated without damage at high water during the next night.
Nov. 21	Fish boat, no name.	Bodie Island, North Carolina.	Anchored off the station and hoisted a signal of distress. Surfmen went off to the boat, replaced a broken sprit with a new one, and then piloted the craft into the inlet.
Nov. 21	Scows (2), no names.	Buffalo, New York, Lake Erie.	Broke adrift from their moorings at the S. end of the outer breakwater, 2½ miles S. of station, and drifted toward shore with several men on each. The wind was blowing a SW. gale, registering 80 miles per hour, and a very heavy sea was breaking along the beach. Station crew towed out to windward of the scows, and then casting off from the tug, they dropped down and anchored the lifeboat just off the outer breakers, the scows being then on shore, or very near it. The tremendous seas completely buried the lifeboat at times, and the anchor began to drag over the hard bottom. As it was beyond the power of men to pull out against such a wind and sea, the keeper decided to let the boat drag close inshore, where they might be able to handle it, but just then three heavy breakers struck them, the last one hurling the boat end over end and throwing all the surfmen out except one, who could not tell how he managed to stay in. One of the surfmen thrown out regained the boat, which rolled over several times before it was cast on the beach, and all of the surfmen reached the shore safe. A man soon informed them that all the people from the scows had landed all right except one man, who had been washed off from one of the scows and was now clinging to some piles about 500 feet offshore. Boarding a locomotive engine which took the surfmen to the beach abreast the ex-

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 21	Scows (2), no names.	Buffalo, New York, Lake Erie.	hausted man, the keeper saw at a glance that a boat would be useless amongst the piling. He took the end of a line, and telling Surfman Greenland to follow him, plunged into the surf, but both men were thrown back on the beach. They started again and made about 150 feet, when Greenland was tossed against a pile and the breath knocked out of him. The surfmen on shore hauled him out, and keeper continued on alone with the line, reaching the exhausted and helpless man after being repeatedly thrown back by the breakers. After the line was fast around the man's wrist, keeper gave the signal to haul in, and surfmen safely landed him on the beach. Keeper then struck out for shore, which he reached so exhausted that he could not stand on his feet, but had to be pulled out by the rest of the station crew. The friends of the rescued man took him home, and surfmen returned to station, leaving one man to look after the lifeboat. During this rescue the keeper was injured by being struck in the small of his back by a floating telegraph pole. [See caption "Award of Medals."]
Nov. 21	Am. sc. St. Lawrence	Cleveland, Ohio, Lake Erie.	Stranded at Lorain, 30 miles W. from station, during a heavy gale. Keeper received a telegram asking him to come to the rescue of the eight people on board. He immediately made arrangements with the Lake Shore Railroad to transport the life-saving crew, beach apparatus, life car, and surfboat to Lorain on flat cars. Surfmen and their gear reached Lorain in an hour's time and proceeded at once to the scene of the wreck. The master and his wife and two children had tried to land, before the arrival of the surfmen, in the schooner's yawl, which had capsized in the attempt, but the people on the beach had rescued the occupants. Four men were clinging to the mainmast of the wreck when the life-savers reached the scene. They fired a shot line across her near the mainmast, but the men made no effort to reach it; then they fired two more lines, which fell beyond the reach of the men, who, however, managed to get hold of the first line and haul out, but it was soon seen that they did not have the strength to haul out the whip, which drifted down the shore in the strong current and fouled some fishing stakes. Surfmen then unloaded the surfboat, launched it, and went alongside the wreck. Two of the men had to be assisted into the surfboat, as they were nearly exhausted from exposure. All were landed safe and taken to a house near by, where they were succored. The schooner was a total loss.
Nov. 21	Am. sc. Laney Sims.	Sand Beach, Michigan, Lake Huron.	Having carried away her storm sails in the heavy blow, this schooner anchored 1½ miles SSE. of station and hoisted signal of distress. Surfmen boarded her and, at the request of the crew, landed them and all their clothing at the station. Surfmen gave them food and shelter until the next day, when, the wind having moderated, they put them back on board the schooner and assisted them to pump her out, heave up anchor, and take her inside the harbor.
Nov. 21	Am. sc. I. L. Quinby.	Sturgeon Point, Michigan, Lake Huron.	Sails having blown away in a gale, this schooner anchored 5 miles NE. from station and set a signal of distress. Surfmen sent a message to Alpena for a tug and then boarded her. As the gale was

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 21	Am. sc. I. L. Quinby.	Sturgeon Point, Michigan, Lake Huron.	Increasing in violence, they took the crew to the station to await the arrival of the tug, and provided them with dry clothing from the stores of the Women's National Relief Association and with food. When the tug arrived the surfmen took the crew out to their vessel, helped to hoist the anchor, and then, at the master's request, and as the schooner was leaking seriously, they stayed by her and manned the pumps until the tug had safely towed her into Alpena Harbor.
Nov. 22	Am. sc. E. T. Judd...	Sand Beach, Michigan, Lake Huron.	Stranded at 11 p. m. while beating into the harbor. Surfmen answered her torch with a Coston light, pulled out to her, and took the master ashore to engage a tug to release his vessel, but no assistance could be procured until the next morning. Surfmen ran lines to the breakwater and hove taut on capstans, slowly working her into deeper water and, with the assistance of the small engineer's tug, releasing her at 10 a. m.
Nov. 23	Am. sc. Ella Brown.	Quoddy Head, Maine.....	The crew of this schooner was unable to hoist her anchors while lying in Quoddy Bay awaiting favorable tide and wind. In response to a signal for assistance, surfmen boarded her, helped to get the anchors and make sail, and took her out clear of the shoals.
Nov. 23	Nph. lch., no name.	Ashtabula, Ohio, Lake Erie.	Engine became disabled about $\frac{1}{2}$ mile E. of harbor. Station crew pulled out in surfboat, passed a line to the two men in the launch, and towed them into the harbor.
Nov. 23	Am. sc. Alvina.....	Sturgeon Point, Michigan, Lake Huron.	A leak and water-logged about 3 miles SE. of station. Surfmen boarded her, let go her anchor, and took the crew of four men to the shore, where the master communicated with his owners. Just before nightfall a surfman took the master out to his vessel to hoist an anchor light. A tug arrived at the schooner on the next day, and surfmen and her crew went off to her in the lifeboat; they buoyed her anchor, slipped her cable, and ran a hawser to the tug, which started for Alpena with her in tow. The heavy sea washed off most of the deck load of lumber, which the surfmen picked up along the shore and held to await instructions from the owners.
Nov. 24	Sailboat, no name..	Grindstone City, Michigan, Lake Huron.	Stranded about 1 mile W. of Port Austin and $\frac{3}{4}$ miles W. of station. Surfmen went to the boat, hauled it up on the beach, and, as no one appeared to claim it, they left it in care of a man residing near by until the owner should call for it.
Nov. 25	Br. str. Margaret Jones.	Isle of Wight, Maryland..	At 1.25 a. m. this steamer stranded near the station, the master having mistaken the Fenwick Island light. Surfmen immediately boarded her, but her crew did not wish to land. On the next morning the wrecking tug North America arrived and began work on the stranded steamer, the surfmen assisting by taking messages to and from the shore. The steamer was floated without material damage on Dec. 1.
Nov. 25	Scow No. 8.....	Cleveland, Ohio, Lake Erie.	Anchor line parted and scow stranded 1 mile SW. of station during the night, nobody being on board. On the next morning surfmen ran a hawser to the scow from a tug, but the hawser parted before the tug released the scow. The hawser was run out again by the surfmen, and the scow was floated and towed to an anchorage in the harbor.
Nov. 25	Am. str. Rube Richards.	Thunder Bay Island, Michigan, Lake Huron.	Stranded on North Point Reef, 4 miles SW. of station, at 7.30 p. m. She was pounding upon the rocks and leaking when the surfmen reached her in answer to

Services of crews—Continued.

Date.	Name and nationality of vessels.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 25	Am. str. Rube Richards.	Thunder Bay Island, Michigan, Lake Huron.	her signals of distress. Upon the advice of the keeper, the master decided to let her fill in order to stop her from pounding and to abandon her for the night. Surfmen took the crew of twelve persons into the lifeboat and landed them at Alpena. At daybreak on the next morning surfmen went off to the wreck with tugs and lighters, helped to discharge about 75 tons of pig iron from her deck, and then had to quit work on account of the sea becoming too rough. Work was resumed on the following day, steam pumps were put on board, four hundred tons of iron were lightered, and the steamer was then floated off the rocks. Station crew worked on this wreck fifty-four hours. (See letter of acknowledgment.)
Nov. 26	Br. sc. Advance	Wallis Sands, New Hampshire.	Dismasted and abandoned at sea, the wreck drifted ashore about $\frac{1}{4}$ mile SW. from station. Surfmen took charge of the wreck, saving twenty-eight barrels of fish for the owners. Several thousand feet of spruce boards and a damaged yawl from this wreck were picked up on Plum Island by the Knobbs Beach crew, and the owner was notified of the whereabouts of his property. The schooner was a total loss.
Nov. 26	Nph. lch. Emma D.	Cleveland, Ohio, Lake Erie.	Dragged anchor and in danger of stranding about 1 mile SW. of station. Surfmen went off to the launch and found it full of water and with no one on board. They towed it into the harbor and hauled it out on the beach.
Nov. 26	Am. scs. Malvina and Charles Spademan.	Point Marblehead, Ohio, Lake Erie.	Towline parted while a steamer was trying to take these schooners into Sandusky harbor during a northerly gale, and they stranded and filled with water just outside the jetty work, 5 miles SE. of station. Surfmen launched their lifeboat and started for the stranded vessels under sail, but before reaching them the heavy sea carried away the rudder of the lifeboat, and they had to pull through a sea which threatened every moment to overwhelm them. The Malvina was lying in the most exposed position, with lumber and other wreckage floating around her, and consequently she first received the attention of the life-savers, who, after an hour's difficult work, succeeded in casting a line on board and in throwing life-preservers to her crew. Surfmen took the seven persons on board into the lifeboat over the schooner's stern, one by one, and then, after a hard pull, safely landed them on Cedar Point, the life-savers having to jump into the surf and carry the exhausted people to the shore. Then they launched the lifeboat and pulled out to the Spademan. On account of the high sea, wreckage, and swift current running out of the bay they had an arduous task in getting a line on board, but they finally accomplished it, succeeded in safely getting the crew of five into the lifeboat, and started into the harbor with them. The tug John E. Monk came out, picked them up, and towed them to Sandusky, the station crew being much exhausted. On the following day they went out to the Spademan, assisted to hoist her anchors, and ran a line to the tug, which pulled her off and towed her into the harbor. Part of the cargo of the Malvina was saved, but the vessel was a total loss. (See letter of acknowledgment.)

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Nov. 26	Nph. lch. Lakeside.	Point Marblehead, Ohio, Lake Erie.	Parted moorings and drifted on the rocks, 1 mile W. of station, during the gale. Surfmen went to the launch and found it full of water. After five hours' work they succeeded in hauling it off the rocks, bailing it out, and securing it to a pier.
Nov. 26	Am. sc. I. L. Quinby.	Sand Beach, Michigan, Lake Huron.	A leak and signaled for assistance while being towed into the harbor. Surfmen pulled out to her and manned the pumps until the master could hire help, his crew being completely tired out.
Nov. 26	Br. bk. Poltalloch.	Shoalwater Bay and Petersons Point, Washington.	Stranded on North Spit, 5 miles WSW. from station, at 2.30 a. m. Crews from both Shoalwater Bay and Petersons Point stations started to her assistance upon seeing rockets of distress. It was foggy when they reached the spit, making it impossible to locate the vessel, which was 2½ miles off shore. When the fog lifted somewhat, they discerned the stranded vessel and made two attempts to reach her, but failed on account of the very high surf. They discovered that she had an anchor down, and signaled to the master to slip his cable and let her drift into smoother water near the shore. The master did as requested and the bark came into smoother water, where the surfmen were able to board her. They took seventeen of her crew of thirty-one to the Shoalwater Bay Station in the surfboats, the rest of the crew staying by the bark with the master during the night, as there was no immediate danger of her breaking up. On the next morning both station crews again went off to the wreck, which had drifted in still farther during the night and was then about ¼ of a mile from the beach. The master decided to abandon her, as the weather was threatening, and the surfmen landed all hands on the beach abreast the bark, where they boarded a tug on the inside of the spit. The Petersons Point crew loaded their boat on boat wagon and started back for their station, 14 miles up the beach, and the Shoalwater Bay crew towed behind the tug to their station, where they succored the shipwrecked crew until the following day. On the 30th the bark was driven high up on the beach by a SW. gale, and the sails, running rigging, and personal effects were saved. On June 6, 1901, she was successfully floated and taken to Victoria for repairs. (See letter of acknowledgment.)
Nov. 27	Catboat, no name...	Cuttyhunk, Massachusetts.	Surfmen found this boat lying on its beam ends about ¼ a mile off the N. shore of Nashawena Island. They towed it into Nashawena Harbor, righted it, bailed it out, and hauled it up on the beach to await the owner.
Nov. 28	Am. sc. Northern Light.	Fletchers Neck, Maine ...	Parted anchor chain during a fresh NNE. breeze and stranded 1 mile N. of station. She was pounding on bottom and making some water when the surfmen reached her. They at once made sail, hove her afloat, and got her under way. Keeper piloted her clear of all danger, and then the master decided to continue his voyage as the leak was not serious.
Nov. 29	Barge, no name	Louisville, Kentucky.....	Adrift in the river above the falls, having no one on board. Station crew pulled out, towed it to the shore, and secured it.
Nov. 29	Am. str. Fulton ....	.....do	Machinery disabled, and steamer with a crew of seven men on board was in danger above the Falls of the Ohio. Station crew ran two hawsers to the shore and assisted to warp her in to the foot of Fourth street.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered,
1900. Nov. 29	Flat, no name	Louisville, Kentucky.....	This flat with two men on board was adrift above the falls. One station boat tried to tow it to the shore, but failed on account of the heavy drift stuff in the river. Another station boat pulled out and landed the two men safe, then both boats succeeded in towing the flat to shore.
Nov. 30	Am. sc. Ulrica R. Smith.	White Head, Maine	Missed stays and anchored in a dangerous position near the ledges in Seal Harbor. Surfmen boarded her, got her under way, worked her out clear the ledges, and left her in open water on a safe course.
Dec. 1	A m. sc. S. B. Wheeler.	Hog Island, Virginia	Stranded and sunk on the outer bar of Hog Island at 5 a. m. Patrol reported to keeper, and the surfmen immediately launched the lifeboat and boarded the vessel. There was a heavy sea running, and it was extremely dangerous for the crew to remain on board. As soon as the master saw that the vessel was doomed, he consented to abandon her. Surfmen landed the six men comprising the crew and kept them at the station two days. The vessel filled with sand and became a total loss. (See letter of acknowledgment.)
Dec. 2	Skiff, no name	Louisville, Kentucky	Five men attempted to cross the river in this boat and were swept down by the strong current toward the cross dam of the falls. Boatmen pulled to their assistance, got a line to them, and towed the skiff to the station.
Dec. 3	Br. sc. Priscilla	Cuttyhunk, Massachusetts.	Drifted on the Sow and Pigs ledge at 4 a. m. during calm weather. At daylight she was made out by the lookout and was soon boarded by the crew. A tug coming along about that time, the master made a contract to float the schooner and take her to Vineyard Haven. Surfmen ran a heavy hawser between the two vessels, and in a short time the schooner was hauled afloat. Her keel was damaged, but she did not spring a leak.
Dec. 4	Slp. Ripple	Point Lookout, New York.	Driven ashore 2 miles E. of station during a storm. Patrolman brought the two men from the sloop to the station, where keeper gave them dry clothes and made them comfortable for the night, it being impossible to do anything for the sloop until the storm passed. On the 6th the surfmen assisted in launching the sloop, and on the 8th put her nets on board. She was leaking, but not dangerously.
Dec. 4	Am. sc. Oliver Scofield.	Chadwick, New Jersey...	Water-logged in ESE. storm and went ashore $\frac{1}{2}$ mile S. of station at 3.25 p. m. Surfmen immediately started out with beach apparatus, and upon arriving abreast of her fired a line over her. Her main and mizzen masts had already gone by the board, and the foremast fell about the time the line was placed aboard. The cargo of lumber was washing off, and much debris surrounded the wreck, which lay about 200 yards from the beach. The hawser was finally set up, and three men were hauled ashore in the buoy. By this time the Mantoloking crew arrived and assisted in the rescue. While the fourth man was being taken ashore the whip parted, having been chafed off by the wreckage, and he had to be hauled back to the wreck. The broken part was then sent off by the sound part, and the fourth man was landed. This left the master and mate on board, and the whip having parted again in landing the last man, the broken part was once more started

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Dec. 4	Am. sc. Oliver Scofield.	Chadwick, New Jersey ...	off by the sound part. It was caught and held fast in the wreckage, however, and no further use could be made of it. The hawser was now hauled taut, and the master and mate made their way along it, hand over hand. The surfmen waded out with lines, which they passed around the two men, while those on the beach hauled in. All were finally landed in safety, but several of the life-savers had been more or less injured by being knocked down by the sea or struck by the floating debris. The shipwrecked men were served with hot coffee at the station, and the keeper gave them dry clothes from the stores of the Women's National Relief Association box. They were succored at the station two days. The vessel was a total loss.
Dec. 5	Am. scs. Sea Bird, Thomas B. Reed, and R. P. Chase.	Fletchers Neck, Maine...	These three schooners dragged their anchors during a strong E. gale about midnight, and shortly after the Reed and Chase parted their chains and went ashore on Stage Island. Surfmen launched their boat, and after some two hours' work succeeded in getting a line to the lee quarter of the Sea Bird, and her five men slid down into the boat when they had a chance. Surfmen landed them and took them to the station. At low water the life-savers went to the Reed and brought her crew of five to the station; then they went to the Chase and ran a hawser from her to the shore to keep her from drifting away on the high tide, after which they took her crew of four to the station. All of these men were given food and dry clothing and were succored two days. The Sea Bird swung clear at high water and rode out the gale; surfmen set her crew back on board. The Reed was so hard on the rocks that a contract was made with a wrecking company to release her. The Chase parted the hawser at high water and drifted across the harbor, going high and dry on the shore near the mouth of Biddeford Pool. A contract was let to float her. Keeper secured passes for the crews of the Reed and Chase to their homes.
Dec. 5	Am. scs. Morning Star and Satellite.	Plum Island, Massachusetts.	Dragging anchors during strong E. gale. The Morning Star having a signal of distress flying, surfmen went on board, got her under way, and worked her to a safe anchorage. Then they boarded the Satellite, got her anchors, and hove a line to a tug, which towed her away.
Dec. 5	Catboat Vivian.....	Gay Head, Massachusetts.	Parted moorings and went ashore in a gale, 3 miles E. of station. Three men made their way ashore without difficulty. Surfmen soon arrived and assisted in hauling the boat up clear of the sea. On the 18th, the first favorable opportunity, surfmen helped to launch the boat.
Dec. 7	Yt. Irena	Great Egg, New Jersey ...	Stranded on a bar near the Inlet. Surfmen boarded her, laid out an anchor, and on the afternoon flood hove her afloat.
Dec. 8	Slp. Venus.....	Gurnet, Massachusetts....	Stranded on Browns Island shoal, 1 mile SSW. of station, about 6 p. m. Surfmen boarded her, laid out kedge anchor, and by working sails and lines succeeded in floating the sloop at 10 p. m.
Dec. 8	Yawl, no name.....	Duluth, Minnesota, Lake Superior.	A man started ashore from a whaleback in a yawl about 7.30 p. m., but was caught in the broken ice and drift stuff, and could not move in any direction. He shouted for help, in response to which two surfmen went out in a flat-bottomed skiff and towed him back to the whaleback.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Dec. 9	Am. sc. Mary Farrow	Burnt Island, Maine.....	Dragged ashore in Port Clyde Harbor, 3½ miles NE. of station. Crew boarded her, but found that the master had let a contract to float her. Surfmen assisted in lifting her over and laying out an anchor. The vessel was floated on the 13th by private parties.
Dec. 9	Sc. yt. Rosina.....	Rocky Point, New York ..	Lost one anchor during heavy NW. gale, and was dragging the other toward shore, 7 miles W. of station. Learning of the casualty, surfmen teamed the surfboat abreast her and launched, succeeding in boarding the yacht after a hard pull. There were on board a crew of three, and two passengers—one a woman well-nigh exhausted. Surfmen took them all in the surfboat and landed them; took them to a farmhouse, where they were succored, and where the woman soon regained her strength. The yacht went ashore, but was released on the 11th by the Merritt Wrecking Co.
Dec. 9	Slp. yt. Sagitta.....	Assateague Beach, Virginia.	Mistook Assateague light for Cape Henry light, hauled in and went on the beach about 9 p. m. Station crew boarded her about midnight, but were unable to do anything for her at the time, as she was full of water and heavily iced up. Stripped her of all movable gear and took it to the station, together with her two men. The men were given food and stimulants and were furnished with dry clothes from the Women's National Relief supply. On the following day the surfmen returned to the wreck, rigged a masthead tackle and hove her on an even keel; Popes Island crew then arrived and assisted in pumping her out and planting an anchor offshore. Both crews hove away and succeeded in moving the sloop about ten feet, but this was of small advantage. On the 14th the master despaired of saving the vessel and sold her to local parties. New owners planted a large anchor offshore and surfmen ran a heavy hawser for them; worked all night on her, in bitter cold weather, and at 4 a. m. worked her up to the anchor. Keeper then put her under jury sail (she had lost mainsail and rudder), steered her with oars, and by daylight had her off Assateague Harbor. Tug then came out and towed her in. She will be repaired.
Dec. 9	Am. scs. Julia Larson and J. Duvall.	Sand Beach, Michigan, Lake Huron.	These two schooners parted their lines during the gale and fouled two tugs moored near by. Surfmen got out lines and moored them in safety.
Dec. 10	Br. sc. Corinto.....	Damariscove Island, Maine.	Sails carried away in a gale, became unmanageable, and went ashore on Ram Island, 5 miles NE. of station, in thick weather, about 2 a. m. She was invisible from the station, but was discovered about noon, when the vapor lifted, and was boarded by the surfmen. Took master to Boothbay, where he engaged a steamer and lighter, but the sea had made in the meantime and nothing could be done that day. On the following morning, sea having moderated, surfmen assisted in lightening cargo and handling lines for the steamer, which succeeded in releasing the schooner, and towed her to the marine railway for repairs.
Dec. 10	Dory, no name.....	Sallsbury Beach, Massachusetts.	A fisherman broke one of his oars while coming in from the fishing grounds and had to come to anchor in a dangerous place. He was landed by another fisherman, but could get nobody to assist him with his dory. He applied for help to

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Dec. 10	Dory, no name	Salisbury Beach, Massachusetts.	the station patrolman, who procured a boat, and, after a hard pull through a heavy sea, succeeded in towing the dory into the river.
Dec. 12	Flatboat, no name..	Louisville, Kentucky.....	Three men on this boat attempted to shoot the falls, not knowing of the danger they risked. Boatmen went to their rescue, caught the flatboat, and towed it to the station. The men turned out to be thieves and were arrested by the police.
Dec. 15	Fish boat, no name.	Coquille River, Oregon...	Adrift and being swept down the river. Surfmen pulled out, recovered the boat, and took it to the station. Owner claimed it later in the day.
Dec. 16	Sc. yt. Rosina	Spermaceti Cove, New Jersey.	Grounded on the bar at the mouth of the Shrewsbury River. Surfmen boarded her, ran a line to the dyke, and, at high water, hove her afloat.
Dec. 17	Am. sc. Lygonia	Fletchers Neck, Maine ...	Stranded while entering the Pool. Surfmen boarded her, and, at high water, hove her in to a wharf. She lay there until the 21st, when she started out, but stranded again. Station crew went on board again and kedged her about 600 yards, into deep water, then got her under way and piloted her out.
Dec. 17	Barge W. J. Bryan ..	Cape Disappointment, Washington.	Parted lines and went adrift. Surfmen ran necessary lines and made the barge well fast.
Dec. 18	Am. sc. Joseph Allen.	Assateague Beach, Virginia.	Stranded on Chincoteague Bar, 3 miles W. of station. Surfmen at once proceeded to her assistance, ran out kedge anchor, boarded her, and hove away. About this time the Wallops Beach crew arrived, laid out their anchor, boarded the vessel, and assisted in heaving her afloat. Keeper of Assateague Beach Station then took charge and sailed her into a harbor, but she was leaking so that he had to beach her to prevent her sinking. The master and mate went to town for assistance, and the other two men went to the station for shelter, the schooner being full of water. On the following day master chartered a vessel and surfmen assisted in transferring the cargo of oysters to her. Found and stopped the principal leaks and then left the schooner in charge of her master. (See letter of acknowledgment.)
Dec. 19	Am. sc. M. C. Mosely.	White Head, Maine	Crew unable to get her anchor. In answer to a signal, station crew boarded her and assisted in getting under way.
Dec. 21	Am. sc. N. H. Skinner.	Lewes and Cape Henlopen, Delaware.	Stranded on the point of Cape Henlopen at 11.30 p. m. during fresh N. breeze and rough sea. Patrolmen called up both stations, and crews at once responded in their boats. Boarded the schooner and assisted in running lines to the steamer North America, but could not release the vessel. Remained aboard about three hours, when the sea became very rough and the surfmen landed, taking the sole passenger with them. Arrangements were made with the master of the schooner that he should burn a signal if he wanted to be taken off, and about daylight the signal was made. Sea being too high to use boat with safety, the life-savers took beach apparatus abreast the vessel, fired line to her, set up gear, and landed the eight members of the crew and one man left on board from the North America, in the breeches buoy. Five of the rescued people were taken to the Cape Henlopen Station and four to the Lewes Station, the keepers furnishing from the stores of the Women's National Relief Association such clothing as they needed. The vessel filled with water and was sold to wreck-

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Dec. 21	Am. sc. N. H. Skinner.	Lewes and Cape Henlopen, Delaware.	ers, the hull being a total loss. The rescued men were sheltered at the stations for twelve hours, when they proceeded to their homes.
Dec. 21	Am. sc. Jennie Hall.	Dam Neck Mills, Virginia.	Wrecked $\frac{1}{2}$ mile N. of station in thick fog at night; three men lost and five saved by life-savers. (For detailed account see caption "Loss of life.")
Dec. 21	Br. sc. Victory.....	Sullivans Island, South Carolina.	Stranded on a shoal $2\frac{1}{2}$ miles SW. of station. Surfmen boarded her, and the keeper advised the master to take in all sail. This was done, and when the tide flooded they sheered her off the shoal without difficulty.
Dec. 21	Am. sc. Reliance ...	Fort Point, California....	Encountered severe SE. gale off the coast and had most of her sails torn away; put in for San Francisco and anchored 5 miles SW. of Point Lobos, burning torches. Surfmen boarded her about 11 p. m., but could do nothing for her. Keeper signaled lookout to send a tug, which arrived in due time and towed the vessel into port.
Dec. 22	Flatboat, no name .	Louisville, Kentucky	Adrift in the river with eight laborers on board. Boatmen launched boat and towed the flat ashore.
Dec. 23	Slp. Emma C.....	Hunniwells Beach, Maine.	Loading sand from the beach, and when loaded could not get under way, being on the bottom. Surfmen responded to signal and boarded her, laid out an anchor and hove her into deep water.
Dec. 23	Am. sc. J. Howell Leeds.	Assateague Beach, Virginia.	Sprung a serious leak 4 miles off station and set signal of distress. Surfmen boarded her and, finding her in a sinking condition, put on all sail and ran her into the harbor and onto the mud flats took crew and movable furniture ashore and stowed latter in boathouse; sent telegrams to owners and agents, in response to which a tug arrived on the following day. Tug pumped out and raised the vessel and surfmen returned furniture which had been taken ashore; keeper then piloted them to a safe anchorage. On the 27th a large tug came from Norfolk, and both tugs left that day with schooner and lighter in tow. (See card of thanks under caption "Letters of acknowledgment.")
Dec. 24	Barges C. R. R. of N. J., No. 2 and No. 10.	Monomoy, Massachusetts.	Broke adrift from tug and the No. 10 stranded on Shovelvill Shoal. The No. 2 anchored in a dangerous position near by. Surfmen boarded the No. 10 and at high water worked her afloat and moved her to a safe anchorage, then shifted the anchorage of the No. 2; sent message to Vineyard Haven for tug, which came and took the barges to Boston.
Dec. 24	Br. str. Antilia	Ocean City, New Jersey ..	Lost in the fog and went ashore on the outer south bar, $1\frac{1}{2}$ miles E. of Ocean City. In response to her firing guns and blowing whistle surfmen boarded her; took ashore two passengers and mails for New York and London; also sent messages for tug. Great Egg crew also boarded her, but there was nothing for them to do. Wrecking tug arrived and released the steamer at noon of the 25th.
Dec. 24	Am. str. Ocean King and scs. Rondout and Astoria.	Smith Island, Virginia...	The steamer, with two schooners in tow, stranded on Ship Shoal, 8 miles NE. of station, during dense fog, at 3.30 a. m. Word was telephoned to the station about 8 a. m. and keeper at once started for the scene in the lifeboat, first notifying Cobb Island by telephone. The vessels were all leaking and pounding on the shoal in the heavy surf and it was seen from the first that there was no help for them. Crews of both stations boarded the vessels and remained in the vicinity several hours and then landed

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Dec 24	Am. str. Ocean King and scs. Rondout and Astoria.	Smith Island, Virginia ...	nine men from the steamer and four men from each of the schooners, leaving the master of the steamer on board, he refusing to leave. Later on a tug belonging to the same company as the stranded vessels came along and took the master off. Part of the rescued men went to Smith Island Station and part to Cobb Island, from which points they were assisted to the nearest railroad stations. The vessels were all lost.
Dec. 25	Am. sc. Edna Earl.	Atlantic City, New Jersey.	Stranded on the south bar of Absecon Inlet, master being a stranger in the vicinity. Surfmen boarded her, worked her into the inlet on the top of high tide, and put her in a safe berth.
Dec. 25	Slp. Kestrel	Lewes, Delaware	Dragged ashore $\frac{1}{2}$ mile W. of station during the night. Surfmen went on board and planted anchors, and at high water hove her afloat and sailed her to a good berth.
Dec. 25	Am. str. George Dunbar.	Racine, Wisconsin, Lake Michigan.	Stranded on Racine Reef, 3 miles ESE. of station, at midnight, but owing to strong offshore breeze was not discovered until daylight. Keeper then assembled a crew (closed season) and boarded the vessel in the lifeboat. A local tug was already there trying to pull her off, but was not successful. Station crew assisted crew of vessel to throw overboard seventy-five thousand feet of lumber, when the steamer floated and was towed into port.
Dec. 26	Slp. Henrietta	Shinnecock, New York...	Broke adrift from anchorage and went ashore 2 miles ENE. of station; nobody on board. Station crew hove her afloat and took her to a safe anchorage near the station.
Dec. 26	Skiff, no name.....	Sea Isle City, New Jersey.	About 4 p. m., two fishermen, Charles Petersen, Norwegian, and Thomas Carlson, Swede, left the beach to take up a trawl about $1\frac{1}{4}$ miles offshore. The sea was smooth and the weather fine, and little attention was paid them. The men did not return, however, and on the following morning the fact was reported to the keeper of the station. He made a close examination of the sea with marine glasses, but could discover no trace of men or boat. Nothing further was done until 3 p. m. December 30, when an object was reported in the water 2 miles E. of station. Keeper examined it with the glasses and thought it was a piece of wreckage; but to be certain he pulled out to it. It turned out to be the missing skiff, bottom up, with anchor down and cable all out. Keeper swept for the cable, secured it and began hauling in. When about half in they found the bodies of the two missing fishermen entangled in it. Righted the boat, balled it out and put the bodies in it. Took boat and bodies ashore, where the latter were turned over to the authorities. It is said that the men were much under the influence of liquor when they went out.
Dec. 26	Skiff, no name.....	Humboldt Bay, California.	While pulling up stream against a strong wind and ebb tide, two men broke their oars and were in danger of being swept into the breakers. Surfmen pulled to their assistance, took them into the supply boat, and towed the skiff to the station.
Dec. 27	Slp. Kestrel.....	Hog Island, Virginia	Stranded on SE. bar of Hog Island shoals, $3\frac{1}{4}$ miles SE. of station. Surfmen boarded her at once and attempted to float her, but she went aground on the top of high water and could not be moved. The seas flooding the cabin, all hands had to abandon her, and surfmen took the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1900. Dec. 27	Slp. Kestrel.....	Hog Island, Virginia	crew of four men to the station for shelter. The sloop broke up rapidly, but most of the personal baggage and movable furniture was saved. The hull was lost. The shipwrecked crew were sheltered at the station four days, when they proceeded to their homes. (See letter of acknowledgment.)
Dec. 29	Slp. Novelty	White Head, Maine	Stranded on the rocks near Two Bush Island, 3 miles ESE. of station. Crew boarded her, ran out anchors, rigged masthead purchase, and hove her on an even keel. When the tide was high they worked her afloat and took her clear of danger.
Dec. 31	Dory, no name.....	Quogue, New York	While attempting to land through a heavy surf, three men were thrown into the breakers by the capsize of a dory and one was lost. (For detailed account see caption "Loss of life.")
Dec. 31	Slp. Marie	Santa Rosa, Florida.....	Caught in a squall and drifted into the breakers while the crew was trying to reef down, and had to be run ashore. Accident happened on the Gulf side, 5 miles E. of station. The two men belonging to the sloop made their way to the station, where they were given food, and surfmen then went to the scene to see what could be done. The surf was too high to do anything at the time, so they returned to the station. On January 5 they took the two men, went to the place again, jacked the sloop out of the sand, put skids under her, and after six hours' work had her afloat.
Dec. 31	Fish boat, no name.	Michigan City, Indiana, Lake Michigan.	Two fishermen, Charles Ely and Fred Mecklenberg, went out in the morning, but as they did not return in the evening two of the last season's crew (station closed) made a patrol of the beach. About 2 miles N. of station they found the boat capsized in the surf and the gear strewn along the beach. They searched for the bodies of the missing men, but failed to discover them. Keeper hired a dray and had the boat and gear removed to town. The weather was so hazy that the accident could not be seen from the station.
1901. Jan. 2	Am. sc. Wasp	Burnt Island, Maine.....	While this schooner, with no crew on board, was lying at a dock in Port Clyde, she sprung a leak, filled, and sank. Upon being notified of the casualty, the surfmen pulled to Port Clyde, and, as her hatch coamings were above water at low tide, they succeeded in freeing her from water. On the next flood tide they blocked her up for repairs.
Jan. 2	Gas. lch. Louisa K ..	Milwaukee, Wisconsin, Lake Michigan.	Lost propeller in the ice about 3 miles E. of station. Keeper (inactive season) went out to the disabled craft on a tug, passed a towline to the two men on board, and towed them to their dock in the harbor.
Jan. 3	Am. sc. Massasoit ...	Gurnet, Massachusetts ...	At 4 a. m. this schooner, with a crew of twelve men, stranded on Browns Island Shoal, $\frac{1}{2}$ of a mile SSW. of station, and burned a torch for assistance. She was pounding badly in a rough surf when the station crew reached her. They went on board, put all sail on her, and the wind being favorable, they succeeded in forcing her afloat after an hour's work. They piloted her around the island and safely anchored her in Saquish Cove.
Jan. 3	Br. sc. Lily	Nauset, Massachusetts....	When about 15 miles E. of Cape Cod light the cargo of this schooner shifted, causing her to leak seriously, and the mainsail and outer jib were torn into shreds while the crew were taking in sail. The

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Jan. 3	Br. sc. Lily.....	Nauset, Massachusetts....	<p>master ran off before the wind and anchored near the beach at 1.30 a. m. Surfmen saw her distress signal at daylight and immediately tried to launch their boat through the rough surf, but the boat broached to, throwing out two men, one of whom was struck by the boat and injured. Before they could make another attempt, the master of the schooner had hoisted sail and beached his vessel about 2½ miles S. of station. Surfmen hastened to her with beach apparatus, but her crew had safely reached shore in their own boat before their arrival, the stranded schooner having slued around and made a lee which facilitated their landing. The crew were taken to station, furnished with dry clothing from the stores of the Women's National Relief Association, and given food and lodging until the 7th, when they and their baggage were carried to the railroad station. They were provided with tickets for Boston by the selectmen of Eastham. The schooner was sold and went to pieces soon after she was stripped.</p>
Jan. 3	Am. sc. Julia.....	Long Beach, New York ..	<p>Stranded on the E. side of East Rockaway Inlet, about 2½ miles W. of station. Surfmen boarded her, assisted her crew to throw overboard her cargo of sand, and then she floated on the rising tide.</p>
Jan. 3	Am. slp. Flirt .....	.....do	<p>Stranded on the W. side of East Rockaway Inlet, 3 miles W. of station. Surfmen boarded her, laid out her anchor, and hove her afloat on the rising tide.</p>
Jan. 4	Small boat, no name	Monomoy, Massachusetts.	<p>This boat, containing one man, was caught in the ice off station. After two hours of hard work surfmen succeeded in getting a line to him and hauling him to the beach.</p>
Jan. 4	Am. sc. James Young.	Assateague Beach, Virginia.	<p>Stranded on Turners Lump, 5 miles S. of station, breaking off her keel and opening her seams so that she leaked seriously. Surfmen boarded her at once, and, assisted by the Wallops Beach crew, ran out her anchor and hove taut on cable; then, by handling her sails properly as the tide flooded, they succeeded in floating her. She leaked so much that the water gained on them in spite of the three pumps which they kept going, and it was necessary to take her into the harbor and beach her. On the next morning the surfmen took the master to town, where he arranged for the assistance of a tug, which pumped her out and started for New York with her in tow. (See master's acknowledgment.)</p>
Jan.	Am. str. Iaqua	Fort Point, California....	<p>Stranded on Duxbury Reef, 12 miles NW. of station, at 6.30 p. m., during a strong SW. wind, blinding rain squalls, and rough sea. Of the twenty-three persons on board, twenty-two were saved, and one was lost. Surfmen from Fort Point Station towed to the scene as soon as informed of the casualty, and, together with the crews of Golden Gate Park and Southside stations, they ran lines to tugs, stayed by the wreck until night, and then took off the master and the members of the crew who remained on board. On the next morning the Fort Point crew went to the wreck again and ran lines for tugs, which succeeded in floating her.</p>
Jan. 5	Dory, no name	Cranberry Isles, Maine....	<p>One man was afloat in this dory about 3 miles SSE. from station, and could not pull to the shore on account of the strong NW. wind. He was cold, wet, and exhausted when the life-saving crew reached him; they towed the dory</p>

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Jan. 5	Dory, no name	Cranberry Isles, Maine ...	to Bakers Island with the surfboat, hauling it up on the beach, and then took the man to station and gave him succor.
Jan. 6	Small boat from Fire Island light-ship.	Fire Island, New York ...	This boat was carried on to a shoal by the drifting ice while four men were trying to cross Great South Bay in it. Surfmen pulled out and assisted to float the boat and get it clear of the ice.
Jan. 7	Small boat, no name.	Monomoy, Massachusetts.	This boat, with one occupant, became jammed in the ice about 2½ miles N. by E. from station. After a hard pull the surfmen reached the boat, got it clear of the ice, and landed it at the station. The occupant was much exhausted when the life-savers reached him.
Jan. 9	Catboat, no name ..	Blue Point, New York ...	Station lookout discovered this boat to be capsized and fast in the ice about 1 mile NW. of station. Surfmen recovered it, and turned it over to its owner.
Jan. 9	Am. slp. Emma W..	Great Egg, New Jersey ...	Stranded on a sand bar in the beach thoroughfare. Surfmen ran out her anchor, and succeeded in moving her a few feet by heaving in on windlass and pushing at the same time. She was floated without damage on the next high water.
Jan. 9	Am. sc. John R. Walter.	Wallops Beach, Virginia .	Stranded on the N. point of Wallops Beach. Surfmen boarded her, ran out her anchor, hove in on windlass, floated her without injury, and sailed her to a safe anchorage.
Jan. 11	Dories (2), no names	Race Point, Massachusetts	The surf being much too rough for these boats to land with safety, the station crew assisted the four occupants to land and save their cargoes of fish.
Jan. 11	Skiff, no name	Great Egg, New Jersey...	Capsized in the thoroughfare near a steam dredge, throwing a man named John Leonards into the water. The men on the dredge tried to save the man, but he lost his hold on the skiff, went down, and was seen no more. Surfmen pulled to the spot as soon as informed of the accident, and worked to recover the body, but, although they worked for several days, they failed to find it. (For detailed account see caption "Loss of life.")
Jan. 12	Am. slp. Alice.....	Saluria, Texas.....	In response to a request from the master of this sloop, which had been weather bound near the station for some time, the surfmen put a barrel of fresh water on board.
Jan. 13	Am. str. Isis.....	Damariscove Island, Maine.	This small steamer stranded on the W. side of Damariscove Island Harbor while trying to tow in a small schooner. Surfmen went to her and, by using levers under her bow, succeeded in floating her.
Jan. 13	Am. sc. Annie B. Mitchell.	Assateague Beach, Virginia.	Stranded on Turners Shoal, 5 miles S. of station. Surfmen boarded her, assisted to float her, and then piloted her into a safe harbor, the master being unacquainted with this locality.
Jan. 14	Dories (10), no names.	Race Point, Massachusetts.	During rough weather, the station crew assisted the crews of ten fishing dories to land through the surf. This service was accomplished without loss of life, boats, or cargoes of fish; but two men were slightly injured and three dories were filled with water in the heavy surf.
Jan. 16	Slp. Violetta.....	Galveston, Texas.....	Became dismasted about 1½ miles W. of station in a fresh squall. Surfmen pulled out in surfboat and towed the sloop to her dock.
Jan. 18	Am. sc. Josephine D.	Aransas, Texas.....	Stranded 3 miles NE. of station. Surfmen ran out two anchors with surfboat and shifted some of her cargo forward. Then by heaving in and working the sails properly they succeeded in releasing her without injury.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Jan. 18	Rowboat, no name..	Ludington, Michigan, Lake Michigan.	Three rowboats became jammed in the slush ice while trying to cross the harbor. Keeper summoned three surfmen (inactive season) and, by placing planks on the ice, they succeeded in hauling out one of the boats. The occupants all reached shore safe in the smallest boat, leaving the other boat to be hauled out later.
Jan. 19	Am. sc. George P. Davenport.	Cuttyhunk, Massachu- setts.	Stranded on the S. side of Nashawena Island, about 2½ miles E. of station, at 7 p. m. On the next morning the surfmen discovered her on the beach, went aboard and took a message ashore for the master, who soon afterwards went to Vineyard Haven on a tug. Surfmen stood by the wreck until nightfall, and then, the tug not returning, took all the crew of the schooner except the mate (eight men) to the life-saving station in the surfboat. On the following morning they took the apparatus of the Massachusetts Humane Society to the wreck and fired a line out to the mate, who was still on board, having refused to leave on the night previous. The hawser was set up after considerable difficulty, and the mate was safely landed. Three of the shipwrecked crew were furnished with dry clothing from the stores of the Women's National Relief Association, and all hands were succored at the station till evening, when the tug came after them. A gang of wreckers stripped the schooner, the hull becoming a total loss.
Jan. 19	Am. yt. J. A. Gault.	Great Egg, New Jersey...	Missed stays and stranded 2½ miles WNW. from station. Surfmen boarded her in response to her signal of distress, ran out her anchor, and succeeded in heaving her into deep water. They hung her rudder, which had become unshipped, and sailed her to a safe anchorage.
Jan. 19	Am. sc. John Russell.	Cold Spring, New Jersey.	Stranded on Cold Spring Bar, 2½ miles E. of station, at 6 p. m., during a fresh breeze and rough sea. Station patrol made her out at 4.30 a. m., and the crew at once pulled out to her. They took the master ashore to telegraph for the assistance of a tug, and put him back on his vessel when he had finished his errands. Early on the next morning the surfmen pulled out to the schooner and ran a hawser for a tug which had arrived. On the morning of the 21st one of the wreckers reported to the keeper that the schooner was full of water and that it was necessary to land the crew at once. Station crew pulled out through a rough sea and safely brought the crew of six men to land. Then they took three of the wrecking crew, who were on shore, off to the wrecking tug and brought ashore seven men to look after the hawser, which had been cast off on account of rough weather. The schooner's crew were provided with dry clothing from the supplies of the Women's National Relief Association and with food and lodging. On the 22d the station crew pulled out to the wrecking tug in response to a signal for a boat, underran the hawser, which had become foul of an old wreck, and then secured it on board the schooner. On the 23d the tug released the schooner, much damaged, and towed her to Delaware Breakwater. The crew of the Turtle Gut Life-Saving Station saved about 6,000 feet of this schooner's cargo of lumber which was thrown overboard.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Jan. 20	Am. sc. Lizzie Cochran.	Monomoy, Massachusetts.	Hoisted a signal of distress about 4 miles SSW. of station, her sails having been blown away in a gale and her crew being exhausted by hard work and exposure to the cold. Surfmen boarded her, cleared away the torn canvas, broke out spare sails and bent them, and got her under way for the master, who then continued his voyage toward New Bedford.
Jan. 20	Am. sc. George Nevinger.	Coskata, Massachusetts ..	Anchored 7 miles NW. by N. from station and hoisted a signal for assistance. Surfmen had a hard pull to her through a rough sea, and, upon reaching her, the master informed them that he had lost his sails during the heavy gale and required the services of a tug to tow him to Vineyard Haven. Surfmen returned to station, and the keeper telephoned to Nantucket for a tug, which went out and towed the schooner to her destination.
Jan. 20	Skiff, no name.....	Blue Point, New York ...	Crushed in the ice and sunk 3 miles N. of station, leaving the occupant in a perilous position on the thin ice. Two surfmen went out and picked up the man, and brought him safely to shore.
Jan. 20	Am. sc. A. J. Coleman.	Atlantic City, New Jersey	Stranded on Absecon Bar during a SW. gale, having sprung a leak which compelled the master to run for a harbor. The crew hoisted a signal of distress and then took to the rigging. After a hard struggle the surfmen reached the wreck and took the crew of four men from the rigging into the surfboat. This was accomplished, however, by work involving great peril, as the deck load of lumber was being washed off the schooner by the heavy sea and the masts were tottering. Within ten minutes after the rescue was made the masts fell, and within a half hour not a vestige of the wreck remained on the bar. The rescued crew were taken to the station, where they were furnished with food and dry clothing from the stores of the Women's National Relief Association.
Jan. 20	Am. sc. Lorena.....	Durants, North Carolina .	Missed stays and stranded 4 miles NNW. of station. Surfmen pulled to her, ran out her anchor, hove her aloft, and sailed her into a safe anchorage.
Jan. 21	Am. sc. Joseph Luther.	Hunniwells Beach, Maine	While this schooner was being towed out of the Kennebec River, and when she was just to windward of Whales Back Ledge, the hawser parted and she drifted onto the rocks. The life-saving crew pulled out at once, but were unable to go alongside on account of the heavy sea breaking around her. Keeper pulled to leeward of the rocks and succeeded in landing upon them a surfman, who threw a line to the wreck and made the other end fast around a rock. The men on the wreck passed their effects to the rocks, and then came down the line. After hard work the keeper managed to take them from the ledge, one at a time, but had to leave their clothing on the rocks until the next morning. The whole crew of seven men were taken to the station in the surfboat, provided with dry clothing from the stores of the Women's National Relief Association, and succored until the next day, the master remaining at the station until February 12. The schooner was a total loss. (See letter of acknowledgment.)
Jan. 21	Am. sc. Electa Bailey.	Chatham, Massachusetts.	Parted from her anchors by the heavy drift ice during a fresh SW. wind, and drifted aground off Hardings Beach, about 1½ miles W. of station. The water was full of slush ice between the station and the schooner, and surfmen had very laborious work to transport their surfboat

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Jan. 21	Am. sc. Electa Bailey.	Chatham, Massachusetts.	over it. They finally reached the stranded schooner after three hours of fatiguing toil, and, assisted by a wrecking boat which reached her soon after the arrival of the surfmen, they transported the crew of six men and their personal property to South Chatham, that being the nearest point where the shore was free from ice. The rescued men were taken to the station and succored until the 23d, when they were given tickets for Boston by the selectmen of Chatham. The schooner was stripped, and will probably become a total loss, as she was full of water when the crew were taken off.
Jan. 21	Am. sc. Silver Spray.	Monomoy, Massachusetts.	Hoisted a distress signal about 3 miles S. of station, near Bears Shoal. Some of her sails and an anchor and chain had been lost in the severe gale of the previous day, and her crew was completely tired out. After a hard pull the surfmen boarded her, got her under way; worked her clear of the shoal, and left her with a fair wind for her destination.
Jan. 21	Lighter Pathway...	Metomkin Inlet, Virginia..	Rudder strap carried away. Surfmen transported the master and the broken strap to the mainland, where a blacksmith repaired the damage.
Jan. 21	Barge, no name.....	Cape Arago, Oregon.....	Dragged anchor and slowly drifted into a dangerous position off Coos Head. Surfmen boarded her, ran an anchor inshore, and hove her into a better anchorage. Then, after the tide turned flood, they towed her to South Slough with the surfboat.
Jan. 24	Br. str. Starcross....	North Beach, Maryland..	Stranded 1½ miles NNE. of station. Surfmen launched their boat and took messages to and from the master of the stranded steamer, and then stood by to render assistance. Two tugs arrived and succeeded in floating her without damage. Keeper furnished dry clothing from the stores of the Women's National Relief Association to five men who capsized in a boat belonging to one of the tugs while at work on this vessel.
Jan. 25	Am. sc. Emerald....	Gurnet, Massachusetts....	Stranded on Browns Island Shoal, at 6 a. m., during a moderate NE. wind; low tide and high surf. Station patrol reported that she was aground, and surfmen immediately pulled out to her. They ran a hawser to a tug and hove in on the schooner's anchor, which her crew had planted. She was floated, and as she was leaking considerably was taken to Plymouth for repairs.
Jan. 25	Slp. C. N. Chesser...	Parramore Beach, Virginia.	Missed stays and stranded near the mouth of the station landing creek. Although the wind was blowing a gale, she lay in a safe position, and surfmen could do nothing to float her until high water. When the tide served on the next morning, the station crew ran out an anchor and hove taut on cable, set the sails, and succeeded in releasing her without injury.
Jan. 25	Slp. Lavinia.....	Bodie Island, North Carolina.	Dragged anchor and stranded near the station during a NW. gale. Surfmen put planks and rollers underneath her, and shoved her afloat.
Jan. 25	Sailboat, no name..	Durants, North Carolina.	Drifted ashore about 1½ miles NNW. from station and filled with water. Surfmen bailed it out, launched it off the beach, and sailed it to a good anchorage. On the next day they turned it over to its owner.
Jan. 28	Small boat, no name.	Poyners Hill, North Carolina.	Drifted away from a small island in the sound, leaving two men without means of reaching the mainland. Surfmen overhauled the craft and towed it back to the men.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Jan. 28	Fish boats (2), no names.	Cape Arago, Oregon.....	The occupants (two in each boat), having become intoxicated, let these boats drift helplessly before the gale while they struck at each other with the oars. Seeing that the boats would be swamped during the struggle, the life-saving crew hastily pulled toward them. One man was overboard and another was lying powerless across the gunwale of one of the boats when the surfmen reached the scene. The men were rescued, the boats bailed out, and a surfman placed in one of the boats to care for the helpless men. Keeper then towed both boats to Empire City.
Jan. 29	Shanty boat, no name.	Louisville, Kentucky....	This shanty boat was slowly drifting along the Indiana shore of the Ohio River into the swift current above the falls. It contained a man and his wife, who were bound from Sistersville, West Virginia, to Cairo, Illinois, and who had no knowledge of the dangers of the falls. Seeing their peril, the life-saving crew pulled out, made a line fast to the shanty boat, and towed it past the falls without mishap.
Jan. 31	Am. sc. George R. Congdon.	Cape Hatteras, North Carolina.	About 3 a. m. this schooner stranded at a point on the beach about 3½ miles NNE. from Cape Hatteras Life-Saving Station, the master having mistaken Cape Hatteras light for the light-ship. It was a dark and foggy night with a strong N. by W. wind and a rough surf. The station patrolman discovered the wreck at 4 a. m. and quickly returned to station and gave the alarm. Keeper notified the keepers of the adjacent life-saving stations of the casualty, and then hastened to the scene with the beach apparatus, arriving there at 5 a. m. The Big Kinakeet and Creeds Hill crews arrived soon afterwards, the former bringing their surfboat on a boat wagon drawn by horses. The first shot of the Lyle gun placed a line across the wreck. The beach apparatus was set up and before sunrise the crew of 7 men and their personal effects were safely landed in the breeches buoy. They were taken to the Cape Hatteras Station, where it was necessary to succor them for fifteen days, owing to stress of weather. The schooner became a total loss. (See letter of acknowledgment.)
Feb. 5	Am. sc. John F. Kranz.	Cape Henry, Virginia.....	During the heavy WNW. gale the schooner anchored in Chesapeake Bay, 2½ miles W. of station. At 4 a. m. she began dragging toward shore and was in imminent danger of stranding. Crews of Cape Henry and Seatack stations took beach apparatus abreast of her, but by that time her anchors had brought her up. Surfmen remained on the beach all day, and on the following morning went on board, the sea having moderated somewhat. The master was anxious to get under way, but his crew could not handle the vessel in such a seaway. Surfmen assisted in getting in the anchors and making sail, and the schooner stood off in safety.
Feb. 6	Am. sc. Herman Ellis.	Smith Island, Virginia ...	Ran into the harbor with broken boom and set signal for help. Surfmen boarded her, found what was wanted, returned ashore for tools and lumber, and then went back and fished the boom.
Feb. 9	Am. str. Robert and Edwin.	Cranberry Isles, Maine ...	Stranded on Bear Island Bar, 4 miles NW. of station. Surfmen went on board and at high water worked her out over the shoals.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Feb. 13	Am. sc. S. H. Sawyer.	Hunniwells Beach, Maine.	Struck a rock on Bald Head ledge about 8 p. m., but jumped over it and anchored 3 miles SW. of station. On the following morning surfmen saw colors flying union down and at once boarded the vessel. She was half full of water and the crew were nearly exhausted. Surfmen relieved them at the pumps. After five hours' work the water was reduced enough to make it possible to manage her and keeper got her under way for Boothbay. A tug had been signaled for when they got under way, and one came out from Boothbay and towed them into port.
Feb. 13	Am. sc. Commerce ..	Chatham, Massachusetts.	Dragging anchors 2 miles ESE. of station and in danger of fouling the schooner Juniata. Surfmen boarded both vessels and arranged to have the Juniata slip her anchor and run to another anchorage. Remained on board the Commerce all night, and on the following morning got her under way. The Juniata then returned and picked up her anchor. (See letter of acknowledgment.)
Feb. 15	Am. sc. E. Arcularius.	Monomoy, Massachusetts.	Arrived off the station with signals for assistance set. Surfmen boarded her and found that she had been adrift in the ice for two weeks and was out of provisions and water. Procured food and water from the Shovelful light-vessel and took them on board the schooner, which then stood away on her course.
Feb. 17	Am. scs. Ringleader and Fawn.	Avalon, New Jersey	The tug Covington, towing these schooners, mistook shore lights and both schooners took bottom 1 mile E. of station. Surfmen boarded them and carried messages ashore. Another tug came along and station crew, assisted by crew of Townsend Inlet Station, ran lines between the tugs and the stranded schooners. Both were released without apparent injury.
Feb. 20	Am. sc. Clara Jane..	Orleans, Massachusetts...	Arrived off the station with topmasts carried away, sails split, and distress signal flying. Surfmen pulled out and keeper took charge of her. Ran in for anchorage, came to, and then set to work clearing up the wreckage and making all possible repairs. Keeper signaled station lookout to send to Boston for a tug and soon received answer that one had started. In a short time another tug of the same line came along and took the schooner in tow for Boston.
Feb. 20	Am. sc. Gertie Lord.	Core Bank, North Carolina.	Stranded on Core Bank, 1 mile SW. of station. Surfmen went on board, hove her off, and took her to the harbor at the station.
Feb. 20	Am. sc. Clara R. Grimes.	Santa Rosa, Florida	Missed stays and went ashore in the bay, 4 miles NE. of station. Surfmen boarded her, laid out two large anchors, and hove away on the windlass. About 8 p. m., being unable to move her, station crew pulled to Pensacola to get a tug, but could not procure one. Returned to the vessel and hove away until after midnight, but without starting her. Then took a rest until morning, when, the wind being favorable, they set sail and hove away on the windlass, finally succeeding in floating the vessel. As she was shorthanded, surfmen sailed her to Pensacola.
Feb. 20	Catboat Rambler ...	Saluria, Texas.....	Ran out of channel and anchored in the breakers 3½ miles NE. of station, in a dangerous position. Surfmen boarded her, got under way, and piloted her through a narrow slue and into Saluria Bayou.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Feb. 21	Am. sc. Mabelle E. Leavitt.	Fletchers Neck, Maine ...	Stranded during the night on Negro Island bar, 1 mile N. of station. At daylight surfmen went on board, ran out an anchor, rigged masthead purchases, and battened her down. As the tide rose they hove her on an even keel, and at high water she floated without damage.
Feb. 22	Am. str. City of Rio de Janeiro.	Fort Point, California	While entering the Golden Gate during a dense fog, the vessel was swept out of her course by the strong tide and struck a rock or some other obstruction and sunk almost immediately. The wreck has never been found, although long search has been made for it, and the exact place where the disaster occurred is not known. Of the two hundred and nine persons on board, all but eighty-one perished. At about 7:20 o'clock in the morning, Surfman Ellingsen of the Fort Point Life-Saving Station, while on watch, made out a boat loaded with people coming around the point below the fort. The keeper, knowing that the ebb tide then running was very strong, considered so many people in a small boat in great danger and ordered the station surfboat launched at once. Arriving near the boat containing the persons, he found that a gasoline launch had taken it in tow, and learning that an injured man in need of help was on board, he escorted the people to the station and there first heard of the wreck of the steamer from the third officer (Holland), who was in the boat. One man's leg was broken and two other men were sick and suffering. The keeper sent to the Presidio for a surgeon and telephoned to the city for tugs. Leaving care-takers for the sick and wounded, he then set out again with the rest of his crew to search for persons who might be clinging to wreckage. On the way one of the tugs that had been telephoned for took him in tow and a careful search was made of the neighborhood, but without discovering any survivors of the wreck.
Feb. 23	Am. str. Flora Brown	Shoalwater Bay, Washington.	Lost propeller and stranded on a sand spit 1½ miles SE. of station. Surfmen boarded her and landed two passengers, then returned to the vessel, laid out an anchor, and at high water hove her into the channel. Having a fair wind and tide, they towed her into the cove.
Feb. 25	Am. sc. Anna	Sandy Hook, New Jersey.	Stranded on the west side of the Swash channel, 3 miles NE. of station. Surfmen boarded her finding her leaking and her crew nearly exhausted. Put sail on her, forced her off the shoal, and sailed her to a good anchorage. At master's request station crew remained on board all night.
Feb. 25	Am. sc. General E. L. F. Harcastle.	Big Kinnakeet, North Carolina.	Ran out of Cape channel and went aground 5 miles W. of station. Surfmen went on board, but the tide had fallen so that they could do nothing for her. Worked on her on the 26th and 27th, and on latter date were successful in releasing her. Took her to a safe anchorage.
Feb. 25	Slp. Louise	Galveston, Texas	Fouled wreckage and unshipped rudder, compelling master to anchor. Afterwards dragged anchor and drifted into the breakers. Surfmen saw her signal of distress and sailed out to her. The sea was too heavy to attempt to move the sloop, but life savers took ashore the four persons on board and gave them supper at the station. The sloop was released on the 26th by private parties.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Mar. 2	Slp. Sallie Black ...	Saluria, Texas.....	Capsized 3 miles NNE. of station. Surfmen towed the boat to shore, balled it out, and saved the cargo of vegetables. The single occupant reached shore safe. Surfmen took him to station, gave him dry clothing from the stores of the Women's National Relief Association, and succored him for the night.
Mar. 4	Slp. Bessie	Wood End, Massachu- setts.	The ice having prevented this sloop from reaching Provincetown, surfmen supplied the crew with provisions.
Mar. 4	Dories (2), no names.	.....do	Surfmen assisted the crews of these dories to land their boats and cargoes of fish upon the beach, the ice having cut them off from Provincetown Harbor. They were given supper at the station.
Mar. 4	Am. sc. Gen'l S. E. Merwin.	Gull Shoal, North Caro- lina.	Stranded $\frac{1}{2}$ mile SSE. of station at 3.15 a. m. Station crew hauled the surfboat to the beach abreast the wreck, launched it, and boarded the wreck at 4.30 a. m., the crews from the Little Kinnakeet and Chicamacomico stations assisting. The schooner's crew of seven men were safely landed in the surfboat, and afterwards their personal property and the schooner's boat were taken ashore. The master was succored at the station for five days, in order that he might look after the wreck, which became a total loss. (See letter of acknowledgment.)
Mar. 4	Br. str. Camper- down.	Cape Lookout, North Car- olina.	Stranded on the south side of Lookout Shoals, 8 miles SSE. of station, during thick, smoky weather. Surfmen sailed out to her, and, at the master's request, returned to station and telephoned to Beaufort for a tug. The steamer was not leaking and in no immediate danger. A tug arrived on the 6th, and keeper took the master to the steamer to make arrangements to pull on her, but the wind shifted during the night and caused a high water, which floated her without assistance.
Mar. 5	Am. slp. Aeneld....	Aransas, Texas.....	Missed stays and stranded on the N. end Mustang Island. Surfmen ran out her anchor, and three of their number got overboard and lifted while the others hove in on the cable. After working about thirty minutes they released her, and she continued on her course undamaged.
Mar. 5	Am. str. F. and P. M. No. 3.	Ludington, Michigan, Lake Michigan.	Jammed in the ice off station. Keeper assisted to land four of her passengers upon the pier.
Mar. 6	Small boat, no name.	Plum Island, Massachu- setts.	Drifting out of the Merrimac River, the occupant being intoxicated. Surfmen pulled out and overtook the boat $1\frac{1}{2}$ miles NE. of station. They towed it to the station, where they succored the man, whom they found lying helpless in its bottom. There were no oars, anchor, or balling dish in the boat, and the weather was bitter cold at the time of this rescue.
Mar. 6	Am. slp. Jennie C. Brown.	Fire Island, New York...	Parted anchor chain and stranded about 2 miles W. of station in a NW. gale. The two men on board tried to force her afloat with the sails, but they failed in the attempt. Surfmen ran out her anchor and tried to heave her off at high water, but could not do so. At high water on the next day they put part of her cargo of oysters into the surfboat, and then succeeded in releasing her without damage.
Mar. 7	Fish boat, no name.	Great Boars Head, New Hampshire.	Parted moorings and drifted upon some rocks near the station. Surfmen went to it in the station dory and towed it to shore, where they hauled it up out of reach of the tide.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Mar. 7	Am. sc. Robert F. Brattan.	Core Bank, North Carolina.	Ran aground 1½ miles NW. of station at low tide. Surfmen planted her anchor, but were unable to release her. They worked on her several times, and on the 15th instant she floated without injury and proceeded on her way.
Mar. 8	Am. barge Black, Sheridan, Wilson Co. No. A.	Jerrys Point, New Hampshire.	Stranded on Stillmans Ledge in Portsmouth Lower Harbor. Surfmen boarded her at 6.20 a. m. and found that she was lying easy. At high water they went aboard again and ran a line to a tug, which hauled her off into deep water.
Mar. 10	Am. str. John K. Speed.	Louisville, Kentucky.....	On account of the strong wind and the swift current in the Ohio River above the falls, this steamer was unable to drop down from the upper wharf to the lower one without danger. Her master requested the assistance of the station crew, and they ran his lines and assisted him to drop down in safety.
Mar. 11	Am. sc. W. H. Oler.	High Head, Massachusetts	Stranded about 2 miles SW. from station during thick weather. Surfmen boarded her. She was lying easily and required no assistance from them other than taking ashore a message asking the agent to send a tug to her. On the 16th instant she was released by a wrecking crew, who threw overboard about two hundred tons of her cargo of ice.
Mar. 11	Am. sc. Nathaniel T. Palmer.	Long Beach, New Jersey.	Stranded 1½ miles S. of station at 3 a. m. during thick weather and a rough sea. The casualty was discovered by the south patrol at 3.15 a. m., and surfmen reached the scene with their beach apparatus at 4.30 a. m. Assisted by the crew from Bonds Station, the surfmen fired across the schooner a line, which her crew failed to find. They fired a second line, and then the schooner's crew found the first line and hauled off the wharf. The crew of 12 men on the schooner were safely landed in the breeches buoy. Afterwards, the surf becoming smooth, a wrecking boat took this crew back to their vessel and released her on the 19th instant.
Mar. 11	Am. sc. Mary Standish.	Assateague Beach, Virginia.	Parted both anchor cables in the fresh gale and drifted ashore 1 mile W. of station. The patrolman saw her through a rift in the fog at 5 a. m., and surfmen at once started to go to her assistance. It was impossible to get the surfboat alongside the wreck, but finally the surfmen got hold of a large line, down which the imperiled crew slid into the surfboat. They were landed safely and taken to the station, where they were succored until the Pennsylvania Railroad passed them to New York. The schooner was stripped by wreckers and the hull became a total loss. (See letter of acknowledgment.)
Mar. 12	Fish boat, no name.	Lone Hill, New York.....	Capsized and drifted ashore about a mile E. of station. The occupant reached shore safe and went to the life-saving station, where he received lodging and breakfast. Surfmen righted and bailed out his boat, launched it, and then he continued on his way.
Mar. 13	Am. slp. John Wesley.	Great Egg, New Jersey...	Stranded in the beach thoroughfare at 2.55 p. m. Surfmen planted her anchor and hove her afloat.
Mar. 13	Am. sc. Louis.....	Cape Disappointment, Washington.	While being towed in over the bar, this schooner hoisted a signal signifying that she had sprung a leak. There were six feet of water in her hold when the station crew reached her after a hard pull across Peacock Spit. They stood by her until she arrived at Astoria, and then assisted to place her in a safe berth.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Mar. 14	Slp. Trixie	Gilberts Bar, Florida	Having carried away his mast, the man in charge of this sloop requested the assistance of the keeper of the station, who made temporary repairs which enabled him to reach his destination.
Mar. 15	Catboat Jubilee	Sullivans Island, South Carolina.	While watching this catboat, which was out on a pleasure sail with four young men in it, the station lookout saw the boom knock one of them overboard. Surfmen hastily pulled to the rescue, but the man had regained the boat before their arrival. The weather was cold and stormy, and the sloop's crew were wet through and tired out. Keeper took them to the station, furnished them with dry clothing from the stores of the Women's National Relief Association, and succored them until the next morning.
Mar. 17	Dory, no name	Race Point, Massachusetts.	One of the station crew assisted the occupants of this dory to land through the surf and haul their boat up on the beach.
Mar. 18	Catboat, no name ..	Sullivans Island, South Carolina.	Anchor rope parted and boat drifting out to sea, with seven people in it, during calm weather. Surfmen heard their cries and signals of distress, pulled out to them, towed them in close to the beach, and anchored their boat with station anchor. When the tide began to flood they sailed for Charleston.
Mar. 21	Catboat Maud S.	Great Egg, New Jersey ...	Grounded in the beach thoroughfare, $\frac{1}{4}$ of a mile WSW. of station. Surfmen released her, some of them pushing with oars and others getting overboard and pushing against the boat.
Mar. 21	Am. sc. C. H. Moore.	Brazos, Texas	Stranded on the middle ground about $\frac{1}{4}$ mile NW. of station. Surfmen ran her hawser to an old wharf on the island and then assisted to heave taut on windlass. At high water she floated without injury and proceeded to sea.
Mar. 21	Am. str. City of Pittsburg.	Louisville, Kentucky	Struck one of the piers of the Pennsylvania Railroad bridge and broke her stem while trying to pass through the Indiana chute of the Falls of the Ohio. Station crew hastily pulled out to her, and assisted her crew to build a bulkhead and stop the leak after she was safely tied up at the mouth of Silver Creek, on the Indiana shore. As soon as the temporary repairs were completed she started on her trip down the river.
Mar. 23	Am. sc. Eliza B. Campbell.	Jerrys Point, New Hampshire.	Stranded at 2 a. m. on Duck Island, Isles of Shoals, 6 miles SE. of station. The hull was badly stove and became a total loss. The crew of 18 men succeeded in getting on the rocks, where the life-saving crew picked them up early on the next morning. With the assistance of a tug, surfmen landed them all safe in Portsmouth. The Wallis Sands crew also pulled out to this wreck and took a telegram ashore for the master. The cargo of fish was saved.
Mar. 23	Scow, no name	Kenosha, Wisconsin, Lake Michigan.	Two boys went out in the harbor in this old scow to pick up lumber which had washed away from a dock. The scow sank after the boys had loaded it and had started up the river. Keeper and several volunteers (inactive season) hastened to the scene; but the boys, not being able to swim, had sunk before they arrived. Keeper recovered the bodies and turned them over to the coroner.
Mar. 24	Am. str. Hokendauqua.	Highland, Massachusetts.	While towing three coal-laden barges around Cape Cod this steamer broke her shaft. She anchored off the station and hoisted a signal of distress, which was discovered by the station lookout at 5.35 a. m. Surfmen boarded her thirty-seven

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Mar. 24	Am. str. Hokendau-gua.	Highland, Massachusetts.	minutes afterwards, and keeper took ashore a telegram for the master. He delivered the answer on board when it came, and about 3 p. m. a tug arrived and started toward Boston with the disabled steamer and her barges in tow. (See letter of acknowledgment.)
Mar. 26	Br. sc. Bessie	White Head, Maine	Dismasted near Seal Island, 20 miles ESE. from station, in an easterly gale. The wind moderated a few hours afterwards, and a thick fog shut down, which prevented the station lookout from seeing her until 4.50 p. m. on the next day. She was near the station when the fog lifted and surfmen at once boarded her. They assisted to work her into a safe anchorage in Seal Harbor, cleared away the wreckage, and at the request of the master took him to the head of Seal Harbor and procured for him a passage to Rockland, where he communicated with his owners and engaged a tug, which towed the schooner to Rockland for repairs.
Mar. 26	Nor. str. Gwent.....	Long Beach, New York...	Stranded 2 miles E. of station, at 7.30 p. m., during thick weather. Station patrol discovered her at 8.45 p. m., and surfmen pulled to her without delay. The master informed them that one of the steamer's boats containing the passengers had just pulled away from the vessel. Keeper pulled after the boat, overtook it, and transferred four passengers to the surfboat; then, with the steamer's boat following, he returned to the steamer and advised all hands to remain on board until the next morning, as the vessel lay high up on the beach and was in no immediate danger of breaking up. Had not the steamer's boat been brought back it would undoubtedly have been carried out to sea by the strong wind which sprung up before morning. Surfmen carried the seven passengers ashore early on the next morning and they took the train for New York. The steamer's crew stood by their vessel until a wrecking gang floated her on March 31.
Mar. 26	Am. slp. Belle	Holly Beach, New Jersey.	Became dismasted in thick, stormy weather and drifting helplessly toward the heavy surf on the beach. Surfmen made her out through a rift in the fog at 3.45 p. m., and immediately pulled out to her. They unshackled the anchor chain, which was foul of the mass of debris on deck, bent a rope cable to the anchor, which they let go, and then took the crew of two men ashore in the surfboat. The wind having shifted to the opposite quarter during the night, the surfmen went aboard the sloop on the next morning and assisted her crew to take her to a safe anchorage in Hereford Inlet.
Mar. 26	Sailboat, no name..	Santa Rosa, Florida	This boat, containing two men, lost headway while trying to make the station wharf and was drifting toward the beach. Several surfmen jumped into a skiff and towed the sailboat to the wharf.
Mar. 28	Am. sc. C. G. Cran-mer.	Cold Spring, New Jersey..	Stranded on the outer edge of Cold Spring Bar, 2½ miles E. of station, at 7.30 p. m. Surfmen from both the Cold Spring and Turtle Gut stations pulled out to her, reaching her about 8.30 p. m. They set her head sails, and the strong NW. wind forced her afloat at high water about 9.30 p. m. They took her to a safe anchorage, where the master repaired his foresail and fore gaff, which were damaged while the surfmen were trying to float her, and then he sailed for his destination.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Mar. 29	Am. sc. William T. Parker.	Spermaceti Cove, New Jersey.	Sunk in about 4 feet of water at the mouth of the Shrewsbury River, she having swung foul her anchor at low water and stove a hole in her bottom. Surfmen assisted the master to shovel her cargo of coal onto a lighter. At low water her hatch coamings came out of the water, and they started the pumps, which soon lifted her clear of the bottom. Then they placed an old sail under her bottom and sailed her to a berth on the flats, where the master could repair her. (See letter of acknowledgment.)
Mar. 30	Cat yt., no name ...	Turtle Gut, New Jersey...	Stranded on the south side of Cold Spring Inlet while trying to sail out with a crew of four people on board. Surfmen boarded the boat, backed the sail, and soon had her afloat.
Mar. 31	Sc. Seven Sisters....	Crumple Island, Maine...	Struck on Seal Rocks, 9 miles NNE. of station, and sunk in about 15 feet of water. Surfmen placed a large boat on each side of the sunken schooner and rigged a "Spanish windlass" between them. Then they swept a chain under her keel, and, taking it to the windlass, they succeeded in heaving her off the bottom at low water. They took her to Jonesport and left her in a safe place.
Mar. 31	Am. sc. George A. Pierce.	Watch Hill, Rhode Island.	In a heavy squall this schooner lost her jib, without which she was unable to make Stonington Harbor, and tried to reach an anchorage under Watch Hill Point. She struck on Catumb Rock, 2½ miles WSW. of station, and surfmen pulled out to her through the WNW gale. They secured her sails and tried to keep her free of water with her pumps, but, notwithstanding their efforts, she soon bilged. She hung on the rock and the surfmen stayed on board all night. In the morning, the wind having abated, they took the crew and personal effects to the station in the surfboat. On April 2 the station crew assisted the master to strip the schooner, and on the following day she broke up.
Mar. 31	Am. slp. Lizzie M. Jones.	Fire Island, New York...	Stranded at 9 p. m. on a shoal, 1½ miles W. of station. Station crew went to her assistance, but a gale sprung up and anchor chain parted. Surfmen ran out another anchor and chain, hove in, and at high water succeeded in floating her.
Mar. 31	Am. sc. James W. Lee.	Little Beach, New Jersey.	Stranded on the middle ground in the entrance to Little Egg Harbor Inlet, 2½ miles ENE. of station, at low water. Surfmen boarded her, and at high water worked her afloat.
Mar. 31	Gas. yt., no name ..	Two Rivers, Wisconsin, Lake Michigan.	Caught in the ice and carried ashore 18 miles S. of station. The owner, fearing his boat would be crushed by the ice, requested the keeper of the life-saving station (inactive season) to help a tug to get a line to it. Keeper put his small boat on the tug and went to the stranded yacht. With the assistance of the tug's crew he worked the small boat through the ice for about 1,000 feet, made a line fast to the yacht, and towed it out to the tug, which towed both boats back to the harbor.
Apr. 3	Am. sc. Moselle	Gurnet, Massachusetts ...	Cable parted while this schooner was getting under way, and she stranded on Squish Beach, 1½ miles W. of station. The wind was freshening and blowing directly on shore. Surfmen planted their kedge anchor astern the schooner, passed their hawser in through the stern chock, and took it to the windlass and hove taut. Then they took the chain from the schooner's other anchor in through the other stern chock, the anchor having been let go by the

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 3	Am. sc. Moselle	Gurnet, Massachusetts ...	schooner's crew just before she stranded. By heaving in on both cables for one and one-half hours they released the schooner, and then after the surfmen had recovered her dory, which had drifted into the breakers, she sailed for Plymouth.
Apr. 3	Catboat Laura.....	Great Egg, New Jersey...	Sunk alongside a wharf during an easterly storm. Surfmen raised it, bailed it out, and secured it in a safe berth.
Apr. 3	Am. sc. Oriental....	Wallops Beach, Virginia .	Stranded 2½ miles S. of station during an easterly gale with fog. She went high up on the beach, and the crew of four men jumped ashore, almost dry shod, while the surfmen were dragging the boat wagon through the soft sand on their way to the wreck. The master and mate were succored at the station for two days, and on the 15th instant the surfmen assisted a wrecking crew to float the schooner, which was only slightly damaged by the mishap.
Apr. 3	Small boat, no name.	Chicamacomico, North Carolina.	Adrift about 3 miles SW. of station. Surfmen pulled to it, towed it to the shore, and hauled it out to await a claimant.
Apr. 4	Am. sc. Georgie L. Drake.	Cape Lookout, North Carolina.	Hoisted signal for assistance while anchored off Wreck Point. Surfmen went on board, and the master reported to the keeper that he was afraid to get his vessel under way without assistance on account of the strong W. wind. Station crew helped get the schooner under way and beat her out clear of all danger.
Apr. 4	Am. sc. Early Bird .	Assateague Beach, Virginia.	At 9 p. m. this schooner missed stays while trying to tack off a lee shore and went aground on the S. point of Assateague Beach, 3 miles S. of station and beyond the patrol limits. No signal of distress was made and consequently she was not discovered by the station patrol until daylight. Surfmen boarded her and ran out her anchor into deep water, but it was too light to enable them to heave her afloat. Local wreckers lightered her cargo and released her on the 5th instant apparently uninjured.
Apr. 5	Am. sc. Loduskia...	Burnt Island, Maine	Drifting toward the rocks off Burnt Island in calm foggy weather. The master became alarmed and let go both anchors in a very dangerous position. He pulled to the life-saving station in his yawl and requested assistance. Surfmen went aboard, kept her pumped out during the night, and on the next morning got her under way and worked her out clear of danger in the light breeze which had sprung up.
Apr. 5	Rowboat, no name .	Saint Joseph, Michigan, Lake Michigan.	Drifting out into Lake Michigan, the single occupant not being able to pull ashore against the strong E. wind. Surfmen pulled out and towed the exhausted man and his boat into the harbor.
Apr. 6	Sailboat Marguerite	Charlevoix, Michigan, Lake Michigan.	Caught in the drift ice, near the harbor entrance. Surfmen fired out to the boat a No. 7 shot line, which her crew made well fast on board. Then the surfmen hauled her through the ice into the harbor.
Apr. 7	Br. sc. Wendell Burpee.	Cape Elizabeth, Maine ...	This schooner stranded in thick weather and a heavy E. wind at Broad Cove, 1 mile NNW. of station, and her crew of four tried to get ashore in their yawl before the life-savers could reach the scene. Three of them were drowned in the attempt. Surfmen recovered two bodies. (For detailed account see caption "Loss of life.")
Apr. 7	Am. sc. James A. Gray.	Fletchers Neck, Maine...	Dragged her anchors into shoal water where she would pound on the bottom at low tide, and hoisted signal for assistance. The weather was rainy, with a fresh ENE. wind and rough sea. Surfmen boarded her, hove up both anchors,

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 7	Am. sc. James A. Gray.	Fletchers Neck, Malne...	made sail, piloted her into the Pool, and safely secured her to a wharf. She was only 50 yards from heavy breakers when the surfmen boarded her.
Apr. 7	Am. sc. Ripley .....	.....do.....	Dragged her anchors into shoal water where she would be in danger at low tide. Her crew consisted of young men of the Massachusetts Naval Reserve, who could not handle the schooner in the heavy weather. Surfmen boarded her, hove up her anchors, and sailed her into the Pool. (See letter of acknowledgment.)
Apr. 7	Am. sc. Sarah C. Smith.	Race Point, Massachu- setts.	Anchored in a dangerous position off Race Point with a flag for assistance in her rigging. Her crew were worn out by hard work during the strong easterly gale and were not able to take her into Provincetown Harbor through the thick fog. Surfmen teamed their boat to windward, launched, and pulled aboard in a rough sea. They hoisted the schooner's smaller anchor, slipped the cable of the larger one, made sail, and safely piloted her into Provincetown Harbor.
Apr. 7	Cat yt. Francis	Great Egg, New Jersey ...	Ran on a sand bar near the inlet and stuck fast. Surfmen pulled out to her, got overboard, and shoved her afloat.
Apr. 7	Slp. Little Harry ...	Sullivans Island, South Carolina.	Went aground in the marsh behind station. Surfmen ran out her anchor, hove her afloat, and supplied her crew with fresh water.
Apr. 7	Am. str. Mandalay .	Coquille River, Oregon...	About midnight this steamer stranded on North Spit while crossing the bar, inward bound. The surfmen on watch had called the station crew, and they were standing by ready to render assistance when she grounded. They ran a hawser across the river to S. jetty for the master, who, by working his propeller and heaving in on hawser at the same time, released his vessel uninjured.
Apr. 9	Am. sc. Geo. S. Boutwell.	Fourth Cliff, Massachu- setts.	Stranded at 10 p. m., during thick weather, about 1½ miles S. of station. Station crew pulled out to her without delay, but found that her crew had already landed abreast the wreck in their own boat. Surfmen took them to station and furnished them (five men) with dry clothing from the stores of the Women's National Relief Association and with food and lodging. On the next day they assisted the master to strip the wreck and save the anchors. She went to pieces during the following night.
Apr. 9	Sharpie Wave	North Beach, Maryland..	Grounded on Crow Island shoal, 3¼ miles SW. by S. of station, during a strong N. wind and ebb tide. Surfmen went to her in supply boat and took a small scow in tow, reaching her soon after the tide turned. They discharged her ballast, used the scow to lift her stern, and after about two hours of hard work they succeeded in floating her.
Apr. 9	Am. sc. B. T. Riffin.	Wachapreague, Virginia.	Missed stays and stranded on the N. end of Parramore Beach during a NW. gale. Surfmen carried out her anchor in the surfboat, hove her afloat after two hours of toilsome labor, and sailed her to a safe anchorage in the harbor.
Apr. 9	Catboat Laura.....	Sullivans Island, South Carolina.	Stranded on a shoal, 2½ miles NE. of station, about midnight. Station lookout made her out at daylight on the next morning, and surfmen boarded her without delay. They ran out her anchor, hove her afloat, and supplied her crew with a barrel of fresh water
Apr. 9	Am. str. Frank P. Geiken.	Charlevoix, Michigan, Lake Michigan.	Ran out of provisions while fast in the ice off harbor entrance. Surfmen loaded a light skiff with supplies and hauled it over the ice to her, breaking through several times before they reached her.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 10	Slp. Agnes K	Fire Island, New York ...	This sloop stranded while returning to the mainland with a physician who had been visiting a patient on the island. Station crew released her at 8 p. m., but the man in charge would not start across the bay at that time. Keeper took the physician to the station and sheltered him for the night.
Apr. 10	Am. sc. Puritan	Oak Island, New York ...	Stranded on Fire Island bar, 2 miles S. of station, while bound in, and set signal for assistance. Surfmen pulled out to her, and after two hours of laborious toil succeeded in floating her without damage to vessel or cargo. The local pilot refused to take her over the bar because she drew too much water, and she proceeded to New York.
Apr. 10	Cat yt. Ella	Great Egg, New Jersey...	Stranded on a sand bar in the beach thoroughfare, 1 mile WSW. from station. Surfmen went aboard and assisted the crew of two men to float their boat.
Apr. 11	Dory, no name	Watch Hill, Rhode Island.	Broke away from a sloop which was bound for Stonington. The men on the sloop tried several times to pick it up, but were unsuccessful on account of the fresh NE. wind, and finally abandoned it. Surfmen pulled out, picked it up, towed it to the station, and notified the owner of its whereabouts.
Apr. 11	Scow, no name	Muskegon, Michigan, Lake Michigan.	This scow, valued at \$150, was saved by the station crew at 9 a. m., it having parted its moorings and drifted out of the harbor.
Apr. 13	Dory, no name	Nahant, Massachusetts...	This dory capsized while two men were trying to land through the surf. They reached shore safe and hastened home, leaving the dory upset on the beach. Surfmen hauled it up clear of the surf.
Apr. 14	Sailboat Wasp	Great Egg, New Jersey...	Dragged anchor during the night and stranded 3½ miles SW. of station. Surfmen shoved her afloat, sailed her to a wharf, and delivered her to owner.
Apr. 14	Rowboat, no name.	Pentwater, Michigan, Lake Michigan.	Adrift on the lake about 3 miles NW. of station. Surfmen towed it to the harbor and turned it over to its owner, who said that it had drifted out of the harbor on the previous night.
Apr. 15	Catboat, no name..	Orleans, Massachusetts...	Broke gaff and drifted onto a lee shore about 3 miles SW. of station. Surfmen pulled to the boat, having a NE. gale at their backs, and carried out an anchor; then, by heaving and shoving at the same time, they managed to get the boat afloat. They towed it to safe moorings 1 mile to leeward, and as there was no occupant in the boat when the surfmen reached it, the keeper made inquiries, found the owner, and informed him where the boat was lying. Surfmen had a hard pull back to station against the gale.
Apr. 15	Catboat Pequod	Great Egg, New Jersey...	Dragged anchor during the NE. storm and struck a sand bank, where it listed over and filled with water. Surfmen bailed it out, shoved it afloat, and took it to secure moorings.
Apr. 15	Am. sc. Diadem	Hog Island, Virginia.....	This small schooner with two boys on board became unmanageable while trying to enter the inlet during a gale and began to drift toward broken water, the boys letting go their anchor close to the shoals. Surfmen hastily pulled to her, double-reefed the sails, got her under way, and sailed her into a good anchorage. The schooner's yawl was lost, and the surfboat was only saved by prompt and skillful effort, as both boats filled with water while towing in behind the schooner.
Apr. 15	Flat Tom	Louisville, Kentucky	This flat with six men on board was caught in the strong current of the Ohio River and was in danger of being swept over

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 15	Flat Tom	Louisville, Kentucky.....	the falls. Station crew pulled out, made a line fast to the flat, and towed it to the shore.
Apr. 16	Am. sc. Commerce.	Burnt Island, Maine	Anchored dangerously near the rocks off Benners Island and set a signal of distress. Surfmen boarded her, assisted to get her under way safe, and then piloted her out clear of all danger.
Apr. 16	Catboat, no name..	Block Island, Rhode Island.	Cable parted, boat drifted ashore, and owner requested surfmen to assist him to float it. Three surfmen went to the boat, launched it, and took it to safe moorings.
Apr. 16	Rowboat, no name.	Potunk, New York	Capsized in the bay about $\frac{1}{2}$ of a mile NW. of station. Surfmen immediately started to the rescue, but the two occupants were able to wade ashore before they arrived at the scene of mishap. Surfmen righted and bailed out the boat and towed it to the shore.
Apr. 16	Catboat, no name..	Fire Island, New Ycrk...	Sunk at anchorage near the station during the strong NE. blow. Surfmen dragged it ashore, bailed it out, and hauled it up on the beach.
Apr. 17	Am. yawl Etta May.	Fort Lauderdale, Florida.	Stranded on a shoal near the station. Keeper (house of refuge, no crew employed) boarded the yawl at once and assisted her crew to float her. She was not damaged and continued on her way.
Apr. 18	Am. sc. Agnes	Santa Rosa, Florida	Broke adrift from a wharf during an easterly gale and stranded 3 miles W. of station, staving in several planks and filling with water. The owner made temporary repairs, and on May 9 requested the station crew to assist him to get her afloat. Surfmen bailed and pumped her out, and assisted a tug to release her.
Apr. 19	Catboat, no name ..	Rye Beach, New Hampshire.	Surfmen went out to this catboat, removed the iron ballast, and assisted the man in charge to cross the bar in safety. A dangerous surf was running on the bar at the time.
Apr. 19	Am. str. Empire....	Cape Arago, Oregon.....	While bound into Coos Bay, at 1.30 a. m., this steamer stranded on a sand spit on the north side of entrance. At daylight the station crew boarded her and carried out her starboard bower anchor in surfboat; then they went aboard and assisted the steamer's crew to heave in. At 2 p. m. surfmen ran a heavy hawser from the Empire to the tug Columbia, but the bitts on the Empire carried away, and as the tide had fallen further efforts were abandoned until the next high water. At 9 p. m. they again boarded her, assisted to heave in on hawsers, and at 1 a. m. released her undamaged. The master slipped his cable and proceeded to Marshfield, the surfmen recovering the anchor and hawser for him on the following day.
Apr. 20	Br. sc. Mola	Chadwick, New Jersey...	At 3 a. m. this schooner went ashore 1 $\frac{1}{2}$ miles S. of station, in a fog. There was a strong E. wind and high surf at the time which caused her to go over the outer bar and lie close to shore. Surfmen from both Chadwick and Toms River stations reached the wreck at 4.45 a. m., the Chadwick crew having their beach apparatus. They threw a heaving line on board, set up the gear, safely landed the crew of eight men in the breeches buoy, and took them to the Chadwick Station, where the keeper supplied them with food and dry clothes from the stores of the Women's National Relief Association. At low water the surfmen went aboard the wreck and carried to the station the personal effects of the crew. A wrecking company floated the schooner on May 9 and towed her to New York for repairs.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 20	Br. sc. Two Brothers.	Oswego, New York.....	Carried against the W. pier by the heavy sea and strong current while trying to enter the harbor. She was pounding heavily when the surfmen reached her, and lost her jib boom, bowsprit, and foremast. They ran a line to the end of the pier, hauled her into smoother water, and then were able to run her hawser to the tug which was trying to get hold of her. The first line parted, but after the surfmen had run a second one the tug towed the schooner into the harbor without further damage.
Apr. 20	Nph. lch. Lakeside.	Point Marblehead, Ohio, Lake Erie.	Became water-logged, and stranded at a pier 1 mile W. of station, during a northerly gale. Surfmen went to the launch, pumped it out, and ran lines to secure it to the pier. Afterwards two of station crew went to the launch again, stayed by her all night, and kept her free of water, and prevented her from drifting upon the rocks near the pier.
Apr. 20	Am. sc. Zampa	Umpqua River, Oregon ..	Struck bottom while being towed out across the bar and sprung a serious leak. The tug returned to Gardiner for fuel and extra help to man the pumps while the schooner held her course for Coos Bay. Surfmen towed out in lifeboat behind the tug, overhauled the schooner at a point 20 miles off the mouth of the river, and transferred to her the extra help from the tug, the master reporting that he would then be able to keep his vessel free of water. (See letter of acknowledgment.)
Apr. 21	Catboat, no name ..	Rye Beach, New Hampshire.	Parted moorings and drifted ashore 1 mile NE. of station during a thick fog. Keeper assisted to bail it out, pick up the oars, compass, and other gear, shove it afloat, and moor it in a sheltered berth.
Apr. 21	Skiff, no name.....	Sand Beach, Michigan, Lake Huron.	Boathouse door carried away by the high water during the NE. gale and skiff went adrift. Surfmen found it pounding against some logs near the shore and full of water; they bailed it out and took it to a place of safety.
Apr. 23	Yawl belonging to the Am. sc. Mary W. Bowen.	Coskata, Massachusetts ..	While the schooner Mary W. Bowen was anchored off the Harkerchief Shoal the mate and four men pulled to Nantucket in her yawl to get supplies. They were caught in a thick fog on their way back to the schooner. Surfmen assisted them to land at station, succored them for the night, and when the fog cleared on the next morning launched their boat and saw them safe on their way to the schooner.
Apr. 23	Am. sc. D. P. Dobbins.	Cleveland, Ohio, Lake Erie.	All tugs being laid up on account of a strike, this schooner was unable to enter the harbor, and the master requested the keeper to assist him. Surfmen kedged her in until they were able to run her line to the breakwater, where they made her fast.
Apr. 24	Am. sc. Emma M. Robinson.	Little Egg, New Jersey...	Stranded on a sand bar, 2 miles N. of station, while trying to sail into Tuckerton Bay. Surfmen boarded her and succeeded in heaving her afloat; she proceeded up the bay without damage to vessel or cargo.
Apr. 24	Am. str. R. J. Gordon.	South Haven, Michigan, Lake Michigan.	On fire while lying alongside of dock, 200 yards E. of station. Surfmen on watch discovered the flames and gave the alarm. Station crew hastened to the scene with their force pump and kept the fire checked until the arrival of the fire company, who soon extinguished the flames.
Apr. 25	Am. sc. Valentine Koon.	Fire Island, New York...	Mised stays and stranded on a shoal about 1½ miles W. of station while beating into Fire Island Inlet. Surfmen boarded her,

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 25	Am. sc. Valentine Koon.	Fire Island, New York...	ran out her anchor in the surfboat, hove in on cable, worked her sails, and released her at high water without damage.
Apr. 26	Str. Globe	Wallops Beach, Virginia.	Stranded on a shoal about 2½ miles NNE. of station while carrying the mail and one passenger from Chincoctague Island to the mainland. Surfmen went out to her, and as they could not release her before the next high water at 3 a. m. they took the passenger to station and succored him for the night. The steamer was floated early on the following morning, and the passenger was put back on board by the station crew.
Apr. 26	Gas. lch. Eva Leonard.	Chicago, Illinois, Lake Michigan.	Sprung a leak off Jackson Park pier, and the man in charge steered into the lagoon near the station and requested the assistance of the life-saving crew. Surfmen hauled the launch out on shore, found the leak in a seam near the keel, and calked it, and repaired the stern bearing. Then they launched the craft and found it to be in good condition to continue on its way.
Apr. 27	Catboat, no name ..	Monomoy, Massachusetts.	This catboat, belonging to the Light-House Establishment, was sunk at its moorings during the night by the strong NE. wind and high sea. Surfmen hauled it to the shore, bailed it out, and secured it in a safe place.
Apr. 27	Am. slp. Federalist.	Bonds, New Jersey	Stranded on a shoal, 2½ miles SW. of station, at high water. Surfmen ran out her anchors and tried to heave her off, but the tide had fallen so much that she stuck fast in spite of their endeavors. They worked on her at high water on the 28th and 29th, but could not float her, as the tides were running low. On May 1 surfmen from both Bonds and Little Egg stations went with shovels to the sloop and dug around her a trench which caused her to float at high water. She proceeded on her voyage, apparently uninjured.
Apr. 28	Skiff, no name.....	Louisville, Kentucky.....	While this skiff, containing three boys partly under the influence of liquor, was on the river off the foot of Third street, two of the boys fell overboard, but succeeded in climbing back into the boat. Station crew pulled out and towed them to the shore, as there was danger of their being carried over the falls by the swift current in the river.
Apr. 29	Fish boat, no name.	Salisbury Beach, Massachusetts.	Capsized while two fishermen were trying to land through the breakers about ¼ mile N. of station. Surfmen assisted the men to reach the shore safe and hauled their boat up on the beach.
Apr. 29	Am. slp. Crystal Palace.	Fire Island, New York...	Stranded 1 mile NE. of station. Surfmen ran out her anchor and hove her afloat undamaged.
Apr. 29	Am. sc. Altama	Little Egg, New Jersey...	This schooner became becalmed while trying to pass out through the inlet, and the tide cut her in close to a shoal, where she let go her anchor, swinging her stern into the breakers before she fetched up. Station crew pulled out in surfboat, and keeper and three surfmen, watching their chance, succeeded in boarding her, the rest of the station crew pulling out into the channel and anchoring the surfboat there. After a short wait a light breeze sprung up, and keeper at once hove up the schooner's anchor, made sail, and worked her clear of the shoal. He ordered the three men in the surfboat to follow the schooner and the surfboat were boarded by heavy seas while passing out. After reaching the comparatively smooth water outside, the surfboat

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. Apr. 29	Am. sc. Altama	Little Egg, New Jersey ...	took the keeper and his men off the schooner, and, when the tide slacked up, they pulled back to station.
Apr. 29	Nor. str. Helga	False Cape, Virginia	Stranded on Pebble Shoal, 2½ miles E. of station, during a thick fog. As soon as the fog cleared away the station crew boarded her, and the keeper instructed the master in regard to the lay of the shoal. At the master's request the keeper pulled back to station and sent a message for a tug, but shortly afterwards the steamer floated, without assistance, and proceeded on her way, apparently undamaged.
Apr. 29	Br. str. Ottawa	Grande Pointe au Sable, Michigan, Lake Michigan.	Stranded on the beach, about 4 miles N. of station, in a thick fog. Surfmen boarded her and found that the master had gone to Ludington for assistance. He soon returned with a tug, lighter, and the Ludington life-saving crew. Surfmen from both stations set to work transferring corn from the steamer to the lighter. After transferring about six hundred bushels, the steamer Illinois came along, and surfmen took the master of the Ottawa on board, where he arranged to have the Illinois pull on his vessel, which was soon released without injury. Drifting out into the lake with two small boys on board. Station crew pulled out, overhauled the scow, and towed it to the shore.
Apr. 29	Scow, no name	Racine, Wisconsin, Lake Michigan.	Drifting out into the lake with two small boys on board. Station crew pulled out, overhauled the scow, and towed it to the shore.
May 1	Am. sc. Sussex	Hereford Inlet, New Jersey.	Missed stays and master let go his anchor dangerously near the beach. Surfmen warped her out into the middle of the channel and assisted to sail her to a safe anchorage.
May 2	Sailboat F. Rock....	Bois Blanc, Michigan, Lake Huron.	Capsized about 5 miles WSW. of station, the single occupant wading safely to the shore. Surfmen furnished him with dry clothing from the stores of the Women's National Relief Association, and then they pulled out, towed the boat to the shore, and hauled it up on the beach.
May 2	Am. sc. Beulah	Umpqua River, Oregon...	Drifted dangerously near the rocks while trying to sail in across the bar. Surfmen pulled out and kedged her to a safe anchorage, where she lay until a tug towed her to Gardner.
May 3	Am. sc. Twilight....	Damariscove Island, Maine.	Missed stays while beating into the harbor and stranded near the station, the wind being fresh and from the NE. Surfmen lashed oil casks along the lee side and battened down the hatches; then they ran a line from the masthead to the other side of the harbor. As the tide flooded the schooner began to lift and pound hard on the rocks, and soon commenced to leak seriously. Surfmen went to bailing with buckets and managed to keep the water down until she floated. Then they hauled her in to the wharf, made her fast, and freed her of water.
May 3	Am. slp. Eugene	Caffeys Inlet, North Carolina.	Stranded 4 miles SW. of station. Surfmen from both Caffeys Inlet and Paul Gamie's Hill stations boarded her, lightered her cargo, and then succeeded in floating her without injury.
May 4	Am. sc. Herbert E....	Quoddy Head, Maine.....	Surfmen helped the crew of this schooner to hoist her anchors, which had been let go in deep water about 4 miles E. of station, and could not be recovered without assistance on account of the strong breeze and the depth of water.
May 4	Am. slp. Sentinel ...	Burnt Island, Maine.....	In response to a signal for assistance, surfmen went to Port Clyde and helped to block up this sloop so that the owner could calk several serious leaks in her bottom.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 4	Sailboat, no name ..	City Point, Massachusetts.	Two boys were out in this sailboat during squally weather and were in danger of capsizing, as they did not know how to handle sailing craft. Surfmen towed the boat to the public landing at City Point and landed the boys safe.
May 4	Am. sc. Myra W. Spear.	Oak Island, New York....	Stranded on Fire Island bar, about 2½ miles SE. of station. Surfmen from both Oak Island and Fire Island stations boarded her and remained until the tide served, and then they succeeded in floating her without damage.
May 4	Rowboat, no name ..	South Chicago, Illinois, Lake Michigan.	While a boy was ferrying three passengers across the Calumet River in this boat, one of them stood up, lost his balance, and fell overboard. He grasped the side of the boat and caused it to fill with water by trying to climb into it. Station lookout saw the accident and surfmen reached the scene just as the boat was sinking. They rescued all four occupants, towed the boat to shore, bailed it out, and returned it to its owner.
May 5	Am. sc. Helen.....	Jerrys Point, New Hampshire.	Stranded on Wood Island ledge, 1 mile E. of station. Surfmen boarded her, sent a message to Portsmouth for a tug at the request of the master, and then manned the pumps, as she was leaking much. A tug came in response to the message and started her wrecking pump, but the water still gained and it was decided to abandon the vessel. Surfmen landed the crew of five men and their baggage at the station and succored them for two days, the master being furnished with a pair of shoes from the stores furnished by the Women's National Relief Association. On May 7 the surfmen went off to the wreck and assisted the crew to take ashore the sails, rigging, light spars, and ground tackle. The hull became a total loss.
May 5	Am. slp. Greyhound.	Point of Woods, New York.	Capsized in a squall, ¼ of a mile NW. of station. Surfmen hastily pulled to her, took her crew and passengers, consisting of nine people, out of the water and landed them at the station, where keeper provided them with dry clothing from the stores of the Women's National Relief Association. Station crew returned to the upset sloop, and with the aid of a small passing steamer towed it on the flats, where they bailed it out at low water.
May 5	Am. st. sc. Olga.....	Brazos, Texas	Having missed stays, this vessel was carried by the strong ebb tide into the breakers on the SE. end of Padre Island. Surfmen went on board and endeavored to run out a small anchor, but could not do so on account of the strong current. They stood by until the tide slackened, and then planted the anchor. As the tide flooded they slowly worked her into the channel, and about 5 a. m. they succeeded in sailing her into the harbor without damage to vessel or cargo.
May 5	Shanty boat, no name.	Louisville, Kentucky.....	In danger above the cross dam of the Falls of the Ohio River. Station crew towed the boat into the Indiana chute and instructed the single occupant how to proceed down the river with safety.
May 5	Rowboat, no name ..	Chicago, Illinois, Lake Michigan.	Five small boys were caught in a sudden squall while out on the lake and were unable to handle their boat. Station crew pulled out and safely towed them into the lagoon.
May 6	Am. sc. James A. Gray.	Hunniwells Beach, Maine.	Stranded on rocks near the station while trying to sail into the river during the night. Surfmen boarded her about 10 p. m., ran out a kedge anchor, made sail, worked her clear of the rocks and sailed her into a safe anchorage.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 6	Am. sc. Nightingale.	Wood End, Massachusetts.	Stranded on Wood End bar, $\frac{1}{2}$ of a mile NW. by W. of station, at 6 p. m. at low water. Surfmen immediately boarded her and the keeper advised the master to shift his hawser to the starboard quarter. This was done, and, by hoisting sails and heaving in at the same time, her head was slued to the SE, so that she lay fair for floating into deep water. The wind began to freshen and the schooner began to lift to the flood tide, but was in danger of being cast onto the beach, which was only 200 yards distant. After three hours of hard work, the combined efforts of the surfmen and her crew were successful in releasing her, and the master sailed for Provincetown Harbor, his vessel having sprung a bad leak while on the bar. On the next morning surfmen recovered her kedge anchor, which had been slipped, and about thirty-five fathoms of hawser, and notified the master to send for them. (See letter of acknowledgment.)
May 6	Fish boat, no name.	Sullivans Island, South Carolina.	Mast carried away in the fresh SW. breeze. Surfmen hauled the boat up on the beach and repaired the damage; then the keeper advised the two occupants to wait till the weather moderated before they proceeded toward their destination. On the next morning surfmen launched the boat and the men sailed for Charleston.
May 7	Am. bk. Ethel.....	Monomoy, Massachusetts.	Stranded on Handkerchief Shoal about 6 miles SW. by W. from station. Surfmen boarded her, carried out her anchor in surfboat, and assisted her crew to heave her afloat on the flood tide and to make sail.
May 10	Am. sc. Two Forty..	Race Point, Massachusetts.	Stranded on Race Point, $\frac{1}{2}$ miles SW. of station, at 9 p. m. during a strong SE. wind with rain. Surfmen at once went on board and let go her anchor from the end of the main boom. Then they hove in on cable, made sail, and floated her at midnight without apparent damage.
May 10	Am. sc. A. R. Keene.	Point Lookout, New York.	Stranded at 5 a. m., $\frac{1}{2}$ miles W. of station, during thick, stormy weather. Crews from both Point Lookout and Long Beach stations assembled on the beach abreast the stranded vessel and succeeded in laying a shot line across her on the first attempt. Her crew, however, instead of hauling off the whip, boarded their yawl and pulled seaward into the thick fog. Surfmen from Point Lookout returned to their station and launched their surfboat, pulling after the schooner's yawl, which they found anchored about $\frac{1}{4}$ mile offshore. They took the crew of seven men and their baggage into the surfboat and landed safely on the beach about 3 miles W. of station. Then took them to station, furnished them with dry clothes from the stores of the Women's National Relief Association, and sheltered them for two days. The Merritt Wrecking Company took charge of the schooner, but she became a total loss.
May 10	Scow, no name.....	Ashtabula, Ohio, Lake Erie.	This scow with a boy on board capsized near station. Surfmen hastily pulled out, rescued the boy, and towed the scow to the shore.
May 10	Am. str. Bon Voyage.	Ship Canal, Michigan, Lake Superior.	On fire at 7.30 p. m., about 6 miles NW. of station. Surfmen immediately started for the scene in tow of a tug and, on arriving, found two tugs already there, but they were unable to extinguish the flames, which completely enveloped the steamer. The tugs had picked up from the water two persons, and surfmen transported thirty-one persons, who had

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 10	Am. str. Bon Voyage.	Ship Canal, Michigan, Lake Superior.	swum from the burning vessel to the shore, about 75 yards distant, to the tugs, which took them to the station, where they were given dry clothing from the stores of the Women's National Relief Association and sheltered for the night. The master reported that four passengers were missing, and surfmen and the tugs searched for them until after midnight. On the next two days surfmen searched for bodies and found three, which they turned over to the coroner. The fourth body was found on the 15th about 12 miles from the scene of disaster. Hebrew citizens of Hancock, Michigan, bestowed gold medals upon Keeper McCormick and each member of the life-saving crew for meritorious service in this case. (See newspaper extract under caption "Letters of acknowledgment.")
May 10	Am. str. Stewart Edward.	Two Rivers, Wisconsin, Lake Michigan.	Ran aground in a thick fog about $\frac{1}{2}$ a mile N.E. of station. Surfmen ran a hawser for a small tug, which released her and towed her into the harbor.
May 11	Dory from Am. sc. Tecumseh.	Great Boars Head, New Hampshire.	The station patrol, at 7.45 a. m., assisted a man in this dory to land safely through the breakers. He was much exhausted and patrolman took him to station, where the keeper supplied him with dry clothing from the stores of the Women's National Relief Association, hot drinks, and food. He had become lost from the fishing schooner Tecumseh on the previous morning during a thick fog. Keeper procured transportation to Boston for him and cared for the dory until the next day, when the schooner came after it.
May 11	Slp. yt. Perhaps.....	City Point, Massachusetts.	Fouled the City Point pier while trying to make the float of the City Point Yacht Club under jib alone. Surfmen towed the sloop clear with their launch, but not before the mainmast had broken off just above the deck.
May 11	Am. str. Dan Kunz..	Cleveland, Ohio, Lake Erie.	Surfmen ran a hawser from the tug J. R. Sprankle to this steamer, which had stranded about $\frac{1}{4}$ miles ENE. of station. The tug released the steamer and towed her into the harbor.
May 12	Am. sc. Emma S. Briggs.	White Head, Maine	This schooner was compelled by a thick fog to anchor in dangerous proximity to White Head Island, where she could not get under way without assistance. Surfmen boarded her, got her under way, and worked her out to a safe anchorage in Seal Harbor.
May 12	Gas. lch., no name..	City Point, Massachusetts.	Became disabled for lack of fuel when about $\frac{1}{4}$ mile S. of station with a party of eight people on board. Keeper sent station launch to tow them to their destination.
May 12	Slp. yt., no name .....	.....do	Stranded on Spectacle Island during a fresh SSW. breeze. Owner requested assistance of the life-saving crew, and they hauled the sloop afloat and towed it to Wollaston with the station launch.
May 12	Am. str. City of Paris.	Bois Blanc, Michigan, Lake Huron.	Stranded on Lighthouse Point, $\frac{1}{4}$ miles SSW. of station. Surfmen ran a hawser to the stranded vessel for the tug Favorite, which released her without injury.
May 13	Am. sc. Lydia A. Harvey.	Sandy Hook, New Jersey.	Missed stays, stranded on Romer Shoal, and filled with water at 6 p. m. Surfmen proceeded to the wreck under oars and sail, anchored the surfboat to windward, veered alongside, and took off the crew of six men. Surfmen then anchored in the lee of Romer light until the wind shifted and they were able to return to the station, where the keeper succored the shipwrecked men until the next day, when he sent them to New York on the U. S. steamer Ordinance. The schooner became a total loss.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 13	Am. sc. General J. L. Selfridge.	Great Egg, New Jersey...	Stranded in the beach thoroughfare, $\frac{1}{4}$ of a mile WSW. of station. Surfmen boarded her, and by handling the sails properly succeeded in forcing her afloat.
May 13	Am. sc. Homer.....	Middle Island, Michigan, Lake Huron.	Stranded on the south side of the entrance to Presque Isle Harbor, 16 miles NW. of station, the steamer which was towing her having become disabled while entering the harbor for shelter. Surfmen went to the schooner in tow of a tug, sounded around her, and ran towlines to the tug, but the lines repeatedly parted without floating the vessel. It was then decided to jettison part of the cargo of coal, and surfmen worked at this job until 4 p. m. on the next day, when the tug and steamer released her with only slight damages.
May 14	Am. str. Shenandoah.	Ottawa Point, Michigan, Lake Huron.	Stranded on a shoal 16 miles S. by W. from station. Surfmen went to her and helped her crew to jettison about 50 tons of coal. The owner then arrived on a tug and stopped the work. He went to Bay City, employed men to lighten the cargo, and then two steamers succeeded in floating her without injury.
May 16	Am. sc. Eugene H. Cathrall.	Turtle Gut, New Jersey...	Stranded on the S. bar of Turtle Gut Inlet, about $\frac{1}{4}$ mile SSE. of station. Surfmen from both Turtle Gut and Holly Beach stations boarded her, carried out her anchor and planted it at a point 150 fathoms to seaward, using the station hawser, as the schooner had none, and then succeeded in heaving her into deep water.
May 17	Am. sc. Julia Baker.	City Point, Massachusetts.	About 9 p. m. this schooner stranded off the pumping station, Dorchester Bay, $1\frac{1}{4}$ miles SW. by W. from station. Patrol launch went to her, ran out her anchor, and the patrolmen assisted to heave her afloat. The launch piloted her out of the harbor, as the master was unacquainted in this locality.
May 17	Am. sc. Francis Whalen.	Monomoy, Massachusetts.	Stranded on the NE. point of the Handkerchief Shoal at 8 a. m., during fair weather. Surfmen ran out her anchor, hove in, but could not float her. The master then telegraphed for a tug, which came and released her on the next high water.
May 17	Am. sc. Valentine Koon.	Long Beach, New York...	Stranded about 3 miles W. of station, the master having mistaken a buoy. Surfmen went aboard, ran out her anchor in surfboat, as she had no boat of sufficient size on board, and then assisted with the sails and at the windlass. They floated her on the flood tide, and she proceeded on her way to Northport.
May 17	Br. str. Advance.....	Vermilion Point, Michigan, Lake Superior.	Stranded 7 miles E. of station during a thick fog. Surfmen boarded her, and then at the master's request returned to station, in order to send a telegram to the owner. Before a tug could be sent to her assistance she worked herself afloat and proceeded on her course.
May 17	Rowboat, no name..	South Haven, Michigan, Lake Michigan.	Capsized about 600 yards off station. Surfmen rescued the single occupant, towed the boat to shore, and bailed it out.
May 18	Sloop, no name.....	Aransas, Texas.....	Capsized in a strong SE. wind when about $\frac{1}{4}$ of a mile N. of station. The sloop, being heavily ballasted, sank at once in about 8 feet of water, leaving the occupants (four boys) clinging to the mast and rigging. Surfmen rescued the boys, one of whom was much exhausted, and subsequently they raised and bailed out the sloop.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 18	Am. str. Wyoming ..	Grindstone City, Michigan, Lake Huron.	About midnight the station patrol discovered this steamer stranded on Burnt Cabin Point Reef, 1½ miles N. by E. from station. Surfmen immediately boarded her and assisted her crew to form part of her cargo of railroad ties and pound-net poles into a boom alongside. At 6.30 a. m. she worked herself afloat and proceeded on her course. Station crew hauled the boom of poles up on the beach to await the owner's orders.
May 18	Gas. lch. Alice S	Duluth, Minnesota, Lake Superior.	Ran on a submerged crib about ¼ mile NW. of station, having on board two boys. Station crew hauled the launch off with surfboat, and, as its shaft was bent, they towed it to the boat-club landing.
May 18	Skiff, no name.....	.....do.....	Went adrift, having on board five boys, who lost one of their oars, and were unable to pull to shore. Surfmen pulled out, overhauled the skiff, and landed both boys and boat safe.
May 18	Rowboat Vivia	Chicago, Illinois, Lake Michigan.	This rowboat, containing three men, swamped and capsized near the Jackson Park Harbor, and John D. Winstanley was drowned. The rescued men were picked up before the surfmen reached the scene, and one of them was taken to station in an unconscious condition. Keeper applied the Service method of restoring the apparently drowned, and succeeded in bringing him back to life. (For detailed account see caption "Loss of life.")
May 18	Am. str. Nyack	Milwaukee, Wisconsin, Lake Michigan.	Stranded on North Point, ¾ miles N. of station, during a thick fog in the early morning. Surfmen pulled to her and transferred the thirty-five passengers and the mail to a tug, which landed them at Milwaukee. Then they assisted to lighter about 40 tons of her cargo, and ran hawsers to two tugs, which succeeded in releasing her shortly before sunset. The steamer was considerably damaged, and was towed to Milwaukee for repairs.
May 18	Am. sc. Lettie May ..	Sturgeon Bay Canal, Wisconsin, Lake Michigan.	Anchored in the middle of a narrow channel in Sturgeon Bay. The master came to station and reported that he could not get his vessel to a proper place without assistance. As the schooner lay directly in the fairway, surfmen boarded her and assisted the master to shift her to a safe berth.
May 19	Am. sc. Dacotah	White Head, Maine	Stranded on Grindstone Ledge, 7 miles ENE. of station, in hazy weather. A man residing on the beach near the ledge informed the keeper of the casualty by telephone, and surfmen went to her as quickly as possible. She was pounding hard and full of water when they reached her. They immediately began to throw overboard her deck load of lumber, but soon the sea became so rough that they had to take her crew into the surfboat and pull away from her. They lay by until the schooner slipped off the ledge, when they boarded her again, set the jib, and run her up on Crescent Beach and secured her, where she lay safe throughout the storm which followed.
May 19	Dories (5), no names.	Great Boars Head, New Hampshire.	These boats were in danger of being washed off the beach by the extraordinary high tide. Surfmen hauled them up beyond the reach of the surf.
May 19	Am. str. David M. Whitney.	Sand Beach, Michigan, Lake Huron.	Engine became disabled and steamer anchored about 1 mile E. of station. Surfmen sent a message for a large tug and transported the master and engineer to and from the shore. The tug arrived on the next day and towed the steamer to Detroit for repairs.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 19	Nph. lch., no name..	Ship Canal, Michigan, Lake Superior.	Machinery became disabled about 1 mile N. of station while four persons were out on a pleasure cruise in this launch. They made a signal for assistance, and surfmen immediately responded, towing them into the canal.
May 20	Fish boat, no name.	Great Boars Head, New Hampshire.	Full of water, dragging her anchor, and in danger of stranding about 1½ miles NE. of station. The sea was so rough that the owner did not dare to go out to his boat until the station patrolman assured him that he would assist him. Together they launched a dory through the surf, boarded the fish boat, bailed it out, and let go another anchor, which held it secure.
May 20	Dories(2), no names.	Salisbury Beach, Massachusetts.	Surfmen found these dories pounding on the beach in the very high surf. They notified the owners, whom they assisted to haul the boats up clear of the breakers.
May 20	Schooner, no name.	Core Bank, North Carolina.	Sunk in Core Sound about 3 miles N. of station. The water was shallow, and the surfmen assisted the two men on board to haul their boat to Atlantic where they could repair it.
May 21	Fish boat, no name.	Kitty Hawk, North Carolina.	This boat was thrown end over end while five fishermen were trying to pull off the beach through heavy breakers. The boat was stove to pieces, but the men reached shore safe, and the surfmen assisted them to save their nets.
May 21	Am. str. Boston	Hammonds Bay, Michigan, Lake Huron.	Stranded about 16 miles NW. of station during a thick fog. Surfmen sailed to her and made several trips between her and a tug, which arrived with lighters. They assisted to put the lighters alongside and to transfer freight to them. On the 23d the steamer was released by the tug after being considerably damaged by the mishap.
May 22	Sloop Helen	Aranzas, Texas.....	Capsized 1½ miles N. of station. The surfman on lookout gave the alarm, and life-savers quickly reached the scene of accident, rescuing the three occupants, who were clinging to the side of the capsized boat which was slowly sinking. Surfmen towed the sloop into shoal water, where they righted and bailed it out.
May 22	Fish boat, no name.	Cape Disappointment, Washington.	This boat having two fishermen on board, capsized in the breakers about ¼ mile from Sand Island. On account of the threatening weather and rough sea, surfmen had pulled out to Peacock Spit in order to be at hand in case of a mishap among the fish boats. The capsizing occurred about 500 yards from the surfboat, and the life-saving crew rescued the two men after a sharp pull of ten minutes through a heavy sea. The capsized boat washed up on Sand Island and the fishermen recovered it. Keeper provided dry clothes from stores of Women's National Relief Association for the rescued men.
May 22	Fish boat, no name. ....do .....	.....do	Capsized in the heavy breakers on Peacock Spit in a strong squall. Surfmen rescued one occupant whom they found clinging to the upset boat. The other occupant of the boat was drowned before the arrival of the life savers. (For detailed account see caption "Loss of life.")
May 23	Am. sc. Lettie G. Howard.	Gurnet, Massachusetts ...	Stranded on Brown's Island Shoal, ¼ of a mile SW. of station. Surfmen carried out her large anchor and fifty fathoms of cable, hove taut, and at high water at 4 a. m. tried in vain to release her. On the afternoon high water, they tried again and succeeded, a fresh SW. breeze having sprung up to aid them.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 23	Am. sc. Polar Wave.	Sandy Point, Rhode Island.	At 1 a. m. this schooner stranded at Clay Head, 2½ miles SSE. of station, in thick weather. The station patrol discovered her upon the beach in about ten minutes after she stranded, but before the surfmen could board the wreck, the crew of seventeen men had safely landed in their own boats. Surfmen landed four men who afterwards returned to the wreck for their clothing. The schooner was a total loss.
May 23	It. bk. Bianca Aspasia.	Ship Bottom, New Jersey.	Soon after midnight this bark stranded ¼ of a mile S. of station, the night being dark and foggy and the sea rough. Surfmen quickly dragged their beach apparatus to the scene, and, assisted by the crew from Long Beach Station, fired a line across the vessel, but her crew were unable to find it. They fired another, and the crew on board hauled off the whip line, but they made it fast improperly and surfmen could not set up the gear. As daylight was then breaking, the keeper launched the surfboat, boarded the wreck, and, after making five trips, safely landed the crew of fifteen men and their clothing. The crew were succored at station for three days and the master for six days. Wreckers stripped the bark of her sails and rigging, but the hull and cargo became a total loss.
May 23	Raft, no name.....	Cleveland, Ohio, Lake Erie.	Station lookout saw what appeared to be two men on a small raft about 3¼ miles NW. of station. Surfmen pulled out and found two men on a raft which the swell from a passing steamer had partially broken up. They took the men into the surfboat and abandoned the raft, the men having constructed it in order to get ashore from the new water-works crib.
May 23	Am. str. Pewaukee.	Bois Blanc, Michigan, Lake Huron.	A line having fouled the propeller of this steamer while she was loading cedar ties on the north side of Bois Blanc Island, she drifted aground about 10 miles NW. from station. At the request of the master, surfmen went to Cheboygan and sent a message for a tug, but before nightfall the steamer managed to release herself.
May 24	Am. sc. Annie Sargent.	Gloucester, Massachusetts.	Foresail and jib blew away about 3 miles S. of station, and schooner anchored and set signal for assistance. Surfmen went on board and assisted the master to work his craft into an anchorage inside of Ten-Pound Island.
May 24	Slp. yt. Irene.....	City Point, Massachusetts.	Dragging anchor during a strong NE. blow, no one being on board. Station launch towed the sloop to moorings, where she remained safe until the weather moderated.
May 24	Sloop Idella.....	Gurnet, Massachusetts ...	Stranded about ¼ mile NW. of station at 3.45 a. m., and filled with water, the weather being thick and rainy, with a strong ENE. wind. The two men on board found temporary refuge on a schooner, which was anchored near by, until surfmen arrived and took them to station and furnished them with food. At low water surfmen bailed out the sloop and planted anchors, by the use of which they hoisted her upright and floated her as the tide flooded.
May 24	Sloops Albert Drummond and Jennie A. Hupper.	.....do.....	These sloops stranded on Saquish Beach, ¼ mile NW. of station, at 8 p. m., during a severe thunderstorm. Surfmen ran out kedge anchors, left one of their number to watch the sloops, and then returned to station with the crews (five men), providing them with dry clothes from the supplies of the Women's National

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 24	Sloops Albert Drummond and Jennie A. Hupper.	Gurnet, Massachusetts ...	Relief Association. The sloops floated at high tide, about 3 a. m., and surfmen put their crews on board, helping them to get under way.
May 24	Br. Sc. Acacia	Oswego, New York, Lake Ontario.	Towline parted while a tug was taking this schooner out of the harbor in a strong NE. breeze. Surfmen ran a line to her from the end of the pier, hauled her into smooth water, and made her fast alongside the pier.
May 24	Floating steam elevator.	Bois Blanc, Michigan, Lake Huron.	Stove in and sunk about 10 miles NW. from station, while lying alongside of a steamer in a rough sea. At the request of the master of a tug, surfmen towed the wreck and assisted to place a lighter on each side of the sunken craft. Then they put chains around each end of the wreck and fastened them to timbers placed across the lighters. By using a large lever, they slowly raised the sunken craft, taking in the slack on the chains to keep it afloat until repairs could be made.
May 24	Nph. lch. no name.	Michigan City, Indiana, Lake Michigan.	Owing to a very high sea the boathouse containing this launch began to go to pieces. Surfmen removed the launch and all the gear to a place of safety.
May 24	Am. sc. A. Bradley.	Milwaukee, Wisconsin, Lake Michigan.	During a NE. gale a tugboat company informed the keeper that this schooner was flying a signal of distress off Fort Washington, 17 miles N. of station. Surfmen in lifeboat towed behind the tug, W. H. Meyer, to the schooner, which was leaking badly and water-logged. They went on board, helped to handle the sails, ran towline to the tug, which safely towed her to Milwaukee.
May 24	Am. sc. H. D. Moore.	Sheboygan, Wisconsin, Lake Michigan.	While attempting to make harbor in the strong NE. gale, this schooner struck the S. pier and stove in her bow. Her master let go the only anchor that could be used, but she drifted toward the beach. Station crew pulled to her and ran four lines to the pier, over which the sea was breaking so that the surfmen upon it had to lie flat to keep from being washed away. Then they boarded the schooner, which was leaking seriously, and manned the pumps. One surfman missed his footing and fell into the lake while jumping from the surfboat to the schooner, but the others hauled him into the surfboat safe. After about eight hours of hard work, the wind abated and surfmen ran a hawser to a tug which ventured out and towed the disabled craft into the harbor. (See letter of acknowledgment.)
May 24	Fish boat, no name.	Point Adams, Oregon	Capsized on Clatsop Spit, 5 miles WNW. of station, having on board two fishermen. Surfmen had pulled out to the fishing ground in order to be on hand in case of mishaps, and were only $\frac{1}{4}$ of a mile away when the accident occurred. Within four minutes they were alongside the upset boat and had safely hauled into the surfboat the two men, who were so weakened by the shock that they made little or no effort to save themselves. Keeper pulled to the tug Escort No. 2, put the rescued men and a surfman on board, and the master of the tug landed them at Fort Stevens. The surfman took the men to station and gave them dry clothing from the stores of the Women's National Relief Association. Keeper pulled back and recovered the capsized boat, towing it out to the other fishermen, who took charge of it.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 25	Rowboat, no name..	City Point, Massachusetts.	About midnight seven soldiers were trying to pull to Fort Warren in this boat, but were making no headway against the strong NE. breeze. Patrol launch towed the boat to station, succored the soldiers until morning, and then towed them to the fort.
May 25	Catboat, no name ..	.....do	Capsized off Georges Island in a flaw of wind, the sheet having become jammed. Surfmen were returning from Fort Warren when they saw the accident. They quickly reached the capsized boat, took the sole occupant from its bottom, and landed him and his boat on Lovells Island.
May 25	Slp. yt. Don.....	.....do	This yacht with nobody on board was drifting toward the pumping station, where it would soon break up against the wall. Station launch overhauled it and towed it to moorings off the yacht club.
May 25	Fish boat, no name.	Wood End, Massachusetts	Having broken his main boom in a heavy squall, the fisherman in charge of this boat anchored near the station and requested assistance. Keeper went on board, and assisted him to fish the boom and get under way.
May 25	Am. str. Waquoit...	Great Neck, Massachusetts.	Stranded on Tuckernuck Bank, about 8 miles N. of station. Surfmen boarded her, ran out anchors, and succeeded in floating her after 5 hours' work.
May 25	Br. str. Robinia.....	Cape Henry, Virginia	During a dense fog this steamer stranded on Cape Henry, 1½ miles NW. from station. Keeper telegraphed for a wrecking tug, and then surfmen boarded her. They remained until the wind and sea increased so much that it was dangerous for the surfboat to stay by her; then the keeper arranged a system of signals with the master and pulled ashore, taking some telegrams to send for him. Surfmen took their beach apparatus to the stranded steamer and stood by till the wrecking tug floated her soon after midnight.
May 25	Am. sc. Storm	Hammonds Bay, Michigan, Lake Huron.	Rudder became disabled during heavy weather, and master set a signal of distress about 2½ miles W. of station. Surfmen boarded her and found the master's wife in a critical condition, needing medical assistance at once. They took five persons on board into the surfboat and safely landed them at station, summoning a doctor as soon as possible. The master's wife gave birth to a son in one and one-half hours after arriving at station, and keeper provided mother and child with clothing from the supplies furnished by the Women's National Relief Association. On the next day, the weather having moderated, the master repaired his rudder and sailed away, leaving his family at the station, where the life-savers succored them for seven days.
May 26	Slp. yt. Trix	City Point, Massachusetts.	Ran on a shoal near Castle Island, about 1 mile NE. of station, while out on a pleasure sail with five people on board. Surfmen threw a line to the sloop and hauled it afloat with the station launch.
May 26	Catboat, no name ..	Santa Rosa, Florida	Capsized 4 miles NNW. of station by a sudden puff of wind. The crew of two men were picked up by a naphtha launch, which was close at hand, and taken to Pensacola. Surfmen towed the catboat to shore, righted it and bailed it out, and delivered it to its owner, who came for it on the following day.
May 26	Nph. lch. Colonel J.	Muskegon, Michigan, Lake Michigan.	Fouled a pound net about ¼ of a mile NW. of station while trying to enter the harbor at midnight, and crew of two men were unable to free the boat from

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 26	Nph. lch. Colonel J.	Muskegon, Michigan, Lake Michigan.	the obstruction. Surfmen pulled out, cut away the ropes and netting, and then, as the machinery was disabled, they towed the launch into the harbor.
May 26	Am. sc. Margaret Dall.	.....do.....	Stranded on a sand bar near the station while trying to leave the harbor. Her crew ran to the north pier a line which a surfman tended for them. After about an hour's work they hauled her afloat and proceeded on their way.
May 26	Scow, no name.....	Kewaunee, Wisconsin, Lake Michigan.	This scow parted from the tug that was towing it to Sturgeon Bay during the NE. gale of the 24th, and drifted ashore near Two Rivers Point Lighthouse, 17 miles S. from station. On the 26th the tug came to station and requested the surfmen to assist her in getting the scow off the beach. They went to the scow in tow of the tug, ran lines to it, and pumped about 3 feet of water out of its hold. After the tug had parted the hawser twice, she released the scow and towed both scow and surfboat back to Kewaunee.
May 27	Am. sc. Hobo.....	Burnt Island, Maine.....	At 9 p. m. this schooner stranded on Hart Island bar, 3 miles NE. from station. After her crew of five men had made an ineffectual attempt to float her, they came to station and requested assistance. Surfmen boarded her, carried out an anchor, hooked the fore and main throat halyards to the cable, and then hove a strain upon them. By this means they kept her from pounding upon the rocks and gradually hove her upright, releasing her without damage at high water.
May 28	Am. sc. Bay Queen.	Long Beach, New York..	Stranded on the W. bar of East Rockaway Inlet while bound in with a load of seed oysters. Surfmen pulled to her, but could do nothing to save the vessel, as the high surf was breaking over her. By skillful work the keeper got close enough to the wreck for the crew to jump into the surfboat, but this was a difficult task, as the sea was tumbling in from various directions. The crew, consisting of two men, were safely landed at the station. The schooner was a total loss.
May 28	Elec. lch. Two Brothers.	Cold Spring, New Jersey..	Capsized on Cold Spring bar, 2 miles E. of station, at 8 p. m., having on board four men, who reached the beach in safety. Surfmen went to the launch, which had drifted onto the beach, and at low tide bailed out the water and sand. They picked up the gear, which was scattered along the beach, and, at high water, floated the launch, wading through the strong surf with it until they reached the smooth water inside the inlet. Keeper succored the men at the station until June 12, and surfmen assisted them to take their boat to a place where repairs could be made.
May 28	Am. sc. Light Guard.	Sand Beach, Michigan, Lake Huron.	Having sprung a bad leak, this schooner signaled for assistance on arriving off the harbor in tow of a steamer. Surfmen went on board and manned the pumps, but were unable to free her of water. A tug then placed her upon the mud flats, where she lay until the master could dock her for repairs.
May 28	Gas. lch., no name..	Marquette, Michigan, Lake Superior.	The machinery of this launch became disabled while it was towing a lighter to Pine River, and the man in charge anchored about $\frac{1}{2}$ mile S. of station while he tried to make the necessary repairs. The wind freshened and caused the launch and lighter to drag toward the beach. Surfmen went out in power lifeboat and towed them both into the harbor.

Services of crews—Continued

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. May 29	Am. sc. A. S. Caswell	Gurnet, Massachusetts ...	Stranded on Browns Island Shoal in a thick fog. Three men pulled ashore in a dory and requested assistance of the life-saving crew, who at once boarded her. They ran out her anchor and ninety fathoms of cable and hove taut on windlass. About an hour before high water they set the sails, and, aided by the heavy sea which was rolling in, they hove her into the channel apparently uninjured.
May 29	Sloop, no name.....	Eatons Neck, New York..	This sloop, with two men on board, anchored near the station, where it would ground on the rocks at low tide. Taking the advice of the keeper, they moved to a safer berth; but on the next morning, as a storm threatened, surfmen took the sloop to a better place and the men to station, where they provided them with clothing from the stores of the Women's National Relief Association and with food and lodging until the 31st.
May 29	Am. sc. H. Rand	Racine, Wisconsin, Lake Michigan.	The wreck of this schooner was lying directly in the path of vessels, making a dangerous obstruction. Surfmen towed out, ran a line to the wreck, and had the tug tow it to the beach.
May 30	Am. bkn. Vidette ...	Point Lookout, New York.	At 2.30 a. m. this vessel stranded $\frac{1}{2}$ of a mile E. of station, in a dense fog. The patrol turned out the station crew at 3 a. m., and they boarded the wreck after a hard pull through the strong surf. They landed the crew of eight men and their baggage in the surfboat, making two trips to the wreck. On the next day the barkentine was floated without damage by the Merritt Wrecking Company.
May 30	Br. str. John Milne..	Oswego, New York, Lake Ontario.	Ran ashore 9 miles W. of station during a fog. Surfmen ran a hawser to her for a tug which succeeded in hauling her afloat, apparently undamaged.
May 30	Am. sc. Emily B. Maxwell.	North Manitou Island, Michigan, Lake Michigan.	Stranded $\frac{1}{2}$ miles S. of station at 3 a. m. during a thick fog. After her crew had worked in vain for about two hours to float her, her master sent two sailors to station with a request for assistance. Surfmen boarded her and threw overboard twenty thousand feet of lumber, which they made into rafts alongside. Then they succeeded in heaving her afloat and afterwards they restowed the lumber on board.
May 30	Am. sc. Cape Horn..	Grande Pointe au Sable, Michigan, Lake Michigan.	Stranded 4 miles N. by E. of station, at 4 a. m., in a fog. Keeper telephoned for a tug at the request of the master, and then boarded her. The tug arrived soon afterwards, surfmen ran a hawser to her, and she released the schooner uninjured.
May 30	Gas. lch. Eva Leonard.	Chicago, Illinois, Lake Michigan.	Engine broke down near the station. Surfmen went to the assistance of the four men on board, and started to tow the launch to its destination, but another launch soon came out and relieved the life-saving crew.
May 31	Slp. yt. Fellowcraft .	Buffalo, New York, Lake Erie.	At 7 p. m. this yacht stranded on the N. end of the new N. breakwater, having on board two men who were unacquainted with the harbor. Surfmen threw a line from the surfboat to the men, pulled the sloop afloat, and towed it to an anchorage behind the breakwater. (See letter of acknowledgment.)
May 31	Skiff, no name	Duluth, Minnesota, Lake Superior.	While this skiff, loaded with furniture and having no one on board, was being towed behind a sailboat, it swamped about 200 yards offshore. Surfmen towed it to the beach, unloaded the furniture, baled it out, and then turned it over to the men on the sailboat.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901.			
June 1	Am. sc. Lizzie Maud.	White Head, Maine.....	Stranded during foggy weather on Grindstone Ledge, 6 miles ENE. of station. Keeper assembled a volunteer crew (inactive season), pulled out to her, and manned the pumps, as she was leaking considerably, and all of her crew except the master had landed in dories. Surfmen ran a hawser to a tug, which soon arrived, released the schooner, and towed her to Rockland for repairs.
June 1	Slp. yt. Perhaps	City Point, Massachusetts.	Capsized with four people on board while trying to get underway from moorings. Station launches hastened to the scene, rescued the people, and righted and bailed out the sloop.
June 1	Skiff, no name.....	Louisville, Kentucky	In danger above the cross dam of the Falls of the Ohio, containing one person. Station crew pulled out and towed the skiff and its occupant to the landing.
June 2	Am. sc. Yankee Maid.	White Head, Maine.....	Carried onto Grindstone Ledge by the strong current during light, hazy weather. Keeper mustered a crew (inactive season, no regular crew employed) and went to her assistance. He manned the pumps, ran out an anchor, and succeeded in floating her on the flood tide. Discovering that her cargo of lime was on fire, keeper sealed all hatches, doors, and windows, and sailed her to an anchorage near Ash Island, whence a tug towed her to Rockland for repairs.
June 2	Br. sc. St. Mary.....	.....do	Stranded on a sunken ledge near Garden Island, while beating through Muscle Ridge Channel. Keeper and his volunteer crew boarded her and hauled her booms out square, thus making back sail, which forced her afloat. They sailed her out clear of the ledges to a safe anchorage.
June 2	Canoe Pawnee	Oswego, New York, Lake Ontario.	At 3.50 p. m. the station lookout reported that this canoe, containing two young men, had capsized about 4 miles NE. of station. Surfmen immediately pulled out, and arrived at the capsized boat in twenty-seven minutes after the accident. They found a coat floating near by, but could not find the occupants, although they searched for some time in the vicinity of the casualty. They righted the canoe, bailed it out, towed it to the station, and then notified the police of the accident. About six weeks afterwards the two bodies were found about 50 miles NNE. of the scene of the capsize. (For detailed account see caption, "Loss of life.")
June 2	Dory, no name	Cape Disappointment, Washington.	Adrift near shore at McKinzie's Head. Surfmen waded out, caught the boat, and hauled it up on the beach to await the owner.
June 3	Slp. yt. Venture	City Point, Massachusetts.	Dragging anchor out of Dorchester Bay. Surfmen boarded the sloop, hove up and cleared the anchor, and then let it go in a place where the craft rode out the blow in safety.
June 3	Slp. yt. Medora.....	.....do	Bowsprit and shrouds carried away in the strong wind, and sloop, having two men on board, became unmanageable. Station launch picked up the disabled craft and towed it to its moorings off the Massachusetts Yacht Club.
June 3	Sc. Marguerite .....	.....do	This small schooner, with three people on board, carried away its rudder head about a mile NE. from station in a rough sea and strong breeze. Station launch towed it to the shore abreast the Mosquito Yacht Club.
June 3	Br. str. Ronald	Absecon, New Jersey.....	Cargo shifted and steamer lay on her beam ends at anchor off Atlantic City. Volunteer crew from Absecon Station (inactive season) boarded her, transported the master to and from the shore, and landed

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 3	Br. str. Ronald	Absecon, New Jersey.....	the mail. Her crew had their belongings in small boats, and were ready to go ashore at the command of the master. She sank during the night and became a total loss, the crew landing safely.
June 3	Skiff, no name.....	Cleveland, Ohio, Lake Erie.	A tug ran into this skiff and capsized it, throwing two men into the water. Surfmen hastily pulled out, rescued the men, and towed their boat to shore. Keeper furnished the men with hot stimulants and with dry clothing from the stores donated by the Women's National Relief Association.
June 3	Raft, no name.....	Louisville, Kentucky.....	Caught in the strong current of the Ohio River and swept partly under the steamer Tell City, throwing into the water two painters, who clung to the breast hooks of the steamer. Station crew quickly pulled to the place, rescued the men, and towed the raft to shore.
June 4	Catboat, no name..	Galveston, Texas.....	Dragged anchor in a squall and fouled the N. jetty about 5 miles E. of station. Volunteer surfmen (inactive season) went to the catboat and found it badly stove, its crew of three men having reached shore safely. They saved some valuable fishing gear, but the boat was a total loss.
June 4	Skiff, no name.....	Louisville, Kentucky.....	This skiff, containing one man, was in danger above the cross dam of the falls of the Ohio River. Station crew overtook the skiff and towed it to the station, where the keeper instructed the man how to proceed safely through the canal.
June 4	Gas. lch., no name..	Two Heart River, Michigan, Lake Superior.	Machinery became disabled about a mile NW. of station, and launch drifting rapidly seaward, the two men on board not having oars, sail, or anchor. Surfmen towed the launch to station, where the keeper was able to repair the machinery in such a manner that the men could continue on their way.
June 5	Gas. lch. Sport	Old Chicago, Illinois, Lake Michigan.	Engine disabled and launch drifting toward the N. pier, where it would soon pound to pieces in the choppy sea. Surfmen pulled out and threw a line to the single occupant just in time to haul the launch clear of the pier, and then they towed it to the station dock.
June 5	Skiff, no name.....	.....do.....	Capsized in entrance to the harbor. Surfmen righted the boat, bailed it out, towed it to station, and delivered it to its owner. The two occupants were rescued by a small steam launch which was close at hand.
June 6	Am. sc. Donaldson..	Cleveland, Ohio, Lake Erie.	In danger of stranding about 3 miles ENE. of station during squally weather. Surfmen ran a hawser for a tug which towed the schooner to a place of safety up the river.
June 6	Fish boat, no name.	South Chicago, Illinois, Lake Michigan.	Driven upon a submerged crib near the end of the new break water by the high wind. Surfmen rescued the thoroughly drenched and shivering occupant and took him to the station, where the keeper gave him dry clothing from the stores of the Women's National Relief Association, and food. Then the surfmen hauled the boat from the crib, towed it into Calumet Harbor, and turned it over to its owner.
June 6	Gas. lch., no name..	Racine, Wisconsin, Lake Michigan.	Drifting out of the harbor. Surfmen picked it up, towed it to shore, and secured it safe.
June 6	Small boat, no name.	.....do.....	Drifting out into the lake with a fresh off-shore breeze. Surfmen towed it to the shore, hauled it up on the beach, and turned it over to its owner.
June 7	Am. sc. Northern Light.	City Point, Massachusetts.	Dragging anchor directly toward the fleet of yachts lying off City Point during a strong SW. wind and rough sea. Surfmen went to her in the station steam launch Relief, and, finding no one on board, they hove up and cleared her anchor and towed her to a secure berth.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 7	Sailboat, no name..	City Point, Massachusetts.	Adrift in Dorchester Bay with an occupant who did not know how to handle sailboats. Station launch picked up the boat and towed it to the South Boston Yacht Club. There was a strong SW wind and a rough sea was running at the time of rendering this aid.
June 7	Gas. lch. Estelle.....do.....	.....do.....	Broke down near the station while towing a catboat to the South Boston Yacht Club. Station launch towed both boats to their destination.
June 7	Sailboat No. 12.....	Charlotte, New York, Lake Ontario.	Capsized near the station, having on board a man who did not understand the management of sailboats. Surfmen rescued the man, righted his boat, towed it to shore, and emptied the water out of it.
June 8	Rowboat, no name..	City Point, Massachusetts.	Three men in this boat signaled for assistance, not being able to make headway against the fresh westerly wind and ebb tide. Station launch towed them to the Mosquito Yacht Club.
June 8	Small boat, no name.....do.....	.....do.....	Capsized by a sharp gust of wind about 1½ miles SW. from station. The crew of three men were safely picked up by a boat which was close at hand. Surfmen righted the capsized craft and towed it to Savin Hill.
June 8	Sailboat Minnie.....do.....	.....do.....	The crew of five men ran this boat ashore on Thompsons Island and signaled to station for assistance, they being unable to handle the boat in the fresh breeze. Station launch went to their aid and conveyed them to the City Point landing.
June 8	Cutter, no name.....do.....	.....do.....	This cutter having no centerboard was not able to beat back to the navy-yard, and the crew of five men could not pull against the strong breeze. They signaled for assistance, and surfmen towed them to City Point with station launch.
June 8	Cat yt. Francis.....	Great Egg, New Jersey...	Struck a sunken anchor and stove in bottom planking. Her master ran her on a sand bar and all hands (eight persons) reached shore safely. On the 10th instant surfmen raised her, nailed canvas over the hole and put on a thick coat of paint, and then the man in charge took her to Ocean City.
June 8	Skiff, no name.....	Louisville, Kentucky.....	This skiff containing two men was in a dangerous position near the Kentucky chute of the falls of the Ohio River. Station crew towed it to shore and landed the men without mishap.
June 8	Slp. yt. Marie.....	Michigan City, Indiana, Lake Michigan.	Mistook piers at 10 p. m. and ran ashore in the breakers to the westward of W. pier. Her crew of four people became frightened and let her centerboard go by the run, thereby losing the centerboard chain. Surfmen swept a line underneath her bottom and raised the centerboard enough to enable them to pull the yacht afloat with surfboat. They towed her into the harbor, and on the next morning recovered the lost chain.
June 8	Sailboat, no name.....do.....	.....do.....	Capsized in the river. Surfmen rescued the single occupant, a boy of 12 years, and towed the boat to shore.
June 8	Fish boat, no name.	Point Adams, Oregon.....	Drifted into the breakers on Clatsop Spit while the occupants, two fishermen, were picking up their net. Surfmen threw a line to them and towed them into smooth water.
June 9	Sloop, no name.....	Erie, Pennsylvania, Lake Erie.	Capsized near the station, throwing two men into the water. Surfmen quickly pulled out and picked up the men, who were clinging to the capsized boat. After taking the men to station, the surfmen towed the boat to shore and put it to rights.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 9	Elec. lch., no name.	Erie, Pennsylvania, Lake Erie.	Broke down at the entrance to Erie Bay at 8.10 p. m. Observing that the launch was making no headway, surfmen pulled out and towed it safe to moorings, landing the crew of seven people on a pier from which they could walk to their homes.
June 9	Slp. yt. Wistsith.....	Chicago, Illinois, Lake Michigan.	Stranded on a reef off Forty-ninth street at 8.20 p. m. Surfmen hailed the yacht afloat, towed it into deep water, and landed two of the six people on board.
June 9	Gas. lch. Eva Leonard.	.....do	Engine broke down off the Fifty-ninth street pier. Surfmen pulled out and towed the launch and its four occupants into the harbor at Fifty-fifth street.
June 10	Am. str. York State.	Charlevoix, Michigan, Lake Michigan.	Stranded on a reef about 2½ miles S. of station. Station crew ran lines to a tugboat which released her without damage.
June 11	Am. str. Fisherman.	Thunder Bay Island, Michigan, Lake Huron.	Stranded on the SE. end of Thunder Bay Island during foggy weather. Surfmen heard her whistles of distress and at once pulled out to her. The master returned to station with keeper and telephoned for a tug, which soon arrived and released the steamer undamaged.
June 13	Catboat Silane.....	City Point, Massachusetts.	This catboat carried away its mast while bound from Hough's Neck to City Point. Surfmen cleared away the wreckage, taking it inboard, and towed the boat to an anchorage off the South Boston Yacht Club, where they landed the two persons on board.
June 13	Am. sc. John Kilderhouse.	Cleveland, Ohio, Lake Erie.	Sprung a leak while anchored about ½ of a mile W. of station, and the master requested the assistance of the life savers to man the pumps, as his crew was exhausted. Surfmen went on board and kept the vessel free of water from 6 p. m. to 6 a. m., and then her crew manned the pumps until the master hired additional help and a steamer to tow her to her destination.
June 15	Br. sc. Theta	Peaked Hill Bars, Massachusetts.	At 3.30 a. m., during a strong NE. wind and rough sea, this schooner stranded on Peaked Hill Bars, the master having mistaken Cape Cod light. Keeper (inactive season, no crew employed) discovered the wreck at 4 a. m. and at once telephoned to the keepers of Race Point and High Head stations for assistance. Surfmen were summoned from Provincetown, and, together with the keepers of the adjacent stations, they assembled at the station at 6.20 a. m. The surfboat was launched and pulled to the wreck, taking much water on board. After bailing out his boat, keeper took the crew on board and started for the shore; but when near the beach he looked toward the schooner and discovered another man on her. He immediately turned back, took off the man, and then landed safely with the crew of seven men and one female passenger, who were taken to the station, where the men were provided with dry clothing from the stores of the Women's National Relief Association. Not having any garments for the woman, keeper telephoned to the Seaman's Aid Society in Provincetown and, in response, received a change of clothing for her. On the 17th the schooner was floated by a wrecking company.
June 15	Catboat Marguerite.	Sandy Hook, New Jersey.	Stranded on the Point of Sandy Hook at 1 a. m. Keeper and a volunteer surfman (inactive season) ran a line to the catboat from keeper's steam launch at 4 a. m., and succeeded in hauling it afloat without damage.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 15	Sailboat, no name..	Charlotte, New York, Lake Ontario.	Capsized in Charlotte Harbor during a fresh easterly breeze. Surfmen rescued the two occupants, towed the boat to shore, and hauled it up on the beach.
June 15	Sailboat No. 12 .....	.....do	Capsized in the harbor on account of bad management. Surfmen took the single occupant safe from the bottom of the overturned boat, which they towed to shore and put to rights.
June 15	Slp. yt. Peeps the Second.	Chicago, Illinois, Lake Michigan.	Capsized in a fresh NE. breeze off the sixty-eighth street pier, 1½ miles SE. from station. Surfmen hastily pulled to the upset boat and rescued the crew of two men who were clinging to its bottom. After landing the men, surfmen righted the boat, bailed it out, and towed it to moorings in Jackson Park harbor.
June 15	Sailboat Query	Evanston, Illinois, Lake Michigan.	Capsized about a mile S. of station during the fresh N. wind. Surfmen reached the place of capsizing in ten minutes, made a line fast to the mast, and assisted the crew of two men to right their boat, which was self-bailing and flat bottomed. Then the station crew lowered the sails and towed the boat into the harbor of the Evanston Boat Club.
June 15	Slp. yt., no name...	Milwaukee, Wisconsin, Lake Michigan.	Capsized in Milwaukee Bay, ¾ miles NE. from station, in a fresh NE. breeze. Station lookout reported the casualty, and surfmen immediately started for the scene in tow of a tug. The capsized crew of six men were rescued by another yacht just before the arrival of the station crew. Surfmen towed the sloop to its anchorage off the Milwaukee Yacht Club, and then righted it and bailed it out.
June 16	Gas. lch. Emma and barge Annabelle.	Rehoboth Beach, Delaware.	At 6 a. m. keeper (inactive season) discovered this launch and barge in the surf about 2 miles N. of station. The two men on the launch succeeded in wading through the rough surf to the shore. Keeper took them to station and provided them with dry clothing from the stores of the Women's National Relief Association and with food and shelter until the following day. He employed four volunteer surfmen and managed to haul both boats up on the beach in time to save them from pounding to pieces. The man in charge of the boats hired a wrecking crew to transport them overland to Delaware Breakwater.
June 16	Slp. yt. Romola.....	Charlotte, New York, Lake Ontario.	Missed the entrance between the piers at Sea Breeze, 4 miles E. of station, and went aground. Station crew pulled to the stranded sloop and ran their 4-inch hawser from her to a tug which released her without damage.
June 16	Gas. lch. Lizzie.....	Chicago, Illinois, Lake Michigan.	Engine disabled about ¼ mile NE. of station. Surfmen pulled to the launch, threw a line to the eight people on board, and towed them into the yacht harbor at Jackson Park.
June 17	Catboat, no name ..	City Point, Massachusetts.	The night patrol from station discovered this catboat adrift in Dorchester Bay at 9.30 p. m. They towed it to the landing of the South Boston Yacht Club and made it well fast.
June 18	Slp. yt. Mayoeg.....	Shark River, New Jersey.	Stranded on the N. side of the entrance to Shark River. Surfmen ran out keedge anchors, hauled her afloat, and took her to a good anchorage inside the inlet. Her crew consisted of three men who were on a pleasure trip from New York to Shark River.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 18	Am. str. Stephen C. Hall and Am. sc. Nellie Mason.	Charlevoix, Michigan, Lake Michigan.	This steamer with the schooner in tow stranded on the W. end of North Fox Island, 28 miles WSW. from station, during foggy weather. Upon being notified of the casualty by the master of a fishing tug, surfmen towed to the stranded vessels and ran a hawser to the schooner, which the tug released, and towed to shelter on the lee side of South Fox Island. Surfmen then picked up the steamer's yawl, which was leaking and contained three men who were unable to pull from the schooner to the steamer against the fresh breeze, and towed it there with the surfboat. Then they stood by the steamer until a wrecking outfit arrived on the following day and succeeded in floating her.
June 18	Am. sc. Swan.....	Grand Haven, Michigan, Lake Michigan.	This schooner stranded at 11 p. m. just a little to the southward of harbor entrance in a dense fog. Station patrol gave the alarm and surfmen at once boarded her. They pulled on her with surfboat and, aided by her crew, who pushed with poles, succeeded in floating her. They towed her safe into the harbor.
June 18	Slp. yt. Ruth.....	Holland, Michigan, Lake Michigan.	Capsized in a fresh NW. breeze about $\frac{1}{2}$ of a mile E. of station. The three occupants were taken from the water by a steamer which was close at hand. Surfmen righted the sloop and towed it to the boat livery to which it belonged.
June 18	Nph. lch. Lolly	Old Chicago, Illinois, Lake Michigan.	Disabled and drifting helplessly toward the pier. Surfmen pulled out and safely towed it into a slip, where the owner could repair it.
June 19	Am. sc. Altama	Gay Head, Massachusetts.	Stranded about 2 miles ENE. of station at 11 p. m. Surfmen boarded her early on the next morning, threw overboard four tons of ice, ran out two anchors, and succeeded in heaving her afloat. They sailed her to a safe anchorage and then recovered her two anchors and put them on board.
June 19	Slp. yt. Lotus	Buffalo, New York, Lake Erie.	Stranded about $\frac{1}{4}$ of a mile SW. of station. Surfmen hauled her afloat with surfboat and then sailed her into the harbor.
June 21	Am. sc. yt. Thora	City Point, Massachusetts.	Stranded in Pleasure Bay, 1 mile NE. by N. from station, the man in charge not being acquainted with the waters of this vicinity. Surfmen pulled her into deep water with the station launch.
June 21	Rowboat, no name	Frankfort, Michigan, Lake Michigan.	Capsized and sunk about 200 yards NNE. of station, throwing two men into the water. Surfmen quickly pulled out and picked up the men unharmed by the mishap.
June 22	Slp. yt. Syndicate.....	Chicago, Illinois, Lake Michigan.	Capsized in a fresh W. breeze off the Sixty-eighth street intake crib. Station crew pulled out in surfboat and rescued the crew of five persons, and then, with the assistance of the gasoline launch Myrtella, they towed the capsized craft into the Jackson Park yacht harbor.
June 22	Rowboat, no name	Evanston, Illinois, Lake Michigan.	Capsized near the shore, $\frac{1}{4}$ of a mile N. of station, throwing three boys and three girls into the water. The girls were picked up by a boat near by and the boys swam safely to shore. One girl was unconscious when rescued, and surfmen gave her medical assistance and dry clothing from the stores of the Women's National Relief Association. She soon recovered sufficiently to be taken to her home.
June 22	Sailboat Pastime	Kenosha, Wisconsin, Lake Michigan.	This small sailboat, containing one man, who did not know how to handle it, became water-logged and helpless about 5 miles E. of station. Surfmen pulled out, overhauled the boat, and towed it safe into the harbor.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 22	Skiff, no name.....	Milwaukee, Wisconsin, Lake Michigan.	Adrift on the lake about a mile from shore. Surfmen towed it into the harbor and restored it to its owner.
June 23	Slp. yt. Smuggler ...	City Point, Massachusetts.	Went ashore in a fog near the pumping station in Dorchester Bay. Surfmen released the yacht and towed her into deep water with the station launch.
June 23	Am. str. Comal.....	Jupiter Inlet, Florida.....	Stranded 2 miles S. of station during rainy and misty weather. A volunteer crew boarded her (no crew employed at Jupiter Inlet), and assisted to throw overboard coal and to carry out anchors. On the 25th she floated without apparent damage.
June 23	Rowboat, no name .	Buffalo, New York, Lake Erie.	Broke adrift from breakwater, leaving two boys without means of reaching the shore. Surfmen saw their signals of distress and went to their assistance, landing them and their boat at Erie Basin.
June 23	Slp. yt. Ariel .....	.....do.....	Disusted in a fresh SW. breeze, about 1½ miles WSW. of station, while out on a pleasure cruise with four people on board. Station crew pulled out in surfboat and towed the sloop to the new N. breakwater.
June 23	Rowboat, no name .	Saint Joseph, Michigan, Lake Michigan.	Capsized in St. Joseph River above the railroad bridge. The two occupants, named Michael Linowiecki and Stephen Michalski, sank and drowned before aid could reach them. The capsize occurred out of view from station lookout, but, upon being informed of the accident by the bridge tender, surfmen hastened to the scene. They dragged for and recovered both bodies, and worked to restore life until a physician announced that both men were dead. (For detailed account see caption "Loss of life.")
June 23	Rowboat, no name .	Chicago, Illinois, Lake Michigan.	Capsized about 600 yards off station. The two occupants, a man and a woman, were quickly picked up by a sailboat which was close by at the time. Surfmen towed the boat to shore, put it to rights, and delivered it to owner.
June 23	Skiff, no name	Milwaukee, Wisconsin, Lake Michigan.	Capsized by the swell from a passing steamer about 200 yards N. of pier. The light keeper rescued the five occupants and took them to station, where keeper provided them with dry clothing from the stores of the Women's National Relief Association. Surfmen towed the skiff to the station and bailed it out.
June 23	Se. G. Brown	Baileys Harbor, Wisconsin, Lake Michigan.	This schooner having sprung a bad leak, the master applied at station for assistance. Surfmen hauled her out on the beach with heavy tackles, stopped the leak, and then launched her.
June 24	Am. slp. W. Kaler..	Cranberry Isles, Maine...	Grounded while trying to enter the Pool, Great Cranberry Island, at half tide. She listed over and filled at high water. Keeper and volunteer crew (inactive season) bailed her out at low water, ran out an anchor, got a hawser to her masthead and hove her upright. Then at the next high water they succeeded in floating her without damage.
June 24	Am. sc. Annie and Reuben.	Hunniwells Beach, Maine.	Stranded on the N. end of Pond Island. Keeper and volunteer crew (inactive season) ran a line from the shore to her bow, which they hove toward the rocks so that the tidal current would strike the schooner on the inshore side, her stern being to the tide and fast aground while her bow was water-borne. The strong current soon forced the schooner off, and then surfmen assisted the master to make sail and proceed seaward.
June 25	Gas. lch. Helene ...	City Point, Massachusetts.	Engine disabled and launch stranded on the N. side of Castle Island. Surfmen towed the disabled craft to the landing of the South Boston Yacht Club with the station launch.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 25	Am. sc. L. B. For- ester.	Ludington, Michigan, Lake Michigan.	Stranded in the harbor just E. of station. Surfmen ran a hawser to a tug, which hauled her afloat uninjured.
June 26	Flat Ed.....	Louisville, Kentucky.....	This flat, having on board seven men and a load of coal, missed the landing and was being swept by the strong current toward the falls of the Ohio. Station crew pulled out, made their line fast to the flat, and assisted the men to gain the landing.
June 27	Slp. yt. Namenah ..	City Point, Massachusetts.	Dragging anchor and in danger of fouling the City Point pier. Surfmen ran a line to her from station launch and towed her to safe moorings.
June 27	Catboat Joe.....	.....do	Capsized off City Point in the fresh breeze, throwing three men into the water. Station patrol launch rescued the men, righted the boat, and took it to its moorings.
June 27	Am. sc. Hannah F. Carleton.	Cuttyhunk, Massachu- setts.	Stranded on Sow and Pigs Ledge during a fog. At the request of the master, keeper sent telegrams to the owner and to New Bedford for a tugboat. A wrecking crew boarded her and floated her at high water.
June 27	Rowboat, no name.	Holland, Michigan, Lake Michigan.	Capsized while being boarded by two men at the end of N. pier. One of the men managed to climb upon the pier, but the other was thrown into the water and was in danger of drowning. Station watchman upon the pier threw a life-buoy to the struggling man and then, jumping into a rowboat, safely pulled him out of the water.
June 27	Sc. Wanderer.....	Baileys Harbor, Wiscon- sin, Lake Michigan.	Station lookout saw a signal of distress on this schooner and surfmen immediately boarded her. There was nobody on board but two women, who were without supplies; the man in charge having left in the only boat and not having returned, the women became alarmed. Surfmen rolled up the canvas, took the women ashore, so that they might purchase provisions, and then transported them back to their vessel.
June 28	Br. str. Starcross....	Cape Lookout, North Carolina.	Stranded on the outer Lookout Shoal during the night. Keeper discovered her at daylight and boarded her with a volunteer crew as soon as possible (inactive season). At the request of the master, he returned to station and sent telegrams to Norfolk and Wilmington for tugs. On the 30th the revenue cutter Algonquin and two tugs succeeded in releasing her without apparent damage.
June 28	Sailboat, no name..	Two Rivers, Wisconsin, Lake Michigan.	Two men, having gone out for a pleasure sail, were not able to beat back into the harbor, and were rapidly drifting to the northward. The weather was squally and threatening. Station crew pulled out and towed the men safe into the harbor.
June 29	Slp. yt. Tacoma	City Point, Massachusetts.	Capsized during the yacht races in Dorchester Bay. The crew of five were picked up by the police boat, which was near by. Surfmen helped to bail her out, and station launch towed her to the yacht club landing.
June 29	Sailboat Natalie.....	.....do	Stranded near Castle Island, 1½ miles NE. of station. Station steam launch Relief hauled her afloat and towed her out into deep water.
June 29	Flat, no name.....	Louisville, Kentucky	Swamped and turned over in the Ohio River at the foot of Third street. Station crew pulled out and picked up the single occupant, who was clinging to the bottom of the flat. Then they righted the flat, recovered the cargo, and took all safe to shore.

Services of crews—Continued.

Date.	Name and nationality of vessel.	Station and locality.	Nature of casualty and service rendered.
1901. June 29	Am. sc. Condor.....	Holland, Michigan, Lake Michigan.	This schooner fouled the S. pier while trying to enter the harbor during a heavy SW. squall. The head gear caught on some piles, carrying away the bowsprit, jib boom, and the forward sails. Surfmen ran a line to her and after hard work succeeded in hauling her to a safe berth abreast of the station. Then they went out on the pier and recovered the wreckage.
June 29	Am. str. Eugene C. Hart.	Plum Island, Wisconsin, Lake Michigan.	The machinery of this steamer became disabled and she anchored off the station at 3 a. m. during a heavy wind and sea. Surfmen went on board, and after the engineer's force had made temporary repairs they assisted the crew to heave in forty-five fathoms of chain and get the anchor on board.
June 30	Rowboat, no name.	City Point, Massachusetts.	This boat, containing an intoxicated man and woman, was in danger of capsizing near the station, the woman having fallen partly overboard. A surfman jumped into the water and prevented the capsizing, assisting the woman to regain the boat, and then the keeper had the station launch take them ashore.
June 30	Nph. lch. Nellie White.	Mantoloking, New Jersey.	Machinery became disabled and crew hoisted a signal of distress about 2½ miles E. of station. Keeper employed a volunteer surfman (inactive season) and pulled out to the launch, finding three men on board and the man in charge very seasick. Keeper landed the sick man, and then after working nearly all day succeeded in towing the launch to a safe anchorage inside Barnegat Inlet.
June 30	Dredge No. 3.....	Galveston, Texas.....	On fire at 8.30 p. m. while lying in the bay near Hitchcocks Reef, ¼ mile N. of station. A volunteer crew from station (inactive season) assisted to handle the hose from two tugs until the flames were under control. Before the dredge could be pumped out it sank in thirty feet of water and was a total loss.
June 30	Sloop, no name.....	Charlotte, New York, Lake Ontario.	Capsized off Windsor Beach, 1 mile E. of station, in a fresh W. breeze. Surfmen quickly pulled out, rescued the single occupant, righted the sloop, and towed it to the shore.
June 30	Slp. Mistletoe.....	Duluth, Minnesota, Lake Superior.	Capsized about 2 miles SSE. of station. Surfmen hastened toward the scene of mishap, but the crew of four men were picked up by a gasoline launch before their arrival. They assisted to tow the sloop to the shore and bail it out.
June 30	Slp. Spray.....	South Haven, Michigan, Lake Michigan.	Capsized in Lake Michigan, 700 yards W. from station. Surfmen rescued the two occupants, righted and bailed out the sloop, and towed it into the river.
June 30	Rowboats (2), no names.	.....do.....	Drifting out of the harbor, having parted their moorings. Station lookout pulled out in station skiff, overhauled the boats, and towed them back to the landing, where he made them well fast.
June 30	Sloop, no name.....	Michigan City, Indiana, Lake Michigan.	Capsized near the station in a fresh S. wind. Surfmen rescued the two occupants, and after landing them on the pier righted the sloop and bailed it out.
June 30	Rowboat, no name.	Old Chicago, Illinois, Lake Michigan.	This boat was drifting out into the lake, having on board three men, who were not able to pull back against the fresh SE. wind. Station crew pulled out and towed them into a slip without mishap.

MISCELLANEOUS SERVICES OF CREWS.

Under this caption are included services performed by the crews in casualties not shipwrecks, such as rescues from drowning where persons have fallen from piers, etc., recovery of the bodies of persons drowned, aid in case of fire, succor to persons along the coasts suffering from exposure and in need of shelter and food, supply of boats and vessels short of water, rescuing property exposed to loss in various ways near the stations, etc.

In numerous instances, as will be noted from a perusal of the following statement, lives were saved where death would have been inevitable but for the services rendered.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. July 1	Recovery of body ..	White River, Michigan, Lake Michigan.	Upon receiving word that a man had drowned in White Lake, about $\frac{1}{2}$ mile from station, the surfmen went to the scene without delay with their dragging gear. After working for thirty-five minutes they recovered the body, but could not restore life, although they applied the Service treatment for over an hour. They notified the coroner of the casualty and turned the body over to relatives of the deceased.
July 1	.....do	South Chicago, Illinois, Lake Michigan.	The city police requested the life-saving crew to recover the body of a man who was drowned while attempting to swim across the Calumet River, 3 miles from station. Surfmen found the body and delivered it to the city officials.
July 3	Succor.....	Oak Island, New York ...	At 6 p. m. a man arrived at station and reported that his catboat had sunk about 2 miles SW. of station. He reached the shore safe in his small boat, but was thoroughly drenched. Keeper gave him dry clothing from the supplies furnished by the Women's National Relief Association, shelter for the night, and a ferry ticket for passage to the mainland.
July 3	Recovery of body ..	Cleveland, Ohio, Lake Erie.	Two surfmen recovered the body of Walter Smith, who was drowned while bathing in the river about 5 miles from station. They delivered it into the charge of an undertaker.
July 3	Clothing furnished.	Milwaukee, Wisconsin, Lake Michigan.	A man who had fallen overboard from S. pier was furnished with dry clothing from the stores of the Women's National Relief Association.
July 4	Recovery of body ..	Buffalo, New York, Lake Erie.	A boy of 14 years was drowned at the sand catch while bathing. Surfmen recovered the body and turned it over to the police, who were also grappling for it.
July 4	.....do	Cleveland, Ohio, Lake Erie.	A man was drowned while bathing from a yacht which lay off Erie street, $1\frac{1}{2}$ miles from station. Surfmen recovered the body and delivered it to an undertaker.
July 6	Clothing furnished.	Charlotte, New York, Lake Ontario.	A small boy fell from the pier into the water, and a man near by hauled him out safe before the surfmen could reach the place of the accident. Keeper took the boy to station and furnished him with dry clothes from the stores of the Women's National Relief Association.
July 7	Recovery of body ..	Milwaukee, Wisconsin, Lake Michigan.	A telephone message informed the surfmen that a boy had fallen into the river and drowned at Sixteenth street. After working for about one-half hour, the surfmen recovered the body and turned it over to the parents.
July 8	Resuscitation and clothing furnished.	Plum Island, Massachu- setts.	Keeper was notified by telephone that two men had been rescued from a capsized boat; that one was in a bad condition, and that both required dry clothing. He went to their assistance and, after working for one and one-half hours, restored circulation of the thoroughly chilled man; then he provided both men with dry clothes from the stores of the Women's National Relief Association.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. July 8	Recovery of body ..	Grand Haven, Michigan, Lake Michigan.	Keeper sent a surfman along the beach to look for the body of a drowned boy. The patrolman found the body in the water near the beach about 4 miles N. of station and secured it. The parents of the boy sent a carriage after the body upon being notified of its recovery.
July 11	Recovery of bodies (2).	Marquette, Michigan, Lake Superior.	Two young men left Marquette for a trip along the shore of the lake in a canoe. Their canoe was found bottom up near Black Rocks, 4 miles N. of station. Surfmen searched for the bodies each day until the 14th instant, when they succeeded in recovering them by dragging in the vicinity where the boat was found.
July 11	Recovery of body ..	South Chicago, Illinois, Lake Michigan.	Surfmen hauled the body of Andrew Fisher out of the Calumet River and turned it over to the city police. This man had been missing from South Chicago since the 7th instant.
July 18	Succor.....	Velasco, Texas	Owing to the prevailing strong easterly winds, all the lowlands along the beach were submerged by high water. A family, having been driven from their home, camped on a high ridge near the station, where they became entirely surrounded by water. Keeper took them to the life-saving station in his boat and gave them shelter and food. The hardships endured by them caused the severe illness of one of the women, and on the following day it was necessary for the keeper to send a surfman to Quintana to summon a physician to attend her. This family of 7 persons was succored at the station until the 19th instant.
July 18	.....do	Brazos, Texas	Sixteen persons who were forced to leave their homes by the unusual high water were succored at the life-saving station on the 13th and 14th instants.
July 14	Recovery of body ..	Louisville, Kentucky.....	A report reached the keeper that a boy was drowned in the Ohio River about 14 miles from station. The life-savers put their dragging gear into one of the station boats and towed to the scene behind the steamer Columbia. They recovered the body and delivered it to the boy's father.
July 15	Fire extinguished..	Spermaceti Cove, New Jersey.	During the inactive season a fire became started in the grass near station. Keeper, assisted by a volunteer and a squad of soldiers from Fort Hancock, extinguished the flames before they damaged the neighboring buildings.
July 15	Transportation	Velasco, Texas	Being unable to cross on horseback a new cut from the sea into the bay, two young men requested aid from the keeper to reach their aged father, who was living with his two granddaughters within the inundated area, about 8 miles NE. from station. Keeper sent a volunteer surfman (inactive season) to transport them in a sailboat across the flooded prairie to their home, where they found their father and his granddaughters safe.
July 15	Assistance to aeronaut.	Charlotte, New York, Lake Ontario.	A balloonist made an ascension near the station and cut adrift a parachute, by means of which he dropped into the lake. Surfmen pulled out and picked him up, recovered the parachute and balloon, and landed all upon the pier.
July 16	Body found	Ashtabula, Ohio, Lake Erie.	A fishing tug found a floating body about 4 miles out from shore, and sounded whistle for assistance off station. Surfmen went out to her, towed the body to the shore, and delivered it to an undertaker. It was thought to be the body of a fireman who was lost off the steamer W. D. Rees in the latter part of the month of May.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. July 16	Recovery of bodies (2).	Kenosha, Wisconsin, Lake Michigan.	Surfmen dragged for the bodies of William Burwell and Alma Beinerman, who had fallen into the water from a dock and were drowned. They found the bodies and turned them over to the coroner.
July 17	Rescue from drowning.	Buffalo, New York, Lake Erie.	Surfmen on lookout saw two small boys, who were in bathing near the station, approach unwittingly a deep hole made by a sand sucker. Not hearing his cry of warning, they walked into the deep water and sank out of sight. The surfman immediately plunged in after them and brought them safely to the shore, having seized one of them just as he was sinking for the third time.
July 17	Recovery of body ..	Cleveland, Ohio, Lake Erie.	Keeper received word by telephone that a boy had drowned at the Erie street pier, 1 1/2 miles ENE. from station. He immediately sent three surfmen in the dingey, with dragging gear, to the pier to recover the body, which they soon found and delivered to an undertaker.
July 18	Rescue from drowning.	North Manitou Island, Michigan, Lake Michigan.	While a little girl was playing with other children upon the pier in the vicinity of the station, she fell into the lake. Station lookout sounded the alarm, and surfman No. 1, reaching the pier first, rescued the child.
July 18	Assistance to injured persons (2).	Chicago, Illinois, Lake Michigan.	Keeper dressed the wound of a boy who had fallen from a bicycle cutting both knees badly, and then he sent him home in an ambulance. He also dressed a wound that a young lady had received from a golf bat, and summoned a carriage to take her home.
July 19	Recovery of bodies (2).	Duluth, Minnesota, Lake Superior.	Two boys were drowned while in swimming about 4 miles S. of station, and surfmen were requested to recover the bodies. They reached the scene of the accident at 9 p. m. and worked until midnight, recovering both bodies and delivering them to the stricken parents. It was stated that the younger boy, Arthur Swenson, got beyond his depth, and, as he did not know how to swim, the older boy, John Douglas, plunged in to assist him. The grip of the younger lad hauled the older one under water, and both were drowned.
July 20	Rescue from drowning.	Seatack, Virginia.....	Keeper swam out through the surf and rescued a man who was trying to commit suicide while suffering from an attack of delirium tremens. After landing safely with the man the keeper summoned two physicians and put him in their charge.
July 20	Recovery of body ..	Sturgeon Point, Michigan, Lake Huron.	After working nearly all night the surfmen recovered the body of a boy who had fallen into the lake at Harrisville and had drowned. They turned the body over to the boy's parents.
July 20	.....do	Sheboygan, Wisconsin, Lake Michigan.	At 8 p. m. station crew were notified that a man had jumped off the end of the N. pier. Surfmen hastily pulled out and found the body floating with only the top of the head out of water. They took it upon the dock and worked for one and one-half hours to restore life. A doctor then said that further efforts were useless.
July 20	Recovery of bodies (2).	Two Rivers, Wisconsin, Lake Michigan.	Two girls, named Mabel Garbes and Beatrice Pearson, fell into the river at a point out of view from station. A party of men in a shore boat recovered one body after it had been in the water about thirty minutes, and life-savers worked in vain to resuscitate it. Surfmen found the other body and tried to restore animation until a physician pronounced life extinct. Surfmen took the bodies to the home of the girls' grand parents.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. July 22	Recovery of body...	Cleveland, Ohio, Lake Erie.	A young man was drowned while bathing in the river about 5 miles SE. from station. Surfmen dragged for and recovered the body, and turned it over to an undertaker.
July 22	Rescue from danger.	Southside, California.....	While in bathing during low water, a man climbed up on Mussel Rock, lost his foothold, and fell, breaking his thigh. He regained the rock, where he lay helpless, trying to attract attention by waving his hat. Surfmen were informed of his position and hastened to his rescue. Two surfmen swam off to the rock with a line and life-preserver, which they attached to the injured man, and then, gently lowering him into the water, they carried him safe to the shore. Putting him into the station wagon, surfmen transported him to a hotel, whence an ambulance took him to a hospital.
July 23	Recovery of body ..	Racine, Wisconsin, Lake Michigan.	Surfmen recovered the body of a small boy who had fallen into the river W. of Main street bridge, and tried to resuscitate it until two physicians arrived and took charge of it. All efforts to restore life to the remains were futile.
July 24	.....do	Fairport, Ohio, Lake Erie.	Shortly after midnight the tug E. C. Maytham steamed up to station. The master reported that his fireman had fallen overboard while going aboard the fuel scow, and he requested the assistance of station crew to recover the body. Surfmen towed to the scene behind the tug, and after dragging for twenty minutes they recovered the body. They took it to station and, on the next morning, turned it over to the coroner.
July 25	Shelter	Gurnet, Massachusetts ...	Keeper sheltered for the night at the station two men who were unable to reach their home at Kingston.
July 25	Recovery of body ..	Erie, Pennsylvania, Lake Erie.	Station crew dragged for and recovered the body of a boy who had ridden off the Anchor Line pier on his bicycle. The coroner took charge of it.
July 25	Aid to injured man.	Bois Blanc, Michigan, Lake Huron.	Surfmen transported to Cheboygan a man named Harry Squires, who had fallen and received severe injuries.
July 26	Rescue from drowning.	Louisville, Kentucky	A man under the influence of liquor fell into the river at the foot of Fourth street. Station lookout sounded the alarm and life-saving crew immediately pulled to the scene. They rescued the man, took him to the station, and turned him over to the police for safe-keeping.
July 27	Rescue from danger.	Sullivans Island, South Carolina.	Keeper went into the surf and assisted two women who were caught in the undertow and in danger of being carried out beyond their depth while in bathing near the station.
July 27	Succor	Cape Lookout, North Carolina.	A party of eleven persons from Morehead City sought shelter at the station at 8 p. m., they having been overtaken by a heavy rain squall. Three of the party were furnished with dry clothing from the stores of the Women's National Relief Association, and all were given a warm supper and lodging for the night.
July 27	Recovery of body...	Cleveland, Ohio, Lake Erie.	Having received word by telephone that a man was missing from the C. & P. ore docks, surfmen dragged for and recovered the body. It was identified as that of Charles Buelow, and was taken in charge by the coroner.
July 27	.....do	Old Chicago, Illinois, Lake Michigan.	Surfmen picked up a corpse which was floating in the lake at the foot of Randolph street and delivered it to the city authorities.
July 28	Assistance to sick man.	Plum Island, Wisconsin, Lake Michigan.	One of a number of visitors at the station having been taken sick suddenly, keeper sent a surfman to sail him back to Detroit Harbor.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. July 29	Recovery of body...	Ashtabula, Ohio, Lake Erie.	Station crew pulled up the river about $\frac{1}{4}$ of a mile and dragged for the body of a man who had fallen overboard from a steamer. They recovered the body and took it aboard the steamer, where they applied the Service method of restoring the apparently drowned until a physician pronounced life extinct. The name of the drowned man was J. C. Travis.
July 29	.....do	Holland, Michigan, Lake Michigan.	A young lady reported to keeper that her brother, aged nine years, was missing. Keeper sent surfmen out to search for the boy; soon afterwards his attention was called by a crowd of people upon the pier, and, hastening there, he found that the boy's body lay in five feet of water near the pier. He dived in and brought up the body, landing it upon the pier, where the life-savers worked in vain for over an hour to restore life. A physician having pronounced life extinct, they turned the body over to the coroner.
July 29	.....do	Old Chicago, Illinois, Lake Michigan.	Keeper was informed that a man had committed suicide in the lake off the foot of Erie street. Surfmen recovered the body after dragging for one and one-half hours, and turned it over to the city officials.
July 31	.....do	Milwaukee, Wisconsin, Lake Michigan.	A boy living on Jones Island, $1\frac{1}{2}$ miles S. of station, fell into the Kinnikinnick River and drowned. Surfmen dragged for and recovered the body, and delivered it to relatives of the boy.
July 31	Rescue from drowning.	Cape Disappointment, Washington.	A young woman named Katie Russell got beyond her depth while bathing near station, and was in danger of drowning. Surfman A. W. Robertson plunged in and rescued her after she had gone under water once.
Aug. 1	Fire extinguished..	Old Chicago, Illinois, Lake Michigan.	At 10.45 p. m. fire was discovered near the end of the north pier. The surfmen repaired to the scene with buckets and soon put it out.
Aug. 2	Rescue from drowning.	Shark River, New Jersey.	A 4-year-old child fell into a small lake about 125 yards from the station, and was rescued by one of the surfmen, who jumped in and brought the child ashore.
Aug. 2	Property saved.....	Louisville, Kentucky	A horse having backed into the river with a wagon, surfmen went to the place and assisted in getting them out.
Aug. 3	Recovery of body ..	Michigan City, Indiana, Lake Michigan.	Seeing a commotion at a bathing beach about $\frac{1}{4}$ mile from the station, surfmen pulled down and found that a boy, Robert Mason, 10 years old, had sunk and was supposed to be drowned. They got out their dragging gear and in less than a minute recovered the body. Resuscitation was attempted, but without success. The body was under water for about half an hour.
Aug. 3	.....do	Milwaukee, Wisconsin, Lake Michigan.	A boy having fallen off the north pier, about 500 yards from the station, surfmen hastened to the spot and one of them dived several times. Not finding the body, they began dragging and recovered it in about fifty minutes. Life was extinct, and the body was turned over to the local authorities. The lad was Thomas Corcoran, aged 12.
Aug. 4	Rescue from drowning.	Oswego, New York, Lake Ontario.	Seeing a man fall from a tug lying at a pier about 100 yards from the station, crew ran down to the place. The man had sunk under the tug, but Surfman Holbrook dived down and brought him up.
Aug. 4	Recovery of body ..	Erie, Pennsylvania, Lake Erie.	Learning that a man had drowned about $\frac{3}{4}$ miles from the station, crew went down in a boat and dragged for the body. They recovered it in about three hours and turned it over to the local authorities.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Aug. 5	Fire extinguished..	Erie, Pennsylvania, Lake Erie.	Seeing a dense volume of smoke rising about 1½ miles from station, surfmen went over and after two hours' work succeeded in putting the fire out.
Aug. 6	Recovery of body ..	Cleveland, Ohio, Lake Erie.	Learning that a man had drowned while bathing about a mile from the station, three of the crew took dragging apparatus in small boat and proceeded to the place. They recovered the body and turned it over to an undertaker. It was not identified.
Aug. 7	Rescue from drowning.	Evanston, Illinois, Lake Michigan.	While bathing near the station a boy became exhausted and went under twice. Two of the crew jumped in and brought him safely ashore.
Aug. 7	Recovery of body ..	Milwaukee, Wisconsin, Lake Michigan.	Three of station crew dragged for and recovered the body of a boy, Charles Schallings, 12 years old, who was drowned in the river ¼ miles west of station.
Aug. 7	Rescue from drowning; resuscitation.	Golden Gate Park, California.	While a woman was standing near the water's edge, she suddenly fell face forward into the bay. Four of the station crew rushed to her assistance and carried her up on the beach, where they put into operation the Service resuscitation rules. She recovered consciousness in about ten minutes. Keeper sent for a hospital ambulance, which soon arrived with a surgeon. He pronounced it heart trouble and took the woman away.
Aug. 8	.....do.....	Louisville, Kentucky	Crew dragged for and recovered the body of a colored man who fell overboard from a steamer lying near the station. He had been under only a few minutes and the surfmen soon resuscitated him.
Aug. 9	Rescue from peril...	Great Boars Head, New Hampshire.	A man and two women went out on the rocks near the station at low water and were cut off by the rising tide. Surfmen pulled to their rescue and brought them ashore.
Aug. 9	Recovery of body ..	Buffalo, New York, Lake Erie.	Learning that a man had fallen off a steamer into the canal and drowned, part of the crew dragged for and recovered the body. Attempted resuscitation, but without success. Gave the body in charge of coroner.
Aug. 9	Rescue from drowning.	Evanston, Illinois, Lake Michigan.	While four boys were bathing near the station one of them became exhausted and cried for help. One of the surfmen jumped in and brought him ashore.
Aug. 10	Recovery of body...	Point Allerton, Massachusetts.	Shortly after midnight surfmen succeeded in grappling the body of a man who was drowned at Nantasket Beach on the previous evening. The police took charge of the body.
Aug. 10	Rescue from drowning.	Oak Island, North Carolina.	While a man and four women were bathing in the surf near the station they were thrown down by the undertow and were unable to get out. The keeper and a party of soldiers from Fort Caswell rushed to their assistance and brought them all safely ashore.
Aug. 10	Assistance at fire ...	Sand Beach, Michigan, Lake Huron.	Surfmen worked one hour assisting firemen to extinguish flames that broke out in a summer resort near the station.
Aug. 11	Rescue from drowning.	Plum Island, Massachusetts.	An aeronaut, descending from a balloon in a parachute, drifted over the water and struck about 1,000 yards from the station. Surfmen pulled out in dory and brought him and his parachute ashore.
Aug. 11	Recovery of body...	Spermaceti Cove, New Jersey.	Patrolman found a body on the beach and hauled it up clear of the high tide. Keeper notified the coroner, who took charge. It was identified as that of Edward Smith, who was drowned on the previous day.
Aug. 11	.....do.....	Buffalo, New York, Lake Erie.	Keeper and two surfmen dragged for and recovered the body of a boy who was drowned in Erie Basin. Resuscitation was impossible, and the body was turned over to the coroner.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Aug. 12	Rescue from drowning.	City Point, Massachusetts.	Responding to an alarm from one of the bathing beaches at 9.50 p. m., part of the crew went out in the large station launch and arrived in time to rescue and resuscitate a man who had gone down while bathing.
Aug. 12	Recovery of body...	Spermaceti Cove, New Jersey.	Learning that the body of a drowned boy was on the beach about 1/4 mile from the station, keeper and one of the crew went to the spot and carried it to Highland Beach, where they gave it into the charge of friends and notified the coroner.
Aug. 14	.....do.....	Brant Rock, Massachusetts.	Learning that a young man had gone down while bathing about a mile from the station, keeper took surfboat and went to drag for the body. They found it after several hours had elapsed since the drowning, and kept charge of it until the coroner arrived.
Aug. 14	.....do.....	Long Branch, New Jersey.	Surfmen recovered an unidentified body from the surf and sent for the coroner, who came to the station and took charge.
Aug. 15	Transportation.....	Hunniwells Beach, Maine.	Two persons walked from the beach across to Wood Island at low water and were cut off by the rising tide. Surfmen transported them to the shore in the station boat. (See letter of acknowledgment.)
Aug. 15	Recovery of body...	Cleveland, Ohio, Lake Erie.	Learning that a man had drowned at a bathing beach about 9 miles from the station, keeper dispatched one of his crew with dragging gear to the scene. He secured assistance and two boats and succeeded in recovering the body, which he turned over to friends of the deceased.
Aug. 15	.....do.....	Holland, Michigan, Lake Michigan.	At 4.30 p. m. a young woman was drowned at Macatawa Beach by falling out of a rowboat. Surfmen, seeing commotion at that place, went over. They began dragging immediately, but the water was thirty feet deep, and it was not until 1.30 the next morning that they succeeded in recovering the body. Notified the coroner.
Aug. 16	Rescue from drowning.	Pentwater, Michigan, Lake Michigan.	A boy swimming near the station became exhausted and called for help. One of the surfmen swam to his rescue and carried him ashore.
Aug. 17	Recovery of body...	Duluth, Minnesota, Lake Superior.	In response to a telephone call from West Superior, surfmen pulled over and after an hour's work succeeded in recovering the body of a boy who was drowned while swimming.
Aug. 17	.....do.....	Milwaukee, Wisconsin, Lake Michigan.	Three of the station crew went a mile up the Milwaukee River and recovered the body of a boy who was drowned while bathing.
Aug. 18	Rescue from drowning.	Charlotte, New York, Lake Ontario.	Hearing a splash and a cry on the opposite side of the river, surfmen pulled over and found a man in a boat holding another man who was unconscious. Keeper took the unconscious man into the station boat and immediately set to work to resuscitate him. He came to in about ten minutes. He had jumped off the pier with suicidal intent. Keeper gave him stimulants and furnished him with dry clothes from the supply of the Women's National Relief Association.
Aug. 18	Assistance at fire...	Fort Point, California.....	Surfmen worked from 7 to 9 p. m. assisting the fire department to extinguish a fire which broke out in the joiner shop of the Fulton Iron Works, in San Francisco.
Aug. 20	Transportation.....	Racine, Wisconsin, Lake Michigan.	Several people were caught in a squall while fishing on one of the piers. Surfmen and lighthouse keeper transported them ashore, the seas having made a breach between the pier and the land.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Aug. 21	Recovery of body...	Old Chicago, Illinois, Lake Michigan.	Receiving word that a man had fallen from a wharf and drowned, five of the crew went to the place to try to recover the body. The water was eighteen feet deep, but Surfman Lofberg made a dive and brought up the body at the first attempt. Surfmen tried to resuscitate the body, but without success.
Aug. 25	Rescue from drowning.	Frankfort, Michigan, Lake Michigan.	In attempting to cross the river in an old skiff, a man lost his balance and fell overboard. Surfmen went out in the surfboat and rescued him.
Aug. 25	Recovery of body...	Milwaukee, Wisconsin, Lake Michigan.	One of the surfmen picked up the body of an infant on the beach. It was taken in charge by the coroner.
Aug. 26	....do.....	Chicago, Illinois, Lake Michigan.	Being informed by the police that a boy, John Woods, was missing and had last been seen at the foot of Fifty-sixth street, surfmen dragged in that vicinity and found his body. Turned it over to the authorities.
Aug. 26	....do.....	Milwaukee, Wisconsin, Lake Michigan.	Being informed by a passing steamer that a floating body had been seen off South Point, 4 miles from the station, surfmen went to the place and recovered it. Brought it to the city and turned it over to the coroner. It was identified as that of August Dahlke, who was drowned off South Milwaukee April 11, 1900.
Aug. 27	....do.....	Ocean City, Maryland....	At 6 p. m. a bather found the body of John Kelly, of Baltimore, floating near the surface of the water. He had been missing for about four hours. Keeper at once began an attempt to resuscitate the body, but without success, and the coroner then took charge.
Aug. 28	....do.....	Old Chicago, Illinois, Lake Michigan.	Surfmen grappled for and recovered the body of Henry Griesheimer, who was drowned by falling off the north pier on the 26th.
Aug. 29	....do.....	Smiths Point, New York..	An unidentified body of a man was found on the beach by one of the surfmen. Coroner was sent for and had it buried.
Aug. 29	....do.....	Milwaukee, Wisconsin, Lake Michigan.	Surfmen dragged for and recovered the body of Charles Brenstak, who was drowned in the Milwaukee River on the previous day. Coroner took charge.
Aug. 31	Medical assistance..	Peaked Hill Bars, Massa- chusetts.	Surfmen dressed the wound of a boy who accidentally shot himself in the hand with a revolver, and then took him home.
Aug. 31	Recovery of body..	Louisville, Kentucky.....	About midnight a report was brought to station that a man was drowned while trying to swim across the Ohio River on a wager. Surfmen immediately went to the scene and dragged for the body but failed to recover it until after daylight on the next morning. They notified the coroner, who took charge of the remains.
Aug. 31	Rescue from danger.	South Haven, Michigan, Lake Michigan.	Surfmen pulled out and brought ashore a boy who was drifting out into the lake on an old raft used by bathers.
Aug. 31	Succor.....	Old Chicago, Illinois, Lake Michigan.	A small boy fell off the N. pier, but was rescued by fishermen before the surfmen could reach the place. They took him to the station, gave him stimulants, dressed him in dry clothing from the stores of the Women's National Relief Association, and kept him at the station until his father called for him.
Sept. 1	Assistance at fire...	Holland, Michigan, Lake Michigan.	Station lookout discovered a barn to be on fire about a mile SE. of station. Surfmen launched the supply boat, and, taking fire buckets, reached the scene in time to prevent the flames from spreading to an adjacent house.
Sept. 3	Rescue from drown- ing.	Salisbury Beach, Massa- chusetts.	The station patrol waded into the surf and rescued an intoxicated woman who had been knocked down by a sea and was unable to regain her footing.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Sept. 3	Recovery of body ..	Cleveland, Ohio, Lake Erie.	While the steamer <i>City of Cleveland</i> was lying at the dock loading freight, a man fell into the water between the dock and steamer. Surfmen recovered the body, which had a large bruise over the eye, and applied the Service method of restoring the apparently drowned forty minutes without effect. They then telephoned for an undertaker, who came and took the body to the morgue.
Sept. 3	Rescue from drowning.	Cape Disappointment, Washington.	A man named Lars Hansen fell overboard from a small boat at the Ilwaco dock. Keeper pulled to him in a rowboat and safely hauled him out of the water.
Sept. 7	Assistance at fire ...	Point Judith, Rhode Island.	Surfmen went to a burning barn about a mile north of station and succeeded in saving the buildings adjacent thereto.
Sept. 7	Recovery of body ..	Michigan City, Indiana, Lake Michigan.	A man named Robert Clark was seen by the station lookout to fall into the river from the W. pier. The lookout shoved off immediately in a skiff and picked him up apparently dead. The station crew worked over him for over an hour to restore animation, but without success. The coroner's inquest developed the fact that death had resulted from apoplexy.
Sept. 8	Assistance rendered and recovery of bodies (92).	Galveston, Texas.....	The life-saving station was entirely destroyed by the great storm of September 8, 1900, and a surfman and the keeper's wife were killed in the disaster. The keeper and two surfmen were washed ashore in the lifeboat, and three surfmen who were in the station when it collapsed reached the land safe but much bruised. On the 9th the life-savers began to search for the bodies of the missing ones from the station and to render such assistance to those in need as lay within their power. They took provisions to the distressed people in the lighthouse, carried messages to and from the mainland, and placed roofings of tarpaulins over two large buildings which sheltered many survivors of the storm. They extricated from the wreckage of wharves and other ruins the dead bodies of ninety-two people and of thirty-four animals, which they disposed of by burying, burning, or towing out to sea.
Sept. 8	Succor and recovery of bodies (180.)	San Luis, Texas	This station was badly wrecked by the great storm of September 8, 1900, and had to be abandoned by the life-savers, who, with two imperiled families, took to the station boats, which they anchored in the lee of a clump of trees until the waters receded on the following morning; then patrol duty was at once begun and a great deal of station property was picked up along the beach. Two fishermen were found on the beach and carried to the station in the last stages of exhaustion, their boat having capsized during the previous night, causing the loss of life of a comrade. They were succored at the station and, after recovering their strength, were taken to Galveston by the keeper. Surfmen patrolled the beach until the 15th instant, during which time they recovered and interred the decomposed bodies of one hundred and eighty persons.
Sept. 8	Assistance to distressed people and recovery of bodies (39).	Velasco, Texas	At noon on this date the barometer was falling rapidly and the abnormal high water had covered the station grounds. The surfmen took much of their gear into the upper story of the station and secured everything as snug as possible. Keeper sent surfman No. 1 to aid the

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Sept. 8	Assistance to distressed people and recovery of bodies (39).	Velasco, Texas	families which lived near the boathouse at the mouth of the river, and through the efforts of this surfman no life was lost in that neighborhood during the storm. He carried women and children through the raging waters on his shoulders to places of safety. Keeper took his family to the station, and then went after the family of Surfman Koch, consisting of four women and three children, but they deemed their home safe and refused to leave it; therefore, the keeper left Surfman Koch to care for them and returned to station. Before sunset the wind was blowing with hurricane force and Keeper scuttled the station, all hands taking refuge in the upper story. During the evening a gun shot was heard in the direction of Surfman Koch's home. Keeper and the three surfmen at the station managed with much difficulty to get the surfboat out of the boathouse and go to assist him, taking the women and children to station and hauling them into the upper story through a window. Surfmen remained in their boat in the lee of some cedar trees during the remainder of the night, having a line between the surfboat and station for use in case of need. On the next morning they picked up near San Luis Pass the crew of the smack Katie and one man from the Pearl W. and took them to station. According to the story of these men they were the only survivors of the crews of eight fishing 'smacks' which had been swept across San Luis Peninsula from the bay to the Gulf during the storm. Surfmen sheltered fourteen destitute persons at the station and carried relief to many others during the next few days. They recovered and buried thirty-nine decomposed and unrecognizable bodies.
Sept. 10	Assistance at fire ...	Burnt Island, Maine	At 8 p. m. the station crew launched the surfboat and pulled to Martinsville, where they assisted to extinguish a fire which endangered the village.
Sept. 10	Rescue from drowning.	City Point, Massachusetts.	A small boy, named Herman K. Nickerson, fell overboard from the station. Surfmen took him from the water in an unconscious state, but they succeeded in restoring animation by using the Service method.
Sept. 10	Assistance to sick man.	Sullivans Island, South Carolina.	A man was taken sick near the station while in bathing. Surfmen carried him to his home and gave him treatment, which brought him to all right.
Sept. 10	Recovery of body ..	Louisville, Kentucky.....	Station crew recovered the body of a man who was drowned in the canal at the foot of Fourteenth street; took it to station and cared for it until the next day, when they delivered it to an undertaker whom the coroner sent for it.
Sept. 12	Succor.....	Cleveland, Ohio, Lake Erie.	The tug Alva B landed at the station the master and crew of six men from the schooner Dundee, which had sunk about 18 miles NW. by N. from station. Mrs. Kate Hoffman having been lost in the disaster. The master was much exhausted and was stripped of wet clothing, wrapped in warm blankets and put to bed. He was treated with hot-water bottles and hot stimulants until a physician arrived and took charge of him, removing him to a hospital on the next day.
Sept. 13	.....do	Gilberts Bar, Florida	Keeper gave lodging for the night to an underwriter's agent bound for the wreck of the Danish bark Paul, who had reached the station just before nightfall.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Sept. 14	Property saved	Point Betsie, Michigan, Lake Michigan.	Two surfmen went with a fisherman and assisted him to recover his pound net, which had broken away from its stakes during a recent gale.
Sept. 15	Assistance at fire ...	Salsbury Beach, Massa- chusetts.	Surfmen went to a fire in the center of Salsbury Beach and succeeded in saving one hotel from the flames before the arrival of the fire engine from Newburyport. Then they worked with the firemen, who were unable to get the flames under control until twenty-seven buildings were totally destroyed.
Sept. 17	Recovery of body ..	Erie, Pennsylvania, Lake Erie.	Surfmen pulled out to a floating object which had been reported by the pier lookout and found it to be the corpse of a man. They towed it to the station and delivered it to the coroner. It was identified as the body of the chief engineer of the American steamer John B. Lyon, which foundered about 28 miles W. of station on the 12th instant.
Sept. 17	Transportation of body.	.....do	At the request of the coroner the surfmen assisted to transport to town a corpse which had washed ashore 4 miles WNW. of station. It proved to be the body of the master of the foundered American steamer John B. Lyon.
Sept. 17	Transportation of a sick man.	Bois Blanc, Michigan, Lake Huron.	Station crew took a sick man to Cheboygan in the supply boat, in order that he might receive proper medical treatment.
Sept. 17	Rescue from drown- ing.	Duluth, Minnesota, Lake Superior.	While playing with other children near the boathouse dock, a small child fell into the water. Surfman Emerson, who happened to be close by, quickly rescued the little one, none the worse for its experience in the water.
Sept. 18	Body found.....	Erie, Pennsylvania, Lake Erie.	A body found on the north shore of the peninsula by some hunters was taken across to the bay and delivered to the coroner by the surfmen. It was identified as the body of William Smith, a fireman of the American steamer John B. Lyon, which foundered on the 12th about 28 miles W. of station.
Sept. 20	Recovery of body..	Cleveland, Ohio, Lake Erie.	At 6.30 p. m. the keeper received word by telephone that a man had fallen into the river about 1½ miles SE. of station and had drowned. Surfmen recovered the body, which proved to be that of Gus Lund, and turned it over to an undertaker.
Sept. 20	Assistance at fire...	Milwaukee, Wisconsin, Lake Michigan.	At 10 p. m. the station lookout reported a fire on Jones Island, about 200 yards SW. of station. Surfmen hastily pulled to the island in the surfboat and set to work removing the furniture from the burning building. The water being too shallow for the fire tug to land, surfmen transferred two boat loads of firemen and two lines of hose to the shore, and soon afterwards the firemen extinguished the flames.
Sept. 21	Succor.....	Plum Island, Wisconsin, Lake Michigan.	Two fishermen came to the station and asked for food and shelter for the night. They were given supper, lodging, and breakfast, and their boat was properly secured.
Sept. 23	Recovery of body..	Cleveland, Ohio, Lake Erie.	Keeper was informed by telephone that a man had fallen into the lake from Erie street pier and had drowned. Surfmen went to the pier with their dragging gear, recovered the body, which proved to be that of a man named Frank Smith, and turned it over to an undertaker.
Sept. 23	.....do	Louisville, Kentucky	Surfmen recovered the body of a boy who had fallen into the river and drowned. They took it to the station and tried to restore animation, but were not successful. The body was then taken to the boy's home, and the coroner notified of the casualty.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Sept. 24	Rescue from drowning.	Erie, Pennsylvania, Lake Erie.	A young woman went out on the end of the north pier to look for a pocket book which she had lost on the previous day. Soon the station lookout reported that she was missing, and surfmen hastily pulled out in a small boat, taking their grappling gear. The surfman on pier watch, with the aid of some fishermen, had her out of the water, however, before their arrival. They took her to the station, rubbed her well, gave her hot drink, wrapped her in blankets, and put her to bed until she recovered strength enough to go to her home with her mother, who came after her.
Sept. 25	Medicines furnished.	Saluria, Texas.....	The fever-stricken master of a schooner, which entered Pass Cavallo for a harbor, sent a seaman to the station to request a supply of medicine. Keeper furnished him with some quinine mixture and purgative pills from station medicine chest.
Sept. 25	Transportation.....	Bois Blanc, Michigan, Lake Huron.	Surfmen transported to Cheboygan two men who were in search for a tug and lighter which had left the island on the previous night with a load of bark, and which these men apprehended to be lost.
Sept. 30	Recovery of body...	Duluth, Minnesota, Lake Superior.	A man named Sam Mattison fell overboard from a rowboat behind Peavey's elevator, and was drowned before his companion could rescue him. Upon being informed of the accident, surfmen went to the place and dragged for the body, but did not find it. It was afterwards found among some driftwood on the beach, and was delivered to the coroner by the station crew.
Oct. 1	Recovery of body...	Old Chicago, Illinois, Lake Michigan.	Surfmen pulled out into the lake and picked up the body of a man which was reported floating off the foot of Indiana street. Turned it over to the police. The body was identified as that of M. Sullivan, a member of the Chicago Fire Department, who had been missing for more than a week.
Oct. 3	Recovery of bodies.	Two Rivers, Wisconsin, Lake Michigan.	About 4 a. m. the keeper was aroused by a woman who reported that her daughter had left the house with her baby during the night and could not be found, and it was feared that she had jumped into the river with the child. Keeper and two of his crew made a search of the river in the vicinity of the woman's house and soon found the bodies of both the mother and child near the shore. They had apparently been dead several hours. At the direction of the coroner the surfmen carried the bodies to the residence of the woman's mother. The names of the drowned were Maggie and Carrie Roulier, the latter an infant of 18 months.
Oct. 4	Recovery of body...	Marquette, Michigan, Lake Superior.	John Oleson, a lumberman, committed suicide by jumping off a wharf $\frac{1}{2}$ mile from the station about 2 a. m. The act was witnessed by the night crew on one of the ore docks, who reported to the city marshal, and that officer reported to the station. Surfmen turned out and at 3.20 had the body on the dock. Life was extinct, and the body was turned over to the local authorities.
Oct. 7	.....do.....	Cleveland, Ohio, Lake Erie.	Charles Compton, aged 14, was reported by his father as missing, he having been last seen playing on a tug about $\frac{1}{2}$ mile up the river from the station. Surfmen pulled to the place and recovered the body with drag. Mr. Compton took the body home.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Oct. 9	Recovery of body ..	Buffalo, New York, Lake Erie.	Learning that a man had fallen off a canal boat near the new breakwater, keeper sent two of his crew out to drag for the body. They recovered it in a short time and attempted resuscitation, but without success. Brought the body ashore and turned it over to the coroner.
Oct. 12	Assistance at fire ...	Frankfort, Michigan, Lake Michigan.	At 12.30 a. m. lookout reported a fire in South Frankfort, $\frac{1}{4}$ mile from the station. Crew turned out with force pump and hose and arrived on the scene in time to prevent the spread of the flames to adjoining buildings.
Oct. 12	.....do	Ludington, Michigan, Lake Michigan.	Crew assisted in putting out a fire on a pile driver which lay about 100 feet east of the station.
Oct. 13	Recovery of body ..	Cold Spring, New Jersey.	While four men were attempting to land through the surf in a skiff, the boat broached to, and one of them, William C. Rutherford, either jumped or fell overboard. The other three took the boat ashore and one of the surfmen, who chanced to be near, ran into the surf and brought Rutherford ashore within three minutes from the time of the accident. He was unconscious, and persistent efforts to restore animation were unavailing. The coroner took charge of the body and removed it. (For detailed account see caption "Loss of life.")
Oct. 16	Shelter	White Head, Maine	Two Indians, on their way to a neighboring town, were sheltered at the station during the prevalence of bad weather.
Oct. 16	.....do	Jerrys Point, New Hampshire.	A man and a boy came ashore from a sailboat in the afternoon and the wind freshened so as to make it unsafe for them to return. Keeper gave them shelter for the night at the station.
Oct. 21	Recovery of nets...	Race Point, Massachusetts.	Surfmen launched dory and picked up some mackerel nets which had caught on an old wreck off the station. Keeper advertised for an owner and on January 5, 1901, turned the property over to Captain Alexander Sargent, of Bay View, he having proven property. (See letter of acknowledgment.)
Oct. 24	Assistance at fire ...	Point Marblehead, Ohio, Lake Erie.	Being informed by telephone that a house was on fire at Lakeside and that the services of the crew were needed, surfmen hastened to the spot with fire apparatus and assisted in arresting the spread of the flames. Six houses were consumed.
Oct. 24	Assistance to injured man.	South Haven, Michigan, Lake Michigan.	A workman on the pier fell and cut his head and was brought to the station for treatment. Keeper washed and dressed the wound, and the man was then able to care for himself.
Oct. 27	Recovery of body ..	Barnegat, New Jersey....	Patrolman found a body in the surf and hauled it up on the beach. Keeper notified the coroner, who took the body away. It was identified as that of the mate of the schooner Emma A. Chesebro, of Stonington.
Oct. 27	.....do	Milwaukee, Wisconsin, Lake Michigan.	Being informed by a passing tug that a body was floating in the lake about $\frac{1}{2}$ mile N. of harbor entrance, surfmen pulled out and brought it to the station. It was that of a woman about 20 years old, and was not identified. Coroner took charge of it.
Oct. 29	Succor.....	Race Point, Massachusetts.	An old man arrived at the station so wet and exhausted that he could scarcely walk. Keeper took him in, gave him food, stimulants, and dry clothing, and cared for him until he was able to go on to his home.
Oct. 31	Recovery of body ..	Fairport, Ohio, Lake Erie.	Upon receipt of information that a man had drowned in the Grand River, $\frac{1}{2}$ mile S. of station, crew pulled to the place and dragged for the body. Recovered it in about twenty minutes and turned it over to relatives of the deceased. The name of the man was Mike Marketo.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Oct. 31	Transportation	Old Chicago, Illinois, Lake Michigan.	At 9 p. m. surfmen pulled out to the south pier and brought ashore three men who had been fishing and whose boat had been stove against the pier.
Nov. 2	Recovery of body .....	.....do	Keeper was notified that a man had fallen from the S. breakwater and was drowned. Station crew went to the place indicated, and after working about twenty minutes recovered the body, which they delivered to the city authorities.
Nov. 3	.....do	Milwaukee, Wisconsin, Lake Michigan.	Surfmen recovered and turned over to the coroner the body of a boy who had fallen off a dock and drowned about 2 miles from station.
Nov. 4	Rescue from drowning.	South Haven, Michigan, Lake Michigan.	Ed. Donohue fell overboard while making a landing at a dock in a rowboat. One of the station crew hauled him out of the water, took him home, removed his wet clothing, and put him in a bed.
Nov. 5	Body found.....	Point Adams, Oregon	A boy reported to the keeper that he had found the body of a man on the beach to the eastward of the station. Surfmen took charge of the body and delivered it to the coroner.
Nov. 6	Property saved	Hammonds Bay, Michigan, Lake Huron.	Surfmen went out to a boom of logs which was adrift about 4 miles NE. of station, towed it into shallow water with the assistance of the steam yacht J. A. Valentine, and secured it with the station anchor. A tug took charge of the boom about 11 p. m., and surfmen pulled out and recovered their anchor.
Nov. 7	.....do	Grande Pointe au Sable, Michigan, Lake Michigan.	Surfmen hauled about two thousand feet of hemlock lumber up on the beach, where it would be safe until the owner should come and claim it.
Nov. 8	.....do	South Haven, Michigan, Lake Michigan.	Surfmen picked up about two thousand feet of deck planking which had washed off the N. pier and restored it to the owner.
Nov. 9	Succor.....	Lone Hill, New York.....	A party of four gunners came to station and requested shelter, their catboat having parted her cable during the prevailing gale and drifted aground about 1 mile W. of station. Keeper sheltered them and, as they had had to wade ashore, furnished them with dry clothing from the stores of the Women's National Relief Association.
Nov. 9	.....do	Point of Woods, New York	Keeper gave dinner, supper, and lodging to three gunners who were unable to return to their yacht on account of the storm.
Nov. 9	.....do	Bayhead, New Jersey	Keeper gave food and shelter to two young men, whose small yacht the gale had driven onto the beach.
Nov. 9	Assistance at fire ...	Duluth, Minnesota, Lake Superior.	At 7.30 p. m. the station patrol discovered a fire in a vacant house about $\frac{1}{4}$ mile N. of station. Surfmen were unable to save the house, but, by forming a bucket brigade, they prevented the flames from spreading to the adjacent buildings.
Nov. 11	Succor.....	Point of Woods, New York.	Surfmen furnished provisions to a gunning party who were without food and whose boat had stranded during the night about 2 miles N. of station.
Nov. 12	Fresh water furnished.	Galveston, Texas.....	The keeper of the Fort Point lighthouse notified the station crew that he was almost out of fresh water and had no way of renewing his supply. Surfmen towed out to the lighthouse a skiff which contained a large barrel and several buckets filled with water. On the 19th they transported an additional supply to the lighthouse.
Nov. 16	Rescue from danger.	Fourth Cliff, Massachusetts.	A man named John Monroe became mired on the mud flats of Herring River, about $\frac{1}{2}$ mile from station. The keeper heard his cries for help, and pulled to his assistance in a dory, finding him in the

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Nov. 16	Rescue from danger.	Fourth Cliff, Massachusetts.	mud nearly up to his hips. By using the dory's thwart and oars, the keeper succeeded in extricating the man from his perilous position.
Nov. 16	Succor.....	Plum Island, Wisconsin, Lake Michigan.	Two belated fishermen called at station and requested shelter for the night. Keeper took them in and cared for them until the next morning.
Nov. 17	Assistance to a woman.	Absecon, New Jersey.....	At 1.15 a. m. the surfman on patrol heard cries for help, and, upon hastening in their direction, found that seven or eight men were attempting to assault a woman. The men released her upon the surfman's approach, and she appealed to him for protection; he took her to the station and gave her shelter until morning.
Nov. 17	Rescue from danger.	Grand Marais, Michigan, Lake Superior.	During the middle watch the surfman on patrol found an old man lying in the snow near the beach in an unconscious condition. The surfman picked him up and carried him to a house near the patrol route, where he received proper treatment and soon recovered. The temperature was below the freezing point on the night of this rescue.
Nov. 17	Assistance to injured man.	Plum Island, Wisconsin, Lake Michigan.	One of the assistant light keepers at Plum Island lighthouse cut his hand seriously while splitting wood. He ran to the life-saving station, where the keeper gave him treatment to stop the flow of blood, and then two surfmen took him in an ice boat to Detroit Harbor, where he could have the services of a doctor.
Nov. 21	Body found	Fairport, Ohio, Lake Erie.	Surfman on patrol found on the beach the decomposed body of a new-born infant, which he carried to the station and delivered to the coroner.
Nov. 22	Assistance at fire ...	Monmouth Beach, New Jersey.	Patrolman discovered a fire in a large building on the beach during the mid-watch. Surfmen hastened to the scene and extinguished the flames, caused by the lodgment of large burning cinders upon the roofs of adjacent cottages. They also saved some fishermen's nets which were spread out near the flames. Keeper notified the fire companies of Long Branch and Seabright, who, however, refused to leave their own fire limits on account of the strong wind that was blowing. To the surprise of the surfmen, they found in the ruins of the burned building the body of Thomas Robbins, which they turned over to the coroner.
Nov. 22	Rescue from danger.	Cleveland, Ohio, Lake Erie.	Keeper received a telephone message at 7.30 p. m. informing him that there were five men on the end of E. breakwater, who were unable to reach the shore. Station crew launched surfboat and landed them safe.
Nov. 22	Recovery of body...	Racine, Wisconsin, Lake Michigan.	Two surfmen went 3 miles NW. of station and, with their grappling gear, recovered the body of a man who had drowned on the previous night. A wagon and the dead bodies of a team of horses had been pulled out of the water before their arrival. The coroner took charge of the body, which was that of a colored man named William Oats.
Nov. 29	Assistance to a demented woman.	Shark River, New Jersey.	Surfmen took charge of a demented woman whom they found wandering on the beach, and turned her over to a police officer for safe-keeping until her friends could send for her.
Nov. 29	Rescue from drowning.	Louisville, Kentucky.....	Keeper, with the assistance of a bystander, hauled out of the water a man who had fallen into the river from the Louisville and Cincinnati wharf.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1900. Dec. 1	Succor	Oregon Inlet, North Carolina.	Two Swedish fishermen, named Johnson, had their boat upset in the surf on the north side of Oregon Inlet, 2½ miles N. of station, and one was drowned. The other was rescued by other fishermen in the vicinity and taken to their camp. Upon hearing of the casualty, keeper went to the camp and brought the rescued man to the station, gave him stimulants and put him to bed. Kept watch over him all night, and in the morning he was able to return to his work.
Dec. 6	Recovery of body ..	New Shoreham, Rhode Island.	Learning that the body of a man had washed ashore on Block Island, near the southeast light, crew got a permit to remove it, and went to the place with a wagon. Put the body into the wagon and delivered it to an undertaker.
Dec. 8	Medical assistance .	Plum Island, Massachusetts.	Two young men came to the station, one of them having a severe cut in his wrist. Keeper washed and dressed the wound and sent the young man to a physician.
Dec. 12	.....do	Corson Inlet, New Jersey.	A man at work grading the street near the station had one of his fingers severely bruised and torn and came to the station for relief. Keeper applied an anodyne and bandaged the wound.
Dec. 12	Recovery of body ..	Marquette, Michigan, Lake Superior.	Two of station crew dragged bottom near the ore docks and recovered the body of Michael Fitzgerald, who had been missing for about a fortnight.
Dec. 17	.....do	Two Rivers, Wisconsin, Lake Michigan.	At request of a policeman, keeper took a pike pole and examined the bottom of the river near Washington street, and soon recovered the body of John Cubicek, an aged pauper. The city authorities took charge of the remains.
Dec. 18	Succor	Oswego, New York, Lake Ontario.	About 7 p. m. keeper found, near the station, an intoxicated man who had fallen into the river. He took the man into the station and kept him near the fire until he was removed by the police.
Dec. 20	.....do	Caffeys Inlet, North Carolina.	Keeper gave shelter to three persons from an open boat, who were becalmed near the station.
Dec. 21	.....do	Gay Head, Massachusetts.	Three men arrived at the station with a dory full of fish, they having been lost from their schooner, the Maude Gertrude, during thick weather. Keeper kept them over night and then sent them to the Cuttyhunk Station, whence they were sent to New Bedford.
Dec. 21	Assistance to man exhausted.	Rehoboth Beach, Delaware.	Sunset patrol found a man who had been gunning in the marshes and who had become exhausted from exposure and overexertion. Patrolman took him to a drug store in Rehoboth and left him in charge of the druggist.
Dec. 26	Assistance to a sick man.	Cuttyhunk, Massachusetts.	The keeper of Cuttyhunk light station having been taken with profuse bleeding at the nose, the keeper of the life-saving station treated the hemorrhage with medicines from station locker and sent for a tug to come to take the light keeper to the hospital at New Bedford.
Dec. 26	Recovery of body ..	Old Chicago, Illinois, Lake Michigan.	Being notified that two men were believed to have been drowned near the Illinois Central slip, keeper went to the place and examined the bottom of the harbor through a hole in the ice, and soon brought up one body. It was recognized as that of Oscar J. Braun, of Chicago. The keeper searched for the body of the other man supposed to have been lost, but was unable to locate it.
1901. Jan. 3	Assistance to injured man.	Burnt Island, Maine.....	A man living near the station seriously cut his foot while chopping wood. Keeper gave him treatment to stop the flow of blood, and then two surfmen took him to Port Clyde, where a physician sewed up and dressed the wound.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. Jan. 4	Assistance to intoxicated man.	Plum Island, Massachusetts.	A man who was lying on the beach near the low-water mark in a drunken stupor was picked up by the surfmen and turned over to his friends.
Jan. 8	Assistance at fire ...	Salisbury Beach, Massachusetts.	Shortly after midnight the S. patrol discovered a fire in a cottage on the beach. Station crew hastened to the scene and prevented the fire from spreading to the adjacent cottages by keeping them wet down with water taken from the sea. The cottages were unoccupied at this season of the year.
Jan. 8	Body found.....	Old Chicago, Illinois, Lake Michigan.	Upon being notified that a body was floating in a slip, keeper went to the place, hauled it out, and turned it over to the city authorities. It proved to be the body of James Crowley, who was drowned on December 25.
Jan. 16	Assistance to injured man.	Velasco, Texas	While returning to the station from San Luis Pass with a wagonload of station supplies, one of the surfmen found lying helpless on the beach an old man named Edward McGrath, who had been badly injured by an explosion on the 14th, while he was trying to blow up an old wreck. The surfman wrapped him up in blankets and took him to the station, where the crew stripped off his wet clothing, gave him stimulants, food, and dry clothing from the supplies of the Women's National Relief Association, and then carried him to Velasco for medical treatment.
Jan. 17	Succor.....	Bethel Creek, Florida	A man who had been drenched by a cold, heavy rain while traveling on the beach applied at the station for succor. He was furnished with food, dry clothing, and shelter for the night.
Jan. 18	.....do	Rehoboth Beach, Delaware.	Surfmen carted to station and cared for until sober two drunken men whom they found lying on the beach near the surf in a helpless condition.
Jan. 20	Rescue from drowning.	Long Branch, New Jersey.	A boy fell through the ice on the lake and was in danger of drowning. Assisted by a man who was close at hand, a surfman crawled out on the ice, shoving a plank ahead of him, threw a line to the boy, and safely hauled him to the shore. Keeper cared for the boy at the station until the next day and informed his parents at Elberon of the casualty.
Jan. 21	Body found.....	Point Adams, Oregon.....	Surfmen took charge of the body of a man which was found on the beach in a badly decomposed condition. It was four feet ten inches in height and was believed to be that of a Chinaman. It was turned over to the coroner.
Jan. 30	Recovery of property.	Cold Spring, New Jersey..	Surfmen assisted the owners to recover two hundred fathoms of 10-inch hawser and four hundred fathoms of 3-inch running line which had fouled an old wreck while a tug was at work on the schooner John Russell.
Feb. 5	Recovery of body..	Milwaukee, Wisconsin, Lake Michigan.	Keeper recovered from the lake the body of a man, about 4 mile S. of the station. Notified coroner and he took charge. The body was not identified.
Feb. 7	Transportation	Mosquito Lagoon, Florida.	A pedestrian, making his way along the beach, was transported to the mainland by the station keeper.
Feb. 9	Fire extinguished ..	Petersons Point, Washington.	At 2.40 a. m. fire was discovered in a dwelling in the town of Westport. Surfmen turned out and hurried to the scene, tore up sidewalks, knocked down fences, wet buildings close by, and prevented the spread of the flames. Only one house was consumed. (See letter of acknowledgment.)

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. Feb. 13	Succor.....	Blue Point, New York....	Keeper supplied dry clothes from the supplies of the Women's National Relief Association to a fisherman who had fallen through the ice. After being supplied with dinner at the station, he left for his home.
Feb. 22	.....do.....	Lone Hill, New York.....	Two fishermen came to the station with wet clothing, having been thrown into the water from their "scooter." Keeper gave them dry clothes from the Women's National Relief box.
Feb. 24	.....do.....	Little Island, Virginia....	During a heavy snowstorm two men, who were traveling along the beach, were succored at the station.
Feb. 24	Recovery of property.	Thunder Bay Island, Michigan, Lake Huron.	While hauling firewood out to the light-house, a man and his team broke through the ice. Keeper of life-saving station and assistant light keeper sent another team after the load and saved one of the horses; the other horse froze to death.
Mar. 5	Rescue from peril ..	Point Adams, Oregon	A man who was digging a well about $\frac{1}{2}$ of a mile S. of station was buried alive by the caving in of the sand. Surfmen hastened to the scene and, assisted by some soldiers from Fort Stevens, began to dig the man out. After six hours of hard work they extricated him, still showing signs of life. The combined efforts of the post surgeon and the life-saving crew restored natural breathing after having worked artificial respiration for one hour and forty-five minutes.
Mar. 15	Shelter	Mosquito Lagoon, Florida.	A young man, who was walking along the beach on his way to Cape Canaveral, 40 miles distant, was sheltered overnight at the station.
Mar. 16	Rescue from drowning.	Fairport, Ohio, Lake Erie.	An intoxicated man fell overboard while trying to get into a small boat at the iron-ore dock opposite the station. Keeper and his son (inactive season) pulled out in a small boat, hauled the man out of the water in time to save his life, and took him to the station.
Mar. 17	Recovery of bodies (2).	Point Reyes, California ..	Surfmen hauled to the top of the cliff the body of a man from the sealing schooner <i>Enterprise</i> , who was drowned on the 15th instant, near Chimney Rock, Drakes Bay, and delivered it to the coroner. They searched for the body of another man who was drowned at the same time, but failed to find it until the 26th instant. It was badly mutilated and unrecognizable when found, and keeper turned it over to the coroner as soon as possible.
Mar. 26	Clothing furnished .	Chester Shoal, Florida ...	A young man in a small sharpie became thoroughly drenched in a heavy rain squall. He came to station for succor, and keeper furnished him with dry clothing from the stores of the Women's National Relief Association.
Apr. 11	Assistance at fire ...	Ocean City, Maryland....	At 11.40 p. m. the station patrol reported that a small hotel on the beach was on fire. Surfmen hastened to the scene, taking buckets, ladders, and their fire extinguisher. With the aid of some volunteers they saved two hotels and the casino, which stood near the burning building, and which caught on fire several times. (See letters of acknowledgment.)
Apr. 13	Rescue from danger.	Chatham, Massachusetts .	Two young men who were out gunning became mired about $\frac{1}{2}$ of a mile N. of station. Surfmen hastened to the place and rescued one of the men, who had sunk in the mud up to his waist. The other man had extricated himself, but was unable to help his companion.
Apr. 16	Succor.....	Jones Beach, New York..	Two young men were caught in a strong NE. gale while out gunning, and could not return to their homes. Keeper succored them at the station overnight.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. Apr. 16	Fire extinguished..	Sullivans Island, South Carolina.	Soon after midnight the station patrol discovered a fire in the rear of the barracks of Company M, First Artillery. By quick work he extinguished the flames before they did any damage.
Apr. 18	.....do.....	Shark River, New Jersey.	At 2.45 a. m. a messenger reported that there was a fire in a hotel near the station. Surfmen went to the building, found the fire in the partition behind a fireplace, and put it out before the arrival of the local fire company.
Apr. 19	Rescue from drowning.	City Point, Massachusetts.	Keoper launched his small boat and rescued a boy named William Leonard Humphrey, who had fallen off the wharf while fishing about 200 yards W. of station. He carried the boy to station, dressed him in dry clothing from the Women's National Relief Association, and then took him to his home.
Apr. 20	Recovery of property.	Cleveland, Ohio, Lake Erie.	At 4.50 a. m. a timber crib which had been moored alongside of the east breakwater went adrift in the NE. gale. Keoper sent word of the casualty to the owners and to a tug which soon reached the station. Surfmen went out and made a line fast to the crib for the tug, which then towed it into the harbor and secured it in a safe position.
Apr. 20	Assistance at fire...	Golden Gate Park, California.	At 6.30 p. m. surfmen hastened to a burning house about ¼ mile S. of station, and succeeded in saving an adjoining building in which the flames had already gained headway.
Apr. 21	Recovery of body ..	Point Adams, Oregon	A fisherman came to station and reported that John Peterson, the night watchman on a wharf near the station, was missing. Surfmen went to the wharf and dragged for the body, finding it about 200 feet SE. of the wharf. They notified the coroner, who took the body to Astoria.
Apr. 22	.....do.....	Old Chicago, Illinois, Lake Michigan.	Having been notified that there was a man's body floating outside the north pier, surfmen pulled out, recovered it, and turned it over to the city authorities.
Apr. 26	Fire extinguished..	Yaquina Bay, Oregon	Surfmen extinguished a fire which had started on the roof of a house near the S. key post.
Apr. 29	Transportation of body.	Ship Canal, Michigan, Lake Superior.	Surfmen transported to the shore and turned over to the proper authorities the dead body of a man who had been accidentally killed by being caught in the drum of a steam windlass on a dredge in the harbor.
May 1	Recovery of body ..	Two Heart River, Michigan, Lake Superior.	Keoper found a body washed up on the beach, which was identified as that of Joseph Kaskadin, one of the five men who were lost from a lighter off Grand Marais on November 18, 1900. Keoper notified the relatives and the authorities, but as no one came for the corpse, he gave it decent burial on May 4.
May 1	Assistance at fire...	Michigan City, Indiana, Lake Michigan.	Discovered a fire in a building near the station, surfmen set to work extinguishing the flames and removing the furniture. They had the fire under control when the fire company reached the scene.
May 1	Succor.....	Old Chicago, Illinois, Lake Michigan.	A boy who fell off the station pier was rescued by a fisherman near at hand. Keoper took the boy to station, gave him dry clothing from the stores of the Women's National Relief Association, and hot drinks.
May 2	Resuscitation.....	.....do.....	The crew of a small steam launch brought to station the inanimate body of a man which they had pulled out of the water near the N. pier. Surfmen immediately applied the Service method for restoring life, and, after about five minutes' work, the man began to breathe naturally. He was wrapped in blankets, given stimulants, and in a few hours was sent to a hospital in a police wagon.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. May 3	Assistance at fire...	Nauset, Massachusetts ...	Surfmen were informed by the keeper of the Nauset lights that an old building near the light station was on fire. They hastened to the scene and assisted to save the lighthouse fence and an adjacent cottage, but could not prevent the destruction of the building.
May 5	Recovery of body ..	Cleveland, Ohio, Lake Erie.	Word having been received by telephone that a boy had fallen into the river and drowned about 2½ miles SE. of station, surfmen recovered the body and turned it over to an undertaker.
May 8	Body found	Two Heart River, Michigan, Lake Superior.	A dead body having been found about 5 miles W. of station, surfmen went after it, placed it in a rough box, and gave it decent burial. It was identified as the body of Ernest Nizer, who was lost from the lighter off Grand Marais on November 18, 1901. Keeper notified the relatives of the deceased of the finding of the body.
May 8	Assistance to a sick man.	Old Chicago, Illinois, Lake Michigan.	Finding a sick man lying on the pier in the rain at 2 a. m., the pier watchman brought him to station, where keeper gave him dry clothing from the stores of the Women's National Relief Association, medicine, and put him to bed. On the next morning keeper called an ambulance and sent him to a hospital.
May 9	Recovery of body ..	Grand Haven, Michigan, Lake Michigan.	A man named George Sole fell down upon the pier and rolled off into about two feet of water. Surfmen took the body from the water within a minute from the time of the accident and tried to resuscitate it until the arrival of a physician, who had treated the man for heart trouble, and who now declared that heart disease had caused the man's death. Surfmen turned the body over to the coroner and assisted him to transport it to the man's home.
May 10	Recovery of bodies (3).	Erie, Pennsylvania, Lake Erie.	After searching for many days, surfmen recovered the body of one of the four men who were drowned on night of the 21st of April, in Erie Harbor, and delivered it to the coroner. They recovered two more bodies on the following day.
May 10	Recovery of body ..	Chicago, Illinois, Lake Michigan.	The police patrol informed keeper that a boy had drowned off Fiftieth street. Surfmen dragged for the body, recovered it, and turned it over to the boy's parents.
May 12	.....do	Old Chicago, Illinois, Lake Michigan.	In response to a telephone call, surfmen went to the dock of the Barry Transportation Company and grappled for the body of a boy who had fallen overboard. In about ten minutes they recovered the body, worked in vain for one-half hour in endeavoring to resuscitate it, and then turned it over to the city authorities.
May 13	Succor.....	Sand Beach, Michigan, Lake Huron.	The crew of five men from the Am. sc. Narragansett, abandoned in a sinking condition about 50 miles ENE. of station, landed 7 miles S. of Harbor Beach, and applied at station for succor. Keeper furnished them with food and shelter.
May 16	Succor.....	Great Egg, New Jersey...	Two belated wayfarers were sheltered over night and given breakfast at the station.
May 16	Medical assistance..	.....do	A carpenter working near the station received a serious cut upon the head. Surfmen dressed the wound, using laudanum from the station medicine chest.
May 17	Recovery of body ..	Louisville, Kentucky,.....	Surfmen went to a pond about four miles from station and recovered the body of a colored boy who was drowned on the previous evening.
May 18	Resuscitation	Chicago, Illinois, Lake Michigan.	A man who had been taken from the water near the Casino pier was brought to the station in an unconscious condition. Surfmen applied the Service method of restoring the apparently drowned, and after two hours' work the man revived, and keeper took him to his home.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. May 19	Clothing furnished.	Grand Haven, Michigan, Lake Michigan.	A man who had fallen into the lake while fishing was rescued by his companions, who brought him to the station. Keeper gave him a change of clothing from the stores furnished by the Women's National Relief Association.
May 20	Succor	Gay Head, Massachusetts.	Three men left on shore by a fishing schooner were succored at the station until the schooner returned for them on the next day.
May 20	Body found.....	Chicago, Illinois, Lake Michigan.	Station patrol found beneath the pier the body of a man whose right hand contained an empty bottle labeled "carbolic acid." The name, Frank Goodwin, Stillwater, Minnesota, was found on the body, which was turned over to the police.
May 21	Rescue from drowning.	Oswego, New York, Lake Ontario.	Station lookout saw a small boy fall into the water from the E. pier at 5.30 p. m. He ran to the place, dove into the water, rescued the boy, and took him to the station, where he was properly cared for until he was able to go to his home.
May 22	Succor.....	Manomet Point, Massachusetts.	Two men who were trying to beat to the southward landed at the station just before nightfall and requested succor, as they were cold and wet. Keeper gave them food and lodging for the night.
May 22	Assistance to injured man.	Old Chicago, Illinois, Lake Michigan.	At 1 a. m. the pier watch found a man, partly intoxicated, who had hurt his leg. The watchman called the station crew, who took the man into their Whitehall boat and landed him on the barge to which he belonged.
May 23	Recovery of body ..	Sturgeon Bay Canal, Wisconsin, Lake Michigan.	Surfmen dragged for and recovered the body of a sailor named Edward Bogart, who had fallen into the water from a dock and drowned. They turned it over to the city authorities.
May 23	Rescue from danger.	Baileys Harbor, Wisconsin, Lake Michigan.	An intoxicated teamster drove his horses into the lake and became mired. After an hour's work with lines and purchases, surfmen succeeded in extricating the man and his horses from their dangerous position.
May 24	Recovery of body ..	Duluth, Minnesota, Lake Superior.	About 7 a. m. surfmen were informed that one of the crew of the steamer Queen City had fallen into the slip and drowned while trying to board his vessel during the night. Surfmen went to the slip, about 5 miles SW. from station, recovered the body, and delivered it to the coroner.
May 25	Succor.....	Hog Island, Virginia.....	A fisherman who had been caught in the heavy storm came to station in a cold and wet condition. Keeper gave him shelter and dry clothing from the stores of the Women's National Relief Association.
May 25	Assistance to fishermen.	Little Island, Virginia.....	Keeper assisted three fishermen, en route from Cape Hatteras to Virginia Beach, to transport their dories and fishing gear from the sound to the ocean, and succored them at the station for the night, which was wet and stormy.
May 26	Recovery of body ..	Ashtabula, Ohio, Lake Erie.	Station crew dragged for and recovered the body of Peter King, a boiler maker, who fell off a gang plank and was drowned while boarding a steamer at the dock.
May 28	Rescue from danger.	Absecon, New Jersey.....	Surfmen launched their boat and rescued three workmen who were clinging to a post in the rough surf. The men had been at work on a temporary platform, cutting the post for the girders of a new board walk, when the tide rose and the rough sea washed away their means of reaching the beach.
May 29	Recovery of body ..	Galveston, Texas.....	Station crew dragged for and recovered the body of a boy named Jacob Serini, who had drowned while bathing at the foot of Tenth street. They notified the coroner, and turned the body over to an undertaker.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. May 29	Recovery of body ..	Old Chicago, Illinois, Lake Michigan.	Having been informed by the master of a tug that there was a man's body floating in the lake, about 2 miles SE. of station, surfmen pulled out, towed it to the shore, and turned it over to the police.
May 30	Rescue from drowning.	Milwaukee, Wisconsin, Lake Michigan.	A boy, fishing on the pier, fell into the water, about 600 yards E. of station. One of the surfmen jumped upon a stringer and succeeded in pulling the boy out of the water. Keeper gave him hot drinks and furnished him with dry clothing from the supplies of the Women's National Relief Association.
May 31	Recovery of bodies (2).	South Chicago, Illinois, Lake Michigan.	At 6 p. m. a policeman reported to keeper that two men were drowned in the Calumet River at the foot of Ninety-fifth street and requested the surfmen to recover the bodies. Keeper and four surfmen went to the scene of casualty with their dragging gear, found both bodies, and delivered them to the city authorities.
May 31	Property recovered.	Cape Disappointment, Washington.	Surfmen pulled out to Peacock Spit and picked up a gill net, worth about \$125, which was drifting out to sea with the ebb tide. They restored it to its owner.
June 3	.....do.....	Ludington, Michigan, Lake Michigan.	Surfmen went out in two small boats and grappled for an anchor which had been slipped near the end of the N. pier. They found it, hove it up, took it to station, and notified the owner that he could get his property by applying at the station.
June 3	Assistance to injured man.	Muskegon, Michigan, Lake Michigan.	While painting the lighthouse the light keeper fell from a staging, broke his arm in two places, and injured his side. Surfmen hastened to his assistance, carried him home, and put him to bed.
June 4	Rescue from drowning.	South Haven, Michigan, Lake Michigan.	A little girl who was playing on the dock near the station fell into the river. Keeper and a surfman, seeing the mishap, jumped into the water and rescued the child.
June 6	Property recovered.	Saint Joseph, Michigan, Lake Michigan.	Surfmen picked up fifty large pieces of timber which were drifting out of the river and restored them to the contractor to whom they belonged.
June 7	Clothing furnished.	Isle of Wight, Maryland..	Keeper furnished clothing from the supplies of the Women's National Relief Association to two young men who had been drenched in a heavy rain storm.
June 9	Recovery of body...	Cleveland, Ohio, Lake Erie.	A man named Gilbert Parker was drowned while fishing about 4 miles E. of station. Surfmen took their grappling gear to the place of mishap, recovered the body, and delivered it to an undertaker.
June 11	Rescue from danger.	Fort Point, California....	Surfmen pulled out and took two men off a scow which threatened to break from its moorings in the strong wind and heavy sea. The men having been drenched by the sea breaking over the scow, keeper took them to station and gave them dry clothing from the stores of the Women's National Relief Association.
June 14	Fire extinguished..	Frankfort, Michigan, Lake Michigan.	Surfmen put the station force pump into the surfboat and pulled to one of the railroad docks which was reported to be on fire. Surfmen had a stream of water on the fire in 10 minutes, and after an hour's work they extinguished it.
June 14	Recovery of body...	Racine, Wisconsin, Lake Michigan.	Station patrol from 4 to 8 a. m. picked up the body of a boy in the river. It was identified as the remains of Nathan Pifkowitz, who had been missing since the 2d instant. The coroner took charge of it.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. June 14	Assistance to injured woman.	Two Rivers, Wisconsin, Lake Michigan.	Two surfmen carried to her home a woman who had suffered severe physical injury while in the vicinity of the station.
June 15	Recovery of property.	Cape Disappointment, Washington.	Surfmen found on the W. side of Sand Island a gill net worth \$300 and restored it to the owner.
June 16	Transportation of a sick man.	Hammonds Bay, Michigan, Lake Huron.	Surfmen took a sick man from the steamer John Owen and transported him to Rogers City, where he could obtain medical treatment.
June 18	Rescue from drowning.	Old Chicago, Illinois, Lake Michigan.	Station watchman on pier saw a man fall from the pier into the lake at 3 a. m. He alarmed the station crew, who immediately pulled to the pier and found the man, much exhausted, clinging to a pile. One surfman jumped into the water and tied a line around the man's body. Surfmen then hauled him into their boat and took him to station, where he was furnished with dry clothing and a place to sleep.
June 19	Succor.....	Point Marblehead, Ohio, Lake Erie.	Keeper succored at the station for the night three men and a boy who arrived at the pier near the station in a small sloop at 9 p. m. They were bound for Catawba Island and departed early in the morning.
June 21	Recovery of bodies (3).	Ottawa Point, Michigan, Lake Huron.	After patrolling the beach for several days searching for the bodies of the people lost in the wreck of the steamer Baltimore, surfmen recovered three bodies and turned them over to the proper authorities.
June 21	Recovery of property.	Two Rivers, Wisconsin, Lake Michigan.	A fisherman came to station and requested keeper to assist him to recover his fish net, which he had lost near the end of the harbor pier. Surfmen grappled for the net, found it, and assisted the fisherman to get it ashore.
June 22	Rescue from drowning.	Manistee, Michigan, Lake Michigan.	Station lookout saw Bessie Blodgett, aged 14 years, fall from N. pier into the lake and at once sounded the alarm. Two surfmen ran to the pier, succeeded in getting hold of the drowning girl, and hauled her out of the water. They took her to station and supplied her with dry clothing from the stores of the Women's National Relief Association. After supper she was able to go home.
June 23	Fire extinguished ..	Ludington, Michigan, Lake Michigan.	Discovering a fire on a slab dock near the station, surfmen formed a bucket line and succeeded in extinguishing the flames.
June 24	Recovery of body ..	Manistee, Michigan, Lake Michigan.	Station lookout having reported that there was floating down the river a black object resembling a human body, surfmen pulled out and recovered the remains of Doctor Ferguson, who had been missing since the 21st instant. Keeper notified the coroner, who came to station and took charge of the body.
June 25	.....do	Cleveland, Ohio, Lake Erie.	Surfmen dragged for and recovered the body of a man who had drowned while bathing about 1/4 mile SW. of station. An undertaker took charge of the body, which was identified as that of Pete Murphy, a fireman on the steamer City of Buffalo.
June 25	.....do	Duluth, Minnesota, Lake Superior.	Being informed that there was a man's body floating in the water on the Superior side of the bay, surfmen went after it and delivered it to the coroner. It had evidently been in the water some time, and no one was able to identify it.
June 25	.....do	Chicago, Illinois, Lake Michigan.	After grappling for two hours, surfmen recovered the body of a boy named William Petersen, who was drowned while bathing in the lagoon at Sixty-third street. They delivered the body to the boy's father.

Services of crews (miscellaneous)—Continued.

Date.	Service rendered.	Station and locality.	Nature of casualty.
1901. June 27	Recovery of body ..	Fort Niagara, New York, Lake Ontario.	At 9 p. m. keeper was notified that Henry Laughlin was drowned about 2½ miles up the Niagara River while in bathing. Surfmen immediately pulled to the place of drowning, recovered the body at 10.30 p. m., and carried it to the man's home.
June 28	.....do	Galveston, Texas.....	Surfmen towed the badly decomposed body of an unknown man from Hitchcock Reef to the station and turned it over to the coroner.

VESSELS WARNED FROM DANGER.

1900-1901.

VESSELS WARNED FROM DANGER.

The information contained in the pages included under this caption is of far more significance than a hasty reading is likely to suggest. When it is stated that 231 vessels were warned away from dangerous places by the signals of the patrolmen, it should be borne in mind that 210 of the instances occurred in the night, frequently during fog, rain-storms, or snowstorms, and a large proportion of them in freezing weather.

Under these conditions and the circumstances narrated, it is evident that but for the presence of the life-saving patrols a stranding would have occurred in nearly every case; and when it is remembered, as the accounts show, that many of the warnings were made at such extremely perilous points as the Peaked Hill Bars, on the coast of Cape Cod, and various shoals and bars on the coasts of Virginia and North Carolina, where vessels which once strand seldom escape without more or less serious results, one finds some basis upon which to intelligently estimate the amount of property and the number of lives saved by means of the patrol system.

Probably an average of 10 persons on board each vessel warned away would be below the actual fact, and yet only that number would make an aggregate of more than 2,000 lives imperiled, while an estimate of \$10,000 as the value of each vessel, leaving the cargoes out of the account, would aggregate more than \$2,000,000. In many cases two signals were necessary to impress the danger of the situation upon the captains of the imperiled craft.

No part of the work performed by the Life-Saving Service is more important or more entitled to the gratitude of the seafaring and commercial world than the patrol, which guards the entire coast within the limits of the Service during all hours of the night, from sunset to dawn, and during the daytime in thick and stormy weather.

WARNED BY NIGHT SIGNALS.

Date.	Station and locality.	Circumstances of warning.
1900.		
July 2	Petersons Point, Washington.	At 1.30 a. m. the south patrol observed a steamer's lights very close to the beach and showing that she was approaching the shore head on. He flashed a Coston signal, whereupon she turned and stood away.
July 11	Ilwaco Beach, Washington...	At 2 a. m. the north patrol discovered a large ship much too close to the beach. His first warning signal was not heeded, but his second was answered from the ship, which then was hauled offshore.
July 13	Umpqua River, Oregon.....	At 9.30 p. m. the station patrolman burned a Coston signal to notify a steamer that she was dangerously near the land. She acknowledged the warning by standing seaward at once.
July 30	Yaquina Bay, Oregon	Station patrol fired a danger signal at 9.20 p. m. to warn off a steamer that was perilously near the N. reef.
Aug. 7	Shinnecock, New York.....	During the first nightwatch patrol burned three red lights to a schooner which was in danger of running ashore. She went about and stood away.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1900.		
Aug. 12	Watch Hill, Rhode Island....	At 10 p. m. patrolman warned a vessel off Napatree Point.
Aug. 15	Cuttyhunk, Massachusetts ...	A sailboat was twice warned out of dangerous positions during the night.
Aug. 19	Parramore Beach, Virginia....	Shortly after midnight a steamer was prevented from stranding by the usual night danger signal.
Aug. 22	Quogue, New York	Sunset patrol warned a steamer off the beach.
Aug. 23	Turtle Gut, New Jersey.....	At 11.20 p. m. patrol saw a schooner heading for the beach and dangerously close in. He fired a Coston signal and she then went about in safety.
Aug. 24	Santa Rosa, Florida	Seeing a steamer standing into danger, patrol burned his red light. The vessel thereupon anchored until daylight.
Aug. 25	Highland, Massachusetts.....	At 8.30 p. m. patrol burned his Coston to a vessel that was dangerously close to the bar. She altered her course and passed clear.
Aug. 26	Cobb Island, Virginia	At 8 p. m. the patrol warned a vessel off a dangerous course.
Aug. 28	Isle of Wight, Maryland.....	During the mid watch a schooner was seen approaching too close to the beach. Patrol burned a danger signal and the vessel went about.
Aug. 30	Plum Island, Massachusetts ..	Warned a yacht against attempting to cross the bar at 7.40 p. m. She stood out into deep water.
Aug. 30	Atlantic City, New Jersey	A north-bound steamer was warned off the beach at 1 a. m.
Sept. 1	Point Lookout, New York.....	Between midnight and 4 a. m. the station patrol burned a Coston light to warn away a vessel which was dangerously near the beach.
Sept. 8	Lone Hill, New York	At 10.30 p. m. the station patrol, seeing a schooner stand in dangerously near the bar, burned a warning signal, whereupon she went about and stood offshore.
Sept. 8	Cobb Island, Virginia	At 7.40 p. m. the patrol saw a vessel in danger and at once fired a Coston signal, which caused her to change her course and pass clear.
Sept. 11	Indian River Inlet, Delaware..	During the middle watch the south patrol made out a schooner standing in too near the beach. He flashed his Coston signal, whereupon she stood seaward.
Sept. 11	Plum Island, Massachusetts ..	At 8.45 p. m. a vessel that was standing dangerously near the bar was warned of her peril by the flash of a Coston light. She kept away and anchored until daylight.
Sept. 13	Fourth Cliff, Massachusetts...	At 11.45 p. m. the patrol discovered a steamer too close in-shore and heading for the beach. He burned a danger signal and she at once turned offshore.
Sept. 13	Turtle Gut, New Jersey	At 10 p. m. the patrol warned off a schooner which was much too near to Turtle Gut Inlet bar.
Sept. 15	Orleans, Massachusetts	About midnight one of the station patrolmen burned a Coston signal to inform a large 2-masted schooner that she was standing into danger. She immediately tacked offshore.
Sept. 16	Plum Island, Massachusetts ..	At 10.20 p. m. the station patrol warned off a steamer which was running dangerously near the beach.
Sept. 16	Gurnet, Massachusetts.....	Between 8 p. m. and midnight the north patrol warned off a sloop which was standing too close to the beach for safety.
Sept. 16	Bellport, New York.....	A schooner heading directly on shore and very near the beach was warned away by the Coston signal of the station patrol during the watch from midnight to 4 a. m.
Sept. 17	Gurnet, Massachusetts.....	During the first watch the north patrol discovered a vessel standing so close to the shore that she was in danger of being set on the sand bars by the strong surf that was heaving in. He burned a danger signal which caused her to haul off.
Sept. 19	Nahant, Massachusetts	Between 4 a. m. and sunrise the east patrol warned offshore a fishing schooner which was standing into danger.
Sept. 22	Wood End, Massachusetts	The south patrol from 8 p. m. to midnight saw a schooner approaching the shore too near for safety. He flashed a danger signal which caused her to haul offshore.
Sept. 23	Plum Island, Massachusetts ..	A yacht was warned away from Newburyport bar at 7.15 p. m., the bar being much too rough for her to cross.
Sept. 23	Knobbs Beach, Massachusetts	During the middle watch the south patrol saw a vessel standing in dangerously near the shore. He fired a warning signal, whereupon she tacked and stood away from her perilous position.
Sept. 24	Hog Island, Virginia	A steamer running much too near to the outer shoals was warned of her peril by the Coston signal of the station patrol at 7 p. m. She at once altered her course and passed clear.
Sept. 24	Cobb Island, Virginia	At 7.30 p. m. a steamer that was heading directly for the beach changed her course and steamed offshore upon seeing the warning signal displayed by the station patrol.
Sept. 25	Point Lookout, New York	The east patrol warned off a vessel which was dangerously near the beach during the watch from 8 p. m. to midnight.
Sept. 27	Orleans, Massachusetts.....	A schooner beating to the southward stood much too close in shortly after sunset. The station patrol flashed 2 danger signals and hailed her, whereupon she went about just in time to avoid stranding.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1900.		
Sept. 29	Metomkin Inlet, Virginia	Shortly before sunrise the station patrol warned away a vessel which was too near the shoals for safety.
Sept. 29	Wachapreague, Virginia	During the watch from 8 p. m. to midnight the patrol warned off a steamer whose lights indicated that she was approaching dangerously close to the shoals.
Sept. 30	Sandy Point, Rhode Island...	Soon after sunset the station patrol fired a danger signal to warn off a schooner that was standing along close to the breakers.
Sept. 30	New Shoreham, Rhode Island	Between sunset and 8 p. m. the north patrol saw a schooner dangerously near the shore. He flashed a Coston signal which caused her to steer a safe course.
Oct. 3	Knobbs Beach, Massachusetts.	A steamer was warned off a dangerous course between 8 p. m. and midnight.
Oct. 4	Tathams, New Jersey	Patrol burned two Coston signals to a vessel running too near the bar; at the second flash she hauled out into clear water.
Oct. 5	Indian River Inlet, Delaware.	During the mid watch patrolman saw a steamer standing toward the shoals and immediately fired a danger signal; the vessel changed her course, barely clearing the breakers.
Oct. 6	Plum Island, Massachusetts..	At 4.45 a. m. station patrol warned off a sailing vessel that was standing dangerously close to the beach.
Oct. 6	Pamet River, Massachusetts..	Patrol flashed a red light to a steamer heading in toward the beach, whereupon she shaped a safe course.
Oct. 10	Little Beach, New Jersey.....	Seeing a steamer with tow standing toward the shoals, patrol warned them off by Coston signal.
Oct. 13	Wallis Sands, New Hampshire	Patrol flashed a danger signal to a schooner heading toward the ledges, and the vessel at once altered her course and passed clear.
Oct. 13	Little Island, Virginia.....	Two red lights were burned in quick succession to apprise a steamer of her dangerous proximity to the beach; her course was at once altered to one of safety.
Oct. 13	False Cape, Virginia.....	Patrol from this station burned two Coston signals to a steamship running too close to the beach; the vessel hauled out at once.
Oct. 14	Peaked Hill Bars, Massachu- setts.	A schooner was warned off the bars at 5 a. m.
Oct. 15	Cape Henry, Virginia.....	Seeing a large steamer about to go ashore on the point of the cape, the patrol flashed two danger signals to warn her off; the vessel changed her course in time to avert a casualty.
Oct. 16	Peaked Hill Bars, Massachu- setts.	Patrol burned a red light to a schooner near the bars, and the vessel then edged out into safe water.
Oct. 16	Ottawa Point, Michigan.....	Two tugs towing a raft got into shoal water near the point, but pulled out when the patrol flashed his danger signal.
Oct. 16	Marquette, Michigan.....	During the mid watch the patrol made out, through the driving rain, a large steamer heading directly for the rocks; he immediately burned a Coston signal, which the steamer acknowledged by a blast of her whistle and then shaped her course for the breakwater.
Oct. 17	Wood End, Massachusetts....	A schooner was warned out of danger about 3 a. m.
Oct. 17	Peaked Hill Bars, Massachu- setts.	A steamer was seen heading dangerously close to the bars, but passed clear when warned by signal of her danger.
Oct. 17	North Beach, Maryland	The stranding of a schooner was averted by the flash of the patrolman's Coston signal.
Oct. 20	Aransas, Texas	In attempting the bar at night, a schooner mistook lights and was on the point of stranding when patrol burned a danger signal. The vessel at once hauled her wind and stood offshore.
Oct. 24	Ship Bottom, New Jersey.....	A steamer was warned off the beach at 10 p. m.
Oct. 25	Humboldt Bay, California	Both station patrolmen burned signals to a steamer heading too close to the beach; she hauled out.
Oct. 26	Cobb Island, Virginia	At 7 p. m. patrolman burned a red light to a schooner in danger, and she at once stood offshore.
Oct. 28	Indian River Inlet, Delaware.	Sunset patrol saw a steamer almost into the breakers and set off one of his Coston lights; the vessel hauled out into deep water.
Oct. 29	Ottawa Point, Michigan.....	A steamer with consort was made out heading directly for the beach at 10.25 p. m., but was warned in time to avoid stranding.
Nov. 7	South Brigantine, New Jersey.	Between sunset and 8 p. m. the station patrol fired a danger signal to warn off a steamer which was perilously close to the outer shoals. Upon seeing the signal she headed offshore and passed clear.
Nov. 8	Core Bank, North Carolina ...	During the evening watch the south patrol warned off a steamer which was too near the beach for safety.
Nov. 9	Ottawa Point, Michigan.....	At 10.30 p. m. the southwest patrol burned a Coston light, which warned off a steamer that was headed directly for the shore.
Nov. 11	North Manitou Island, Michi- gan.	At 1.40 a. m. one of the patrolmen observed a steamer heading toward the station and at once burned a danger signal, which caused her to shift her course to the southward. Her new course brought her into the bay and very close to the beach at the south patrol post, at which point the other station patrolman warned her off.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1900.		
Nov. 13	Atlantic City, New Jersey....	At 9.20 p. m. the north patrol warned off a steamer that was dangerously near shoal water.
Nov. 13	Townsend Inlet, New Jersey.	Station patrol warned a large schooner off Townsend Inlet bar at 7 p. m.
Nov. 14	Crisps, Michigan	At 11.45 p. m. station patrol fired a Coston signal to warn away a steamer which was headed for the shore during a snow squall. The keeper gave her another warning from the watch tower, and she turned offshore.
Nov. 15	Peaked Hill Bars, Massachusetts.	A schooner changed her course and cleared Peaked Hill Bars upon seeing the warning signal of the station patrol at 4.30 a. m.
Nov. 15	Crisps, Michigan	At 9.15 p. m., during a snow squall, the west patrol saw the loom of a steamer heading directly for the beach and very near it. He burned 2 danger signals in quick succession, which caused her to stop and back her engine, and then head out into the lake.
Nov. 15	Two Heart River, Michigan ..	About midnight the west patrol made out the lights of a steamer in a heavy snowstorm and immediately fired a warning signal. The lookout at the station burned another signal, and the steamer hauled offshore just in time to keep from stranding.
Nov. 16	Muskallonge Lake, Michigan.	At 7 p. m. the west patrol warned a steamer away from the beach by burning a Coston light.
Nov. 18	Wallis Sands, New Hampshire	At 10 p. m. the north patrol warned off a schooner which stood in from seaward and approached dangerously near the ledges.
Nov. 19	Cobb Island, Virginia	The station patrol discovered a vessel standing into danger at 2.25 a. m., and at once fired a warning signal, whereupon she stood off into deep water.
Nov. 19	Duluth, Minnesota	The south patrol saw a steamer heading on shore about 7 p. m., and immediately flashed a danger signal to warn her away. She heeded the warning just in time to avoid the breakers.
Nov. 21	Two Heart River, Michigan..	Between 8 p. m. and midnight, during a snowstorm, the east patrol warned a steamer off the beach by flashing a danger signal.
Nov. 21	Yaquina Bay, Oregon	During the middle watch the south patrol burned a Coston light to warn a steamer which was very near the shore. Upon seeing the signal she altered her course and kept off.
Nov. 25	Plum Island, Massachusetts..	Observing a sailing vessel standing perilously close to the bar at 2.20 a. m., the surfman on north patrol informed her of the danger by burning a Coston light, and she at once hauled off.
Nov. 25	Point Lookout, New York....	Shortly before sunrise one of the station patrolmen burned a Coston light, and thus warned away a vessel which was very close to the beach.
Nov. 25	Long Beach, New York	Surfmen on watch from 4 a. m. to sunrise burned a warning signal to a steamer which had approached much too near the shore in a thick mist. She immediately stood seaward for safety.
Nov. 26	Hog Island, Virginia	At 9 p. m. the station patrol saw a steamer running a course which would take her upon the shoals. Not until he had burned two warning signals did she haul out and pass clear.
Nov. 27	Wachapreague, Virginia	Surfman on south patrol warned a vessel off the shoals by flashing a Coston light.
Nov. 30	Peaked Hill Bars, Massachusetts.	A schooner which was in perilous proximity to Peaked Hill Bars was warned off by the station patrol at 9.30 p. m.
Dec. 2	Iiwaco Beach, Washington...	At 8.45 p. m. north patrol warned off a vessel that was running too close to the beach by flashing a Coston signal.
Dec. 3	Gull Shoal, North Carolina...	Sunset patrol N. displayed the night danger signal to a schooner heading too close to shore, vessel headed out at once.
Dec. 4	Nahant, Massachusetts.....	At 9.45 p. m. a schooner was warned off the east point of Great Nahant by Coston signal.
Dec. 8	Two Heart River, Michigan..	About 11 p. m. patrolman made out through the thick snowstorm the lights of a large steamer approaching the beach. He fired two Coston signals in rapid succession and the steamer soon headed out into the lake.
Dec. 9	Popes Island, Virginia	Shortly after dark a steamer and tow were seen approaching the beach too close and were given warning of their danger by night signal. Their course was thereupon changed to one of safety.
Dec. 11	Sandy Point, Rhode Island ..	East patrolman flashed his danger signal in time to prevent the stranding of a schooner during a snowstorm.
Dec. 12	Crumple Island, Maine	At 9 p. m., during a snowstorm, the lookout made out a schooner dangerously near the shoals. He fired a Coston signal, but as the vessel did not heed the warning he ran to the SE. end of the island and burned another. She thereupon changed course and passed clear.
Dec. 13	Wood End, Massachusetts....	A schooner approaching too close to the beach for safety was given warning of her danger by the patrolman's signal and at once headed out.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1900.		
Dec. 14	Wood End, Massachusetts...	Two schooners were warned off the beach during the night.
Dec. 16	Rehoboth Beach, Delaware ..	Night patrol flashed his Coston signal in time to prevent the stranding of a steamer.
Dec. 18	Creeds Hill, North Carolina..	A large steamer heading toward the breakers sheered out upon the flash of the night danger signal.
Dec. 24	Sandy Point, Rhode Island ..	West patrol made out a schooner in the fog heading for the beach. He burned a red light and warned her off.
Dec. 26	Green Run Inlet, Maryland ..	At 9.05 p. m. west patrol gave warning to a schooner that was in danger of stranding; she changed her course at once.
Dec. 28	Cape Fear, North Carolina ...	Shortly before daylight a steamer was seen approaching the north beach and patrolman at once set off his red light. The vessel headed out on a safe course.
Dec. 30	Damariscove Island, Maine ..	West patrol flashed his Coston to a vessel standing very near the west side of the island, whereupon she immediately changed her course and passed by in safety.
1901.		
Jan. 2	Cape Henry, Virginia	At 7.40 p. m. keeper burned a danger signal to warn off a large steamer that was approaching too close to the cape spit. She hauled off at once and passed safely.
Jan. 5	Nahant, Massachusetts	The west patrol warned a schooner from a dangerous position near Shag Rocks at 10.30 p. m.
Jan. 7	Wachapreague, Virginia	Seeing a vessel standing into danger, one of the surfmen on night patrol flashed a warning signal, whereupon she tacked and stood offshore.
Jan. 7	Cape Fear, North Carolina ...	Between 3 a. m. and sunrise, the south patrol warned off a steamer that was in danger of grounding on Cape Fear bar.
Jan. 11	North Scituate, Massachu- setts.	Soon after dark the south patrol observed a steamer too close to Long Ledge for safety. He fired a Coston signal which caused her to haul off.
Jan. 12	Ship Bottom, New Jersey.....	The surfman on south patrol from sunset to 8 p. m. burned a danger signal to warn a steamer that was standing along dangerously near the beach, whereupon she immediately altered her course and drew offshore.
Jan. 14	Plum Island, Massachusetts..	At 10.10 p. m. the keeper fired a warning signal to inform an inward-bound vessel that the Newburyport bar was too rough for crossing. She anchored until the next morning and then passed in safety.
Jan. 16	Green Run Inlet, Virginia....	About 11 p. m. the south patrol sighted a steamer perilously near the beach and at once fired a danger signal. She immediately changed to a safe course.
Jan. 17	Cahoons Hollow, Massachu- setts.	At 9 p. m. the south patrol burned a Coston signal to warn a steamer that was in danger of running ashore. She answered with a long blast of her steam whistle and stood away.
Jan. 17	Dam Neck Mills, Virginia	Surfman on patrol from sunset to 9 p. m. warned off a steamer which was too near the beach for safety.
Jan. 18	Tathams, New Jersey	A vessel was warned off the beach during the watch from 4 a. m. to sunrise.
Jan. 18	Wachapreague, Virginia	A steamer approaching too near the shoals changed her course and stood clear upon seeing the warning signal of the station patrol.
Jan. 19	Cobb Island, Virginia	Seeing a vessel standing toward danger at 5 a. m., the station patrol burned a Coston light which caused her to haul out into deep water.
Jan. 19	Yaquina Bay, Oregon	At 11 p. m. a steamer was warned off the beach by the north patrol.
Jan. 20	Point Lookout, New York....	Shortly after sunset the east patrol saw a vessel dangerously close to the beach and warned her away by a Coston light.
Jan. 20	Assateague Beach, Virginia..	During the first watch the east patrol burned a warning signal to a vessel standing too near the beach, whereupon she steered out into deep water.
Jan. 20	Wachapreague, Virginia	During the middle watch a steamer was warned off Dawson Shoals.
Jan. 20	Cobb Island, Virginia	A vessel standing into danger steered for deep water upon seeing the warning signal of the station patrol at 5 a. m.
Jan. 21	Assateague Beach, Virginia ..	At 5 a. m. the east patrol burned a Coston light to warn off a schooner that was running into a dangerous position. She altered her course in time to avoid stranding.
Jan. 22	Blue Point, New York.....	During the middle watch the patrol fired a danger signal to warn a vessel whose lights showed her to be heading directly for the beach. Upon seeing the signal she changed her course to seaward.
Jan. 23	Turtle Gut, New Jersey	At 7 p. m. the station patrol warned a steamer off Cold Spring bar.
Jan. 23	.....do	At 10.40 p. m. the station patrol fired a danger signal to warn away a schooner which was standing much too close to the north bar of Cold Spring Inlet.
Jan. 24	Rehoboth Beach, Delaware ..	Between 8 p. m. and midnight the south patrol warned off a steamer which was much too close to the beach.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1901.		
Jan. 24	Oregon Inlet, North Carolina.	Station patrol from 3 a. m. to sunrise saw a steamer standing too near the beach for safety. He fired a warning signal and she hauled off.
Jan. 27	Turtle Gut, New Jersey	The north patrol warned a steamer off Turtle Gut Inlet bar during the middle watch.
Jan. 28	Little Island, Virginia	The south patrol from midnight to 3 a. m. discovered a steamer heading directly for the beach and very near it. He immediately fired a danger signal, whereupon she quickly changed her course and went clear.
Jan. 29	False Cape, Virginia	About 11 p. m. the north patrol observed a steamer to be heading toward the beach and very near the outer bar. Upon seeing the flash of his red patrol signal, she stopped and backed her engines just in time to avoid going hard aground.
Jan. 30	South Brigantine, New Jersey.	At 8.30 p. m. the north patrol burned a red danger signal to warn a steamer which was bound S. on a course that converged too much inshore. Heeding the warning, she headed out on a safe course.
Feb. 3	Rehoboth Beach, Delaware..	Sunrise patrol warned a steamer off the beach shortly before daybreak.
Feb. 4	Turtle Gut, New Jersey	At 6.50 p. m. a steamer was prevented from stranding on Turtle Gut bar by patrol signal.
Feb. 5	High Head, Massachusetts...	At 3.30 a. m. patrolmen made out the light of a vessel through the falling snow, indicating that she was in danger of stranding. Upon the flash of his Coston, the vessel put about and passed clear.
Feb. 5	Cold Spring, New Jersey	During a heavy fall of snow night patrolman made out a vessel close to the beach. He burned a danger signal and the vessel anchored.
Feb. 5	Parramore Beach, Virginia ..	South patrol warned a steamer out of a dangerous position about 1 a. m.
Feb. 6	.....do	Another steamer was given warning under similar conditions to the foregoing.
Feb. 7	Assateague Beach, Virginia..	A night danger signal was burned in time to prevent the stranding of a vessel on the shoals.
Feb. 7	Wachapreague, Virginia.....	Both patrolmen burned signals to a vessel standing into danger, whereupon she altered her course and passed clear.
Feb. 8	Ocracoke, North Carolina....	Seeing a vessel's light approaching the beach, patrolman burned a red light as a warning. The vessel promptly headed offshore and soon disappeared.
Feb. 8	San Luis, Texas	At 10 p. m. a vessel was warned off the beach by Coston signal.
Feb. 9	Lone Hill, New York.....	About 8 p. m. patrolman burned a danger signal to a steamer with tow heading for the beach. They immediately edged away on a safe course.
Feb. 10	Atlantic City, New Jersey....	A steamer standing into danger was given timely warning at 9.30 p. m. and headed out.
Feb. 11	Short Beach, New York.....	At 7 p. m. a vessel was given warning of her dangerous proximity to the beach. She immediately hauled out toward deep water.
Feb. 12	.....do	Two Coston signals were burned to apprise a vessel of her dangerous position. She headed out just in time to avert a casualty.
Feb. 13	South Brigantine, New Jersey.	A large south-bound steamer was seen heading toward the shoals and a Coston signal was immediately burned as a warning. She sheered out without delay and cleared the obstruction.
Feb. 15	Hog Island, Virginia.....	At 4.50 a. m. a sailing vessel was warned off the shoals.
Feb. 18	Barnegat, New Jersey.....	A steamer heading a dangerous course was given warning by Coston signal and altered her course at once.
Feb. 19	Race Point, Massachusetts...	Sunset patrol, east, flashed his red light to a schooner too close to the beach. She kept away and passed out of view.
Feb. 19	Hog Island, Virginia.....	A steamer running too close to the shoals was given warning in time to avoid stranding.
Feb. 20	Nauset, Massachusetts	A danger signal was burned to a schooner heading too far inshore. She tacked and stood away.
Feb. 20	Cobb Island, Virginia	A vessel was warned out of danger at 11.35 p. m.
Feb. 22	Little Beach, New Jersey.....	North patrol set off his Coston signal at 11 p. m. and warned a steamer off the beach.
Feb. 23	Race Point, Massachusetts...	Sunrise patrol burned his danger signal to a schooner heading for the beach. She headed out at once.
Feb. 24	North Scituate, Massachusetts.	During a snowstorm in the midwatch the south patrol heard a steamer close inshore. He fired a danger signal, which caused her to haul out.
Feb. 27	Wood End, Massachusetts....	A schooner was warned off the beach by the station patrol in the first watch.
Feb. 27	Southampton, New York.....	Between midnight and 4 a. m. the station patrol burned a danger signal to warn away a tug, with a barge in tow, which was dangerously near the beach.
Mar. 1	Great Boars Head, New Hampshire.	At 5 p. m., during a thick snow squall, the north patrol prevented the stranding of a schooner by burning a danger signal. She hauled off and barely cleared the rocks.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1901.		
Mar. 1	Metomkin Inlet, Virginia	The patrol from midnight to 4 a. m., seeing a vessel very near the beach, fired a signal to warn her away.
Mar. 3	Cranberry Isles, Maine	A schooner standing into danger was warned off by the burning of a patrol signal.
Mar.	Indian River Inlet, Delaware.	Between 8 p. m. and midnight the north patrol saw a steamer standing along too near the beach. He fired a red patrol signal, whereupon she hauled out.
Mar. 4	Wood End, Massachusetts....	About 6 p. m. surfmen burned two danger signals to warn away two schooners which were approaching the drift ice off Provincetown Harbor. They tacked in time to avoid the ice.
Mar. 6	Point Lookout, New York	Shortly before sunrise the east patrol saw a vessel dangerously close to the beach and warned her off by flashing a Coston light.
Mar. 8	Saluria, Texas.....	About 10.20 p. m. the surfman on patrol warned off a schooner which was about to enter the breakers on the shoal off the old bar of Pass Cavallo.
Mar. 9	Plum Island, Massachusetts..	At 9.30 p. m. the south patrol burned a Coston signal to warn off a vessel that was standing much too close to the shore. Upon seeing the signal she stood away on a safe course.
Mar. 14	Atlantic City, New Jersey	The surfman on patrol at 8.45 p. m. saw through the fog a vessel's lights, which showed her to be heading directly for the beach. He quickly burned a warning signal, which caused her to turn offshore quickly and go clear.
Mar. 17	Seatack, Virginia.....	Fired three patrol signals to warn a large steamer off the beach.
Mar. 18	Race Point, Massachusetts...	During the middle watch the surfman on patrol warned off a vessel which was dangerously near the beach.
Mar. 18	Hog Island, Virginia	At 1 a. m. the surfman on patrol burned a Coston signal to inform a three-masted schooner that she was running close to the shoals. She heeded the warning by standing off for deep water at once.
Mar. 21	Ocracoke, North Carolina....	During the first night watch the south patrol burned a danger signal and thus warned off a vessel whose lights showed that she was much too near the beach.
Mar. 25	Rehoboth Beach, Delaware ..	Surfman on patrol from 8 p. m. to midnight warned off a steamer which was standing along dangerously close to the beach.
Mar. 26	Cape Disappointment, Wash- ington.	Seeing a vessel that was too near the beach for safety at 9.30 p. m., the station patrol burned a warning signal, which caused her to haul off.
Mar. 28	Ocean City, New Jersey	A vessel running perilously near the shoals was warned off by the station patrolman.
Mar. 29	Tiana, New York.....	The station patrol from midnight to 4 a. m. saw a steamer too close to shore and warned her off by flashing a danger signal.
Mar. 31	North Beach, Maryland	At 2.30 a. m. the south patrol burned a Coston light and thus warned off a schooner which was much too near the beach for safety.
Mar. 31	Metomkin Inlet, Virginia	Seeing a vessel dangerously near the beach between 8 p. m. and midnight, the station patrol warned her away by firing a Coston signal.
Apr. 1	Peaked Hill Bars, Massachu- setts.	At 7.20 p. m. surfman on patrol warned a schooner off Peaked Hill Bars.
Apr. 1	Petersons Point, Washington.	Shortly before daylight the north patrol saw a steamer's lights close to the bar off the entrance to Grays Harbor. He flashed a warning signal and she immediately hauled off, acknowledging the signal by sounding 3 blasts with her steam whistle.
Apr. 7	Race Point, Massachusetts...	During the middle watch the station patrol warned off a 3-masted schooner, which was about to run ashore.
Apr. 8	Plum Island, Massachusetts..	At 11.30 p. m. the north patrol saw the green light of a sailing vessel perilously near the bar at the mouth of the Merrimac River. He fired a danger signal, whereupon she stood seaward.
Apr. 8	Absecon, New Jersey.....	Surfman on patrol at 4.30 a. m. saw a vessel standing too close to the beach and at once burned a danger signal. She immediately tried to go about, but touched lightly on the bottom. Fortunately she soon floated and stood offshore.
Apr. 9	Hog Island, Virginia.....	Seeing a vessel heading directly for the shoals at 11 p. m., the north patrol flashed a danger signal, which caused her to change her course and go clear.
Apr. 9	Cobb Island, Virginia	Surfman on patrol warned a vessel out of danger at 11 p. m.
Apr. 12	Little Beach, New Jersey.....	At 10 p. m. the south patrol saw a vessel standing toward the shoals and at once fired a Coston signal, whereupon she altered her course and stood out of danger.
Apr. 12	Ilwaco Beach, Washington...	Between 8 p. m. and midnight the north patrol warned off a steamer that was approaching too close to the beach.
Apr. 13	Wood End, Massachusetts....	A schooner which was heading directly on shore during the first watch was advised of her dangerous proximity to the beach by the flash of a Coston light. She immediately tacked and stood offshore.
Apr. 13	Shoalwater Bay, Washington	The surfman on patrol from midnight to 4 a. m. warned a vessel off the beach by burning a Coston light.

Warned by night signals—Continued.

Date.	Station and locality.	Circumstances of warning.
1901. Apr. 14	Indian River Inlet, Delaware.	During the middle watch the north patrol saw a steamer's light which showed her to be standing much too near the beach for safety. He burned a danger signal, upon seeing which she promptly hauled off.
Apr. 16	Yaquina Bay, Oregon	A steamer was warned off the beach by the south patrol during the watch from midnight to 4 a. m.
Apr. 17	Zachs Inlet, New York	A vessel standing too close to the beach immediately turned offshore upon seeing the flash of the patrol's night signal.
Apr. 18	Cape Henlopen, Delaware....	Surfman on north patrol during the first watch fired a danger signal in time to prevent a steamer from running on the beach in a thick fog.
Apr. 18	Hog Island, Virginia	At 10 p. m., during a fog, the north patrol saw a vessel's green light and her sails very near the beach. He quickly burned a warning signal, whereupon she disappeared and must have barely cleared the bar.
Apr. 21	Wood End, Massachusetts....	Hearing a vessel's sails sleet in a thick fog during the middle watch, the north patrol flashed a Coston light and the vessel drew offshore.
Apr. 24	Toms River, New Jersey	Between 1 a. m. and sunrise the north patrol discovered a vessel much too near the beach and warned her off by burning a danger signal.
Apr. 25	Manomet Point, Massachusetts.	Shortly after sunset the south patrol saw through a rift in the fog a steamer standing into danger. He fired a warning signal, which caused her to head offshore.
Apr. 25	Ilwaco Beach, Washington....	Surfman on north patrol from 8 p. m. to midnight warned off a steamer that was approaching dangerously near the beach.
Apr. 28	High Head, Massachusetts ...	Seeing a vessel perilously near the bar at 11 p. m., surfman on patrol flashed a warning signal, whereupon she kept away.
May 2	Wood End, Massachusetts	The south patrol warned off a schooner that was much too near the beach at 9 p. m.
May 6	Ile of Wight, North Carolina.	During the first watch the south patrol saw a two-masted schooner standing close to the beach. He fired a Coston patrol signal, which caused her to go about.
May 7	Hunniwells Beach, Maine	The south patrol from midnight to 4 a. m. burned a patrol signal to warn off a schooner which was standing dangerously near the beach. She at once tacked and went clear.
May 9	Indian River Inlet, Delaware.	The surfman on patrol south from 8 p. m. to midnight saw by a steamer's lights that she was standing too close to the beach for safety. He fired a red patrol signal, and she promptly stood out of danger.
May 10	Sandy Point, Rhode Island....	At 3 a. m. station patrol burned a Coston signal and warned off a vessel that was standing into danger.
May 11	Wood End, Massachusetts	Soon after sunset, when the weather was foggy, station patrol made out a schooner very near the shore. He quickly burned a warning signal, whereupon she altered her course and escaped.
May 11	Cedar Creek, New Jersey	The north patrol from 1 a. m. to sunrise saw both side lights of a large steamer, showing that she was heading directly for the beach. He flashed a warning signal, upon seeing which she turned and ran seaward.
May 12	Ilwaco Beach, Washington ...	During the first night watch both station patrolmen burned danger signals to warn off a vessel that was approaching too near the shore, thereby causing her to haul off.
May 15	Blue Point, New York	The station patrol warned a schooner off the bar at 3 a. m.
May 18	Sandy Point, Rhode Island ...	During a thick fog, seeing a schooner close to the breakers, the station patrol burned a danger signal, and thus prevented a stranding.
May 20	Plum Island, Massachusetts ..	About 7 p. m. the south patrol saw a vessel dangerously near the beach and warned her away by flashing a patrol signal.
May 20	Knobbs Beach, Massachusetts.	By burning two Coston signals in succession the north patrol caused a schooner to stand away from a perilous position near the beach at 7.35 p. m.
May 20	False Cape, Virginia.....	Surfman on patrol from midnight to 3 a. m. burned two Coston signals in rapid succession to caution a steamer that was in danger of striking Pebble Shoal. She altered her course in time to avert a disaster.
May 21	Yaquina Bay, Oregon.....	At 2.20 a. m. the south patrol warned off a steamer that was steering a dangerous course.
May 25	Cuttyhunk, Massachusetts....	During the watch from 8 p. m. to midnight the station patrol informed a schooner, by burning a warning signal, that she was too near the beach for safety, and she at once changed her course.
May 26	Little Island, Virginia.....	Station patrol from 3 a. m. to sunrise warned off a steamer that was very near the beach during thick weather.
May 28	Humboldt Bay, California....	At 1.30 a. m. the station patrolman saw a steamer standing too close to the beach. He burned a warning signal, thereby causing her to haul out.
May 31	Wood End, Massachusetts	Seeing a fishing schooner very near the shore during the first watch, station patrol warned her away by a danger signal.

BY DAY SIGNALS.

Date.	Station and locality.	Circumstances of warning.
1900.		
Aug. 11	Great Boars Head, New Hampshire.	A sloop which was standing too close to the rocks was warned off by code signal J D.
Aug. 23	Fletchers Neck, Maine	Watch on north patrol saw a large yacht standing into a blind channel and hailed her, giving directions for making the harbor.
Aug. 31	Great Boars Head, New Hampshire.	Set signal J D to a schooner standing too close to the rocks; she tacked and passed clear.
Sept. 23	Plum Island, Massachusetts..	Keeper hoisted the signal K P (Bar impassable) to warn three yachts that the bar at the mouth of the Merrimac River was too rough for them to try to enter. They waited until the bar became smoother and then crossed safely.
Nov. 11	South Brigantine, New Jersey.	At 8 a. m. the keeper hoisted international code signal J D (You are standing into danger) to warn off a large steamer which was headed for the south end of Brigantine Shoals. She made out the signal, altered her course, and passed clear.
Nov. 13	Plum Island, Massachusetts..	A steamer with a dredger and some scows in tow stood in dangerously near the bar at the mouth of the Merrimac River at 7.30 a. m. The keeper warned her away by hoisting the international code signal J D.
Nov. 28	Saluria, Texas.....	A schooner coming in from sea steered for the entrance to the old channel into Pass Cavallo, the master evidently not knowing that it was impassable. Keeper hoisted range flags for the proper channel, whereupon the schooner changed her course and safely entered the harbor.
Dec. 14	Cape Fear, North Carolina....	About noon a three-masted schooner was seen standing directly for Frying Pan Shoal. Keeper had the signal J D set, whereupon the schooner headed out to sea.
1901.		
Jan. 22	False Cape, Virginia	At 4.30 p. m. the keeper hoisted international code signal J D to warn off a steamer which was running too near the beach. Upon making out the signal she stood seaward.
Mar. 2	Cape Disappointment, Wash- ington.	Station lookout hoisted international code signal K T (Port the helm) to keep the schooner Occidental from running on Peacock Spit. She obeyed the signal and went clear.
Mar. 4	Yaquina Bay, Oregon	Surfmen hoisted international code signal J D to warn off a steamer which was dangerously near the S. reef.
Mar. 10	Southside, California.....	The keeper, considering the bar dangerous, hoisted international code signal J D to warn two deep-laden coasting steamers which were approaching. One managed to cross the bar, taking heavy breakers on board, but the other turned back.
Mar. 21	Saluria, Texas.....	Two schooners were standing off and on near the old bar, looking for the entrance into Pass Cavallo. Keeper hoisted range flags for the proper channel, and thus warned them away from the old bar, which was dangerous.
Apr. 5	False Cape, Virginia	About noon the station lookout perceived a steamer whose course was taking her dangerously near Pebble Shoals. He hoisted international code signal J D (You are standing into danger), whereupon she changed her course and went clear.
Apr. 12	Smiths Creek, Florida	Keeper of the house of refuge waved a large red cloth to a small naphtha launch which had anchored in a position that would be dangerous if the usual strong on shore wind should spring up. The launch got under way and proceeded southward after seeing the signal.
May 4	Great Boars Head, New Hampshire.	Keeper hoisted international code signal J D, and thereby warned away a schooner which was standing in too close to the rocks.
May 12	False Cape, Virginia	At 1 p. m. the station lookout saw a steamer which was steering a course that would have carried her onto the shoals. He hoisted international code signal J D, and thereupon she altered her course and went clear.
May 27	Little Island, Virginia.....	Keeper hoisted international code signal J D (You are standing into danger) to warn off a steamer which was heading for the beach during thick weather. She made out the signal in time to change her course and haul off.
June 1	Great Boars Head, New Hampshire.	At 11.40 a. m., when the fog lifted, keeper discovered a schooner running directly toward some sunken rocks. He at once hoisted signal J D, international code, and the schooner jibed and went clear.
June 17	Charlevoix, Michigan.....	At 2 p. m., during a thick fog, station patrol hailed and warned off the fish tug Fearless, which was approaching dangerously near the shore.
June 17	Point Reyes, California.....	During a fog the station patrol discerned a steamer heading directly for the beach about 100 yards N. of station. He ran to station and rang the alarm bell, which caused her to stop and then turn offshore.

LETTERS OF ACKNOWLEDGMENT.

LETTERS ACKNOWLEDGING THE SERVICES OF LIFE-SAVING CREWS.

The following letters and other acknowledgments of valuable assistance rendered by the surfmen to vessels in distress have been received during the year at the office of the General Superintendent. Besides these, the gratitude of those who have received aid has been noted in wreck reports and transcripts of journals in numerous other instances, but not in such form as to be readily shown here.

MILWAUKEE, WISCONSIN, *July 5, 1900.*

DEAR SIR: Permit me to express my gratitude for the prompt assistance rendered by the Milwaukee life-saving crew to my boy, Hugh Adams, and his three companions, who certainly would have perished had it not been for the heroic deed of the Milwaukee crew.

I am not able to express my heartfelt gratitude in a financial way, but I feel it my duty to acknowledge the timely assistance given.

Very respectfully,

MRS. MARTIN BRITTON.

To the GENERAL SUPERINTENDENT OF THE LIFE-SAVING SERVICE.

EDENTON, NORTH CAROLINA, *August 11, 1900.*

DEAR SIR: Many thanks to you and your men for the assistance you gave me while on Royal Shoal. I consider you saved the tug *Pamlico*, for you and your men worked faithfully while there, and will be long remembered by myself and crew.

Yours, truly,

J. W. WYNNE, *Master of Tug Pamlico.*

Captain F. G. TERRELL,
Portsmouth Life-Saving Station, North Carolina.

WISCASSET, MAINE, *August 22, 1900.*

DEAR SIR: I would have written to you before, but have been so busy that I have not had the time. Captain Spinney of the Popham Beach Life-Saving Station did us a great favor. We were disabled in the naphtha launch *Nohoko* and had to anchor off Jack-Knife Ledge just at dark. Captain Spinney rowed off alone and found out that we were in a bad place; he went back, picked up a crew, and towed us to the wharf. We had no boat, our engine was broken down, and we had to tow to Bath for repairs.

Captain Spinney did us a great favor and we feel greatly obliged to him.

Yours, respectfully,

NATHANIEL BROWN

SUPERINTENDENT OF LIFE-SAVING STATIONS.

BUFFALO, NEW YORK, *August 28, 1900.*

DEAR SIR: As it is against the rules for you to accept money from vessels in distress for services rendered, it seems that the only thing I can do to show my appreciation of your services while I was on the bottom in the Niagara River is to write and thank you.

I certainly appreciate the way you responded and the efficient services rendered in running lines for us, which would have been almost impossible without your aid. After the fog cleared up you were on hand almost as soon as the tug which I blew for, and never left us until you knew we were out of danger, for all of which please accept my heartfelt thanks.

Very truly, yours,

H. STILL,
Master of Steamer Seattle.

To the KEEPER AND CREW OF THE U. S. LIFE-SAVING STATION,
Buffalo, New York.

OFFICE OF THE LIGHT-HOUSE INSPECTOR, ELEVENTH DISTRICT,
Detroit, Michigan, September 5, 1900.

SIR: I am in receipt of a communication from Charles McDonald, keeper of the Charity Island Light Station, stating that on the occasion of his being capsized in Lake Huron on July 6, while en route from Caseville to his light station, the life-saving crews from Port Austin and Tawas, hearing of his danger, started to his assistance. Before they reached him, he and his comrades had been rescued by fishermen, but this fact does not detract from the credit due to the crews for making the effort from such a long distance.

I wish to assure you of my appreciation of this fact and to congratulate you upon the evident efficiency of your service as represented by these men.

Respectfully,

J. C. WILSON,
Commander, U. S. N., Inspector Eleventh District.

Captain JNO. H. ROGERS, R. C. S.,
Assistant Inspector Life-Saving Service, Detroit, Michigan.

CHICAGO, ILLINOIS, *September 12, 1900.*

DEAR SIR: I want to thank yourself and crew for the splendid work you did in saving the yacht *Argo* from being dashed against the breakwater while dragging her anchor during the fierce gale of yesterday, and in bringing her into one of the basins uninjured.

With my best wishes for yourself and crew,
I am, yours, very truly,

E. M. ARDEN, *Owner.*

Keeper HENRY SINNIGEN,
Old Chicago Life-Saving Station, Chicago, Illinois.

WINDSOR, ONTARIO, *September 24, 1900.*

DEAR SIR: I arrived at Windsor yesterday with my vessel, the *Singapore*, which was on the reef at Towers on the 19th instant, and I wish to convey to you, and through you to Captain Small and his crew of Ottawa Point Life-Saving Station, my sincere thanks and high appreciation for the excellent work which they did in saving both life and property when my vessel was stranded. Not only did they come to my rescue and save my wife and child, taking great risks for their own lives, but the crew turned to and helped me to discharge part of my cargo so that I might save the vessel.

Too much praise can not be given to them for this work, and I take this first opportunity of conveying to you, and through you to them, my sincere thanks.

Yours, faithfully,

JAMES C. SUTHERLAND,
Master of British Schooner Singapore.

Captain J. G. KIAH,
Superintendent Eleventh Life-Saving District, Harbor Beach, Michigan.

PHILADELPHIA, PENNSYLVANIA, *September 24, 1900.*

GENTLEMEN: We, the undersigned, constituting the party on the yacht *Bertha Lee*, which capsized on the bars off Longport, New Jersey, on September 23, 1900, desire to

express our thanks and gratitude to Captain James Rider and his crew of the Great Egg Life-Saving Station for the vigilance, promptness, and efficiency displayed upon that occasion.

J. H. LIPPINCOTT.
J. R. WARRINGTON.
CHARLES BENNETT.
WM. THEGEN.
CHARLES ROGGENMOSER.
GUSTAV SIMON.
LEO. H. PEIFFER.

To the GREAT EGG LIFE-SAVING CREW,
Longport, New Jersey.

MILWAUKEE, WISCONSIN, *September 24, 1900.*

DEAR SIR: While the steamer *Bielman* was stranded on Fishermans Shoal, the Plum Island life-saving crew rendered us very valuable services; and, while we are not allowed to pay them for it, as little as we can do is to say to you that they are a brave crew and workers. We thank them for the good work they did, and we also thank you for securing the services of such brave men, and if the time ever comes when we can reciprocate we will be glad to do so.

Very truly, yours,

A. E. STEWART.

Mr. CHARLES MORTON,
Superintendent of the Twelfth Life-Saving District.

STAPLETON, NEW YORK, *September 27, 1900.*

DEAR SIR: I wish to acknowledge the kind and effective services rendered to my crew and myself on the night of September 15, 1900, by Captain Alexander Falkenburg and his brave crew of life-savers, whereby our lives and vessel were saved by their heroic work, and the kind treatment that we received while at the Little Beach Life-Saving Station, New Jersey.

Very respectfully, your obedient servant,

OLAF ANDERSEN,
Master of Schooner Willie.

GENERAL SUPERINTENDENT LIFE-SAVING SERVICE,
Washington, District of Columbia.

SOUTH DENNIS, MASSACHUSETTS, *October 4, 1900.*

DEAR SIR: Yours received, but I was called away on business by the company and that fact has made me rather late in replying.

I have no fault to find with the crew of the Cahoons Hollow Life-Saving Station, and think that they tried to do all they could do for me under the circumstances, and I am very thankful to them for saving my life.

If there should be any more information that you require that I can give you, I shall be pleased to do so.

Yours, respectfully,

THOMAS B. KELLY,
Master of Barge Blackbird.

Lieutenant WORTH G. ROSS, U. S. R. C. S.,
Assistant Inspector of First and Second Life-Saving Districts.

TAWAS, MICHIGAN, *October 17, 1900.*

DEAR SIR: Yesterday morning I was trying to make Tawas Harbor with the schooner *Canton* in a disabled condition, and the Ottawa Point life-saving crew came to my assistance and rendered the best of service. I came to anchor near the can buoy, and as my boat was gone they took me to Tawas in the face of a north gale to get a tug. The captain of the tug being away, Captain R. M. Small placed one of his

men in charge of the tug and towed my vessel into the dock and stayed by and helped clear up the wreck. Too much praise can not be given to Captain Small and the Ottawa Point life-saving crew for the service rendered us in our trouble.

Yours, truly,

Captain J. G. KIAH,
Harbor Beach, Michigan.

H. JEFFREY,
Master of Schooner Canton.

The following letter was left at the Highland Life-Saving Station:

HIGHLAND LIFE-SAVING STATION,
Cape Cod, October 17, 1900.

TO WHOM IT MAY CONCERN:

We wish to testify to the prompt service rendered us and our crew by the crews of the Highland and Pamet River stations on the occasion of the loss of our vessel, the schooner *General Sheridan*, on Cape Cod, in the storm of the night of October 16, 1900, and to add that but for their timely assistance in bringing us ashore and help in getting to the shelter of the life-saving station we should have perished.

THOMAS A. ANDERSON, *Master.*
EDWARD RYAN, *Mate.*

PERTH AMBOY, NEW JERSEY, *October 18, 1900.*

DEAR SIR: I wish to express my heartfelt thanks to you and your men for your heroic work in saving me and the crew of my vessel, the schooner *General Sheridan*, on the 16th of October, 1900. I can not sufficiently express my thanks to Surfman Marshall for his dispatch in reporting us to the life-saving station.

Very truly, yours,

THOMAS ANDERSON, *Captain.*

Captain WORTHEN,
Keeper Highland Life-Saving Station, Massachusetts.

BUFFALO, NEW YORK, *October 18, 1900.*

DEAR SIR: Reading in the Erie Daily Times a report of the brave and kind aid rendered by yourself and the life-savers to the barge *Brunette* in her recent trouble, I desire to thank you for your kindness in this matter. I certainly appreciate your efforts in behalf of the *Brunette*, and herewith tender my sincere thanks.

Yours, truly,

JOHN J. BOLAND,
Managing Owner Barge Brunette.

Captain JOHNSON,
Life-Saving Station, Erie, Pennsylvania.

DETROIT, MICHIGAN., *October 20, 1900.*

I, Hugh O'Hagan, master of the schooner *Brunette*, which lay at anchor about 15 miles west of Erie, on the south shore of Lake Erie, in a 50-mile breeze of wind from the north on the night of the 16th instant, must tender thanks to the Erie life-saving crew for coming to my assistance in a terrible roll of the sea, which compelled the tug *America* to turn back. I must also tender thanks for the assistance they gave me on the wreck of the schooner *Manitowoc*, of which I was then master, on the night of July 1. I must say that they are very accommodating and a well-trained crew.

HUGH O'HAGAN, *Captain.*

To the KEEPER OF THE ERIE LIFE-SAVING STATION OR WHOM IT MAY CONCERN.

CHATHAM, ONTARIO, *October 20, 1900.*

DEAR SIR: I struck the shoal at Ottawa Point on the night of October 16 while trying to make the harbor, and I wish to give thanks to the captain and his men of the life-saving station at that point, as they worked manfully in trying to save the boat and cargo. They deserve lots of credit.

Yours, respectfully,

W. G. SCOTT,

Owner and Mate of Schooner R. C. Brittain.

Captain J. G. KIAH,
Harbor Beach, Michigan.

SAULT STE. MARIE, MICHIGAN, *October 26, 1900.*

DEAR SIR: I wish to express my gratitude to the captain and members of the Ship Canal Life-Saving Station for the timely assistance rendered to my consort, the schooner *James G. Blaine*, which struck a scow on the 24th in coming into the canal and knocked a hole in her bow. This caused her to leak badly, and without doubt she would have sunk in ten minutes but for the quick work of Captain McCormick and his crew, who succeeded in having a jacket over the hole before the water had a chance to rise in the vessel. They worked faithfully with our crew for five hours, until we had the hole patched so as to proceed. I consider that crew "Johnnies on the spot."

Yours, very truly,

THOMAS BEGGS,
Master of Steamer Niko.

Mr. JEROME G. KIAH,
Superintendent Life-Saving Stations, Harbor Beach, Michigan.

WEST SOUTHPORT, MAINE, *October 30, 1900.*

SIR: I wish to make a statement in regard to the saving of my schooner, the *Freighter*, by the Hunniwells Beach life-saving crew, on Monday, October 29. I ran ashore on Stage Island during a thick fog, and twenty minutes later Captain Spinney and his crew were on board. She would have been a total loss but for their prompt assistance and hard work. In my estimation they are the right men in the right place, watchful, prompt, and faithful at all times.

With best wishes for Captain Spinney and crew, I am,

Yours, respectfully,

DENNIS M. MOORE,
Master of Schooner Freighter.

SUPERINTENDENT FIRST LIFE-SAVING DISTRICT,
Portsmouth, New Hampshire.

LUDINGTON, MICHIGAN, *November 5, 1900.*

DEAR SIR: I take this means of expressing my thanks to yourself and crew for the assistance rendered me the night of October 31, 1900. I am most heartily obliged to you and hope I may have occasion some time to show my appreciation in a substantial manner.

Yours, truly,

W. J. BARNETT,
Master of Steamer F. & P. M. No. 2.

KEEPER LIFE-SAVING STATION,
Ludington, Michigan.

EAGLE HARBOR, MICHIGAN, *November 9, 1900.*

SIR: This is to certify that the Ship Canal life-saving crew gave me all the assistance that could be given in saving the schooner *Abyssinia*. They came off last night while the wind was blowing hard from the NNE. and a big sea running.

I will not forget the work which the life-saving crew did for me.

Yours, truly,

L. COLEMAN,
Master of the Schooner Abyssinia.

SUPERINTENDENT OF THE ELEVENTH LIFE-SAVING DISTRICT.

The master's account of the wreck of the steamer *Olga*, published in the San Francisco city papers of November 10, 1900, includes the following statement:

I would like to take this opportunity of publicly thanking the life-saving crews of Fort Point, Golden Gate Park, and Southside stations for their good offices and zealous work. They stayed by me and could not do enough. They did splendid work, and although we passed a hard night, their presence kept up our spirits.

MUSKEGON, MICHIGAN, *November 15, 1900.*

DEAR SIR: In behalf of myself and crew of schooner *Samuel H. Foster*, I wish to express to you my sincere thanks and gratitude for the noble services rendered by yourself and heroic crew of life-savers in handling lines and doing everything possible to prevent us from going on the beach during the storm of the 13th and 14th instants. You succeeded admirably, and I thank you again for your noble work, as it is the only way in which I can remunerate you and your crew at present.

As long as life lasts you and your crew will be kindly remembered. Long life to you and more noble deeds to your credit. Should it happen that others need your help I am confident that they will be promptly assisted.

Wishing you and your crew all sorts of success,

I remain, yours, very truly,

JAS. CURRAN,

Master of Schooner Samuel H. Foster.

Captain H. J. WOODS AND CREW OF MUSKEGON LIFE-SAVING STATION,

Michigan.

HALLOWELL, MAINE, *November 17, 1900.*

DEAR SIR: Through you I must thank the keeper and crew of the Hunniwells Beach Life-Saving Station for the good services rendered the schooner *Lygonia*, of Boston, on the morning of the 15th instant. We were dragging our anchors dangerously close to Whale's Back Ledge when the surfmen came on board and got her out of her perilous position and into a safe anchorage.

I can not speak too highly of their promptness in answering our signals and of their services on this occasion.

I am, respectfully, yours,

BENJAMIN ANDERSON,

Master of Schooner Lygonia.

SUPERINTENDENT OF THE FIRST LIFE-SAVING DISTRICT,

Portsmouth, New Hampshire.

BRISTOL, RHODE ISLAND, *November 27, 1900.*

DEAR SIR: I appreciate very much the assistance rendered me on October 16 by the Chatham life-saving crew in getting my anchors and getting the vessel out of a dangerous position.

Respectfully,

WILLIAM D. BLAKE,

Master of Schooner Lawrence Haines.

SUPERINTENDENT SECOND LIFE-SAVING DISTRICT,

East Orleans, Massachusetts.

SANDUSKY, OHIO, *November 29, 1900.*

SIR: We, the undersigned, wish to express to you and your noble crew our thanks for the services which you rendered on November 26, 1900, to the crews of the ill-fated barges *Melvina* and *Charles Spademan*. They were in a very dangerous position, and had it not been for your noble and daring efforts our men no doubt would have lost their lives.

We appreciate your services and wish again to thank you.

Yours, truly,

M. SICKEN,

Managing Owner.

HARRY LARSEN,

Master of Barge Melvina.

THE KEEPER OF POINT MARBLEHEAD LIFE-SAVING STATION.

BATH, MAINE, *December 4, 1900.*

DEAR SIR: Kindly permit me to express to you my great appreciation of the work done in saving life and the British schooner *Temperance Belle* by the Hunniwells Beach life-saving crew on November 11. Words to express myself at this moment fail me, but there is not a doubt that had it not been for the cool and able manner in which Captain Spinney and his crew worked that night not one person would have been left to have told the tale.

When Captain Spinney and his crew got on board, after some hours of hard work, they succeeded in getting the vessel off the rocks, partly full of water. It was very evident in my mind that the crew knew what their duty was by the fact that they came on board without being signaled. In my opinion you have not got their equal on the coast. While under their care at the station everything that could be done was done for our convenience and comfort.

Probably no one appreciates their work as much as the owner, and, as I am the owner, I am more than grateful. This is also the feeling of the master and crew. Trusting that you will make some note of this acknowledgment, and with my best wishes for the keeper and crew of the Hunniwells Beach Life-Saving Station,

I remain, very truly, yours,

MAURICE H. TUFTS,
Owner of British Schooner Temperance Belle.

SUPERINTENDENT FIRST LIFE-SAVING DISTRICT,
Portsmouth, New Hampshire.

ASHAWAY, RHODE ISLAND, *December 4, 1900.*

DEAR SIR: No words can ever express to you the gratitude of my friend, Mr. J. Larkin, and myself, to Captain Wm. F. Saunders and crew of the Quonochontaug Life-Saving Station for their timely assistance in saving our lives on November 5, when they took us from an overturned boat, to which we were clinging for dear life, in a heavy surf.

We had been to the ledge for codfish and, in returning, were capsized by the heavy surf. The life-saving crew were on the shore, some 100 yards from the station, watching us and saw our predicament. They made a move for our relief, which was not a slow one by any means—for they had nearly a mile to row to reach us, and I do not believe any crew ever made quicker time, for I was told that five minutes had not expired before they had us safe in their boat.

Respectfully, yours,

GEO. S. CHAMPLIN.

Hon. S. I. KIMBALL,
General Superintendent Life-Saving Service, Washington, D. C.

HOG ISLAND, VIRGINIA, *December 4, 1900.*

SIR: I wish to express my thanks to Captain J. E. Johnson, of the Hog Island Station, for the timely assistance rendered me after going on the outer bar of Hog Island. The lifeboat was alongside twenty minutes after I set the signal of distress, and was kept alongside in a heavy sea. Captain Johnson never urged me to leave the vessel till I saw myself that there was no way, either by anchors or tug, of saving her, as she was fast filling with water and sand. This I consider one of the greatest favors the master of a vessel can be shown. I shall never forget the captain and his crew for the way I and my crew were treated after we landed.

Respectfully, yours,

JOHN FEDDERSEN,
Master of Schooner S. B. Wheeler.

Hon. S. I. KIMBALL,
General Superintendent Life-Saving Service, Washington, D. C.

BROOKLYN, NEW YORK, *December 5, 1900.*

DEAR SIR: I wish to pay tribute to the corps in general and to the Hunniwells Beach Station in particular. Last August, in company with Miss Althans, of Brooklyn, New York, I was caught on an island of rock by the rising tide. The lookout in

the tower of the station saw our predicament and reported it, and a crew put out in a boat and took us ashore. Our lives were not in peril, but I wish to convey my thanks to the men for their courtesy and pay tribute to the alertness of the watch in the tower.

I believe the men of your corps are following a very noble calling, and I think all of the men of that station perform the duties required by the exigencies of the Service faithfully and from the promptings of their manly hearts.

Respectfully,

HOWARD M. FIELD.

GENERAL SUPERINTENDENT LIFE-SAVING SERVICE,
Washington, D. C.

Walter Bateman, in a card of thanks in the *New York Herald*, December 28, 1900, says:

I desire to express my appreciation of the promptness and efficiency of the Life-Saving Service, as exemplified by the services rendered myself and vessel—the *J. Howell Leeds*—by Captain N. B. Rich and crew of this (Assateague Beach) Station. He boarded me on the 23d, in less than an hour of the time of my signal, going several miles to do so; assisted to beach her in a safe place and saved my effects; since then he has stayed by and assisted me in every way possible.

The following letter was handed to the keeper of the Hog Island Life-Saving Station:
HOG ISLAND, VIRGINIA, *December 31, 1900.*

TO WHOM IT MAY CONCERN:

This is to certify that we, the undersigned captain and crew of the sloop *Kestrel*, which went ashore on Pig Island, Virginia, December 27, 1900, have been rendered every assistance by and enjoyed unbounded hospitality at the hands of the Hog Island life-saving crew. We can not too highly praise Captain Johnson and his crew for their prompt and efficient work, which resulted in our saving everything but the vessel itself.

FRANCIS H. WRIGHT, *Captain.*
CHARLES A. BOLDERC, *Mate.*
CHAS. M. BURT.
W. W. CAMPBELL.

Captain Bulger, master of the schooner *James Young*, writes to *The Record* [Philadelphia] that his vessel struck on January 4, and that the Assateague Beach life-saving crew did efficient work in saving the vessel. He states that they floated her after she struck on a dangerous shoal, kept her afloat by pumping, worked her into a harbor, and anchored her in a safe place.

BAY VIEW, MASSACHUSETTS, *January 5, 1901.*

DEAR SIR: I am very thankful to you and your crew for saving my mackerel nets, and would gladly pay for the trouble if you would accept it. But if you will not take any money I would do as much for any of you if it ever came in my way to do so, knowing as I do the feeling common among fishermen in such cases.

Yours, truly,

ALEX. SARGENT.

Captain S. O. FISHER,
Race Point Life-Saving Station.

CLEVELAND, OHIO, *January 9, 1901.*

DEAR SIR: On Sunday, November 25, 1901, the steamer *Rube Richards* grounded on North Point Reef, Thunder Bay, Lake Huron. I can not praise too highly the conduct of the Thunder Bay Island life-saving crew under Captain John D. Persons. We would have lost the steamer without their assistance. I looked after the wrecking of the steamer and should have written to you before, but I have been away most of the time.

Yours, truly,

C. L. HUTCHINSON.

Captain J. G. KIAH,
Superintendent Eleventh Life-Saving District, Harbor Beach, Michigan.

DEAR SIR: I wish to express my thanks to the keeper and crew of the Hunniwells Beach Life-Saving Station for the valuable assistance rendered to myself and crew of the American schooner *Joseph Luther*, which stranded on Whale's Back Ledge on the afternoon of January 21, 1901. There was a very rough sea at the time, and the life-savers had hard work to get the crew off the wreck.

We were treated very kindly and cared for after reaching the station.

Yours, respectfully,

JOHN FRANCIS,
Master of the schooner Joseph Luther.

Mr. SUMNER I. KIMBALL,
General Superintendent U. S. Life-Saving Service, Washington, D. C.

SOUTH BEND, WASHINGTON, *January 30, 1901.*

DEAR SIR: I wish to kindly extend my thanks to the keepers and crews of the Shoalwater Bay and Petersons Point life-saving stations for the prompt and gallant service rendered to myself and crew of the British ship *Pollaloch* while stranded on North Spit, Willapa Bay, about 2 miles from shore, on the morning of the 26th of November, 1901.

Dear sir, I remain yours, respectfully,

A. YOUNG,
Master of the British ship Pollaloch.

The GENERAL SUPERINTENDENT OF THE LIFE-SAVING SERVICE,
Washington, D. C.

CAPE HATTERAS LIFE-SAVING STATION,
February 13, 1901.

SIR: I wish to thank the Cape Hatteras, Creeds Hill, and Big Kinnakeet life-saving crews for rescuing the captain and crew of the schooner *George R. Congdon*, which stranded about 3 a. m. on January 31, 1901.

Before sunrise the entire crew was landed on the beach in the breeches buoy. A heavy sea was running at the time of the rescue, and the vessel was about 250 yards from the beach.

I also wish to express my thanks for the kindness shown me by the keeper of the Cape Hatteras Life-Saving Station.

E. E. BAYLES,
Master of the schooner George R. Congdon.

GENERAL SUPERINTENDENT LIFE-SAVING SERVICE,
Washington, D. C.

WESTPORT HOTEL,
WESTPORT, WASHINGTON, *February 15, 1901.*

DEAR CAPTAIN: We don't know how to thank you and your faithful crew for your services in saving our property (the Westport Hotel) from destruction by fire on the 9th instant. We might have had a big loss. It shows what discipline is in time of danger. Again we thank you and your crew.

Yours, most respectfully,

C. W. YANA and wife, *Proprietors.*

Captain CHARLES JACOBSON,
Keeper Petersons Point Life-Saving Station.

CHEBOYGAN, MICHIGAN, *February 20, 1901.*

DEAR SIR: In the early part of last November I was caught with my boat, the schooner *Belle of Epoufette*, in a storm at McRae's dock on the north shore of Bois Blanc Island.

There was a heavy snowstorm and a gale from the NE. My lines parted, and I was driven ashore in the big sea. As soon as I could get word to the keeper of the Bois Blanc Station, he and his crew came to my rescue and worked like heroes for four days. The weather was bitter cold and stormy, but they kept at work with all their might until they had my boat out on the beach. It would have been a total loss if they had not come to help me.

I feel very thankful to the Department for saving my boat, as it means a great deal to me; and I wish to say that no men could have worked harder or treated me more kindly than this life-saving crew did. I shall never forget Captain Cleary and his men and the great aid that they gave me in saving my boat from being a complete wreck. Thanking you again, I am,

Very respectfully, yours,

WILLIAM CHAPMAN,
Master and owner of schooner Belle of Epoufette.

Captain J. G. KIAH,
Superintendent Eleventh Life-Saving District.

NORFOLK, VIRGINIA, *February 21, 1901.*

DEAR SIR: I desire to express my appreciation of your efforts in my behalf when my vessel, the *Joseph Allen*, was ashore. I assure you I appreciate very much your assistance, and had not the same been rendered as promptly as it was I should have lost my boat. I regret very much that I am not in a position to express my appreciation more substantially.

Again thanking you for the prompt and energetic manner in which you assisted me, I beg to remain,

Very truly, yours,

R. W. DEBNAM,
Master of schooner Joseph Allen.

Captain NEWELL B. RICH,
Assaiteague Beach Life-Saving Station, Chincoteague, Virginia.

(Letter in identical terms was also sent to Captain John B. Whealton, Wallops Beach Life-Saving Station, Chincoteague, Virginia.)

ROCKLAND, MAINE, *March 7, 1901.*

DEAR SIR: I have written to Captain Eldridge, of the Chatham Station, and yet do not feel satisfied until I commend to your notice the keeper and crew of that station. The promptness with which they came to my assistance as I lay there through the heavy blow of last month, my position none of the best, and their kindness and courtesy while with me, deserve the highest praise.

I wish to thank the Service through you, and I congratulate Uncle Sam upon having such men as these in his employ.

Yours, truly,

WILLIAM H. MASON,
Master of Schooner Commerce.

SUPERINTENDENT SECOND LIFE-SAVING DISTRICT,
East Orleans, Massachusetts.

GULL SHOAL LIFE-SAVING STATION, *March 9, 1901.*

DEAR SIR: I wish, through you, to extend the thanks of my crew and myself to the brave keeper and crew of this station for their prompt and valuable services in rescuing us through the heavy surf with surfboat, as the schooner lay too far from shore to use the beach apparatus, and she was fast filling up. Keeper D. M. Pugh would have come to our assistance sooner if he had not had to wait for two men from the crew of one of the adjacent stations to help man his boat.

We also wish to thank them, one and all, for their generous treatment while we stayed at their station; and I personally wish to thank Captain Pugh for the personal aid which he rendered me while I remained there.

I remain, yours, very respectfully,

J. F. RUTLEDGE,
Master of the Schooner Gen'l S. E. Merwin.

To the Honorable S. I. KIMBALL,
General Superintendent Life-Saving Service, Washington, D. C.

ASSATEAGUE BEACH LIFE-SAVING STATION, *March 15, 1901.*

DEAR SIR: I hereby tender you and your crew my thanks for rescuing myself and crew from our very perilous position on the wrecked schooner *Mary Standish* on the 11th instant, and for providing for us since.

Your promptness and efficiency can not be too highly recommended.

I also wish to thank you for securing free railroad passes to New York for us.

Very truly, yours,

C. L. GILLCHRIST,
Master of the Schooner Mary Standish.

Keeper N. B. RICH,
Assateague Life-Saving Station, Chincoteague Island, Virginia.

[A card of thanks published in a local newspaper.]

I wish to publicly thank Captain Joel R. Woolley, of Life-Saving Station No. 2, of Spermaceti Cove, who, with his crew, were of such valuable assistance in raising my schooner, the *William T. Parker*, which sank at the mouth of the Shrewsbury River, with a cargo of coal, while at anchor on the night of Friday, March 29, 1901. They went off to the schooner immediately after they saw that she was sinking, and helped to get her afloat afterwards.

JOHN A. WORTHLEY.

RED BANK, NEW JERSEY, *April 3, 1901.*

BEE LINE TRANSPORTATION COMPANY,
Boston, Massachusetts, April 10, 1901.

DEAR SIR: On March 24, 1901, our tug *Hokendaugua* became disabled off Highland Light, and I wish to express to you the appreciation of our company for service rendered by the crew of the Highland Life-Saving Station, Second District, E. P. Worthen, keeper.

Yours, truly,

W. B. PHINNEY, *Agent.*

GENERAL SUPERINTENDENT LIFE-SAVING SERVICE,
Washington, D. C.

BOSTON, MASSACHUSETTS, *April 15, 1901.*

SIR: I have the honor to call your attention to the efficiency and zeal displayed by the life-saving crew located at Fletchers Neck, Biddeford, Maine, on April 8, 1901.

While riding out a violent northeast gale, the schooner *Ripley*, manned by the First Division of the Massachusetts Naval Reserve, and bound from Rockport, Maine, to Boston, Massachusetts, dragged her anchors, and, being in imminent danger of going ashore, these brave men lent timely aid, and, with their assistance, the vessel was worked into Biddeford Pool.

I wish to call special attention to the intelligence, courtesy, and courage of the keeper of this station.

Very respectfully,

DANIEL H. SUGHRUE,
Lieutenant, Chief of First Division.

TO MR. SUMNER I. KIMBALL,
General Superintendent U. S. Life-Saving Service, Washington, D. C.

SAN PEDRO, CALIFORNIA, *May 4, 1901.*

DEAR SIR: We, the captain and crew of the schooner *Zampa*, wish to express our thanks to the life-saving crew of the Umpqua River Station for the valuable services rendered in putting an extra crew on board the *Zampa*, 20 miles off Umpqua River, on April 21.

On April 20, in towing over the bar at 1.45 p. m., the vessel struck heavily six times. Within half an hour after striking we had 2 feet of water in the hold and

could not lessen it by keeping two pumps going at all times until 10 p. m., when the weather pump sucked; after that, by constantly keeping one pump going, we could just keep her free, but if stopped for one moment the water would gain on us.

If we had not received the extra help on board it is doubtful if we could have kept the vessel free until we reached port, and had it not been for the lifeboat we could not have transferred the extra help from the tug to the schooner.

Yours, respectfully,

O. W. PETTERSON,
Master of Schooner Zampa.

Captain BERGMAN,
Keeper of Umpqua River Life-Saving Station, Gardiner, Oregon.

The following is an extract from an item which appeared in the *Daily Mining Gazette*, of Houghton, Michigan, on October 27, 1901.

Hancock Hebrews award medals to Captain McCormick and his men for gallant conduct.

The Hebrews of Hancock have secured valuable gold medals and pins, suitably inscribed, which will be presented to Captain McCormick and the crew of the life-saving station to-day. The medals are in the shape of a 6-pointed star, and are presented to the life-savers for their gallant conduct in recovering the bodies of the four Hebrews who were drowned on the steamer *Bon Voyage*, which burned off Red Ridge some few months ago, the conduct of the life-saving crew having been very gallant upon that occasion. They faced the danger of being wrecked in the storm, and only after a diligent and difficult search recovered the bodies of the four people. The large medal, which is about 2 inches long, will be presented to Captain McCormick. The following words are inscribed upon it: "From the Hebrews of Hancock; thankful for bravery."

Those presented to the crew are of the same design, but smaller.

It is not the intrinsic value which makes these medals worth having, but what they represent, and Captain McCormick and his men will long cherish the tokens.

BANGOR, MAINE, *May 17, 1901.*

DEAR SIR: I wish to express thanks on behalf of myself, crew, and owners of the schooner *Nightingale*, recently stranded on Wood End Bar, near Provincetown, Massachusetts, for the prompt aid and assistance rendered by Captain Sparrow and life-saving crew at Wood End, May 6, 1901, in getting the schooner off with little or no damage to vessel or cargo, proving the value of the Service, as under the old conditions the vessel and cargo might have been a total loss.

I can speak of Captain Sparrow particularly as proving to be the right man in the right place, capable, resourceful, and prompt in action, and a man to be appreciated in a critical time such as the above.

Respectfully, yours,

M. S. GRANT,
Master of Schooner Nightingale.

I cordially indorse the above statement.

PIERRE McCONVILLE,
Owner of Schooner Nightingale.

GENERAL SUPERINTENDENT OF THE LIFE-SAVING SERVICE,
Washington, D. C.

The following is a card of thanks which was printed in a Sheboygan, Wisconsin, newspaper:

I wish to publicly thank Captain Nequette and members of the local life-saving crew for the valuable assistance given me while the schooner *H. D. Moore* was in distress at the mouth of the piers in Friday's storm.

GUST. JOHNSON,
Master of the Schooner H. D. Moore.

OCEAN CITY, MARYLAND, *June 1, 1901.*

DEAR SIR: I wish to mention the valuable service rendered to myself and family on the night of April 11, 1901, by Captain J. J. Dunton and his life-saving crew at the fire which burned my hotel and the Cropper pavilion. I also wish to thank the life-saving crew for the owners of the adjoining property, which was saved only by their valuable assistance.

Very respectfully,

W. R. RAYNE.

To Hon. S. I. KIMBALL,
General Superintendent Life-Saving Service, Washington, D. C.

OCEAN CITY, MARYLAND, *June 11, 1901.*

DEAR SIR: At a meeting of the city council here to-day the following resolution was passed:

"That the thanks of the mayor and city council be tendered to Captain J. J. Dunton and his life-saving crew for their efficient services rendered in extinguishing the fire of April 11, 1901."

Yours, truly,

E. M. SCOTT,

Clerk to Mayor and Council.

Mr. S. I. KIMBALL,
General Superintendent Life-Saving Service, Washington, D. C.

BUFFALO, NEW YORK, *June 3, 1901.*

DEAR SIR: We wish to acknowledge, through you, the service rendered us by Captain Griesser and his crew when we went aground on Horseshoe Reef with the yacht *Fellowcraft* on Friday evening, May 31.

Only his prompt appearance and persistent effort saved us from total wreck, and he did not leave us until we had been towed to a place of safety.

We can not praise too highly the conduct of Captain Greisser, and take pleasure in making this statement, which is entirely voluntary.

Very truly, yours,

WM. A. COWAN.

F. W. SCHERBARTH.

Mr. E. E. CHAPMAN,
Superintendent Tenth Life-Saving District, Buffalo, N. Y.

MEDALS OF HONOR.

LIST OF MEDALISTS.

The following table contains the names of all persons to whom life-saving medals of honor have been awarded by the Secretary of the Treasury under authority of the acts of June 20, 1874, June 18, 1878, and May 4, 1882, together with a brief statement of the services for which awards have been made, to the close of this year. Detailed accounts of the rescues for which medals were bestowed prior to June 30, 1890, may be found in the annual reports of the Service covering the years in which the awards were made, and of those awarded since June 30, 1900, under the caption "Award of medals" in this volume:

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Lucien M. Clemons	Marblehead, Ohio	Rescue of two of the crew of the schooner Consuelo, near Kelleys Island, Lake Erie, May 1, 1875. (An Rpt., 1876.)	Gold medal	June 19, 1876
Hubbard M. Clemons	do	do	do	Do.
A. J. Clemons	do	do	do	Do.
Otis N. Wheeler	Cape Elizabeth, Me.	Rescue of two men from Watts Ledge, Maine, Nov. 30, 1875. (An Rpt., 1876.)	Silver medal	June 23, 1876
John O. Philbrick	do	do	do	Do.
James Martin	Member of English lifeboat crew.	Rescue of eight of the crew of the wrecked American ship Ellen Southard, at the mouth of the River Mersey, England, Sept. 26 and 27, 1875. (An. Rpts., 1876 and 1877.)	Gold medal	Feb. 27, 1877
Hugh Beard	do	do	do	Do.
James Conley	do	do	do	Do.
William Gregory	do	do	do	Do.
Charles Danslow	do	do	do	Do.
John Dolman	do	do	do	Do.
George Lee	do	do	do	Do.
Philip Murphy	do	do	do	Do.
James Munday	do	do	do	Do.
William Ruffler	do	do	do	Do.
Samuel Richards	do	do	do	Do.
William Stewart	do	do	do	Do.
R. J. Thomas	do	do	do	Do.
Charles Eddington	do	do	do	Do.
William Griffith	do	do	do	Do.
James Godfrey	do	do	do	Do.
W. Jones	do	do	do	Do.
John Dean	do	do	do	Do.
James Duncan	do	do	do	Do.
James Harvey	do	do	do	Do.
Robert Lucas	do	do	do	Do.
Thomas Maloney	do	do	do	Do.
Charles McKenzie	do	do	do	Do.
John Powell	do	do	do	Do.
John Robinson	do	do	do	Do.
E. Crabtree	do	do	do	Do.
Henry Williams	do	do	do	Do.
J. Schuyler Crosby	New York	Rescue of Miss Edith May, and efforts to rescue others from the yacht Mohawk, which capsized and sunk in New York Harbor during a squall, July 20, 1876. (An Rpt., 1877.)	do	June 8, 1877
Carl Fosberg	do	do	do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Henry M. Lee	Milwaukee, Wis..	Rescue of nine of the crew of the bark Tanner, which stranded near the harbor of Milwaukee, Sept. 9, 1875. (An. Rpt. 1877.)	Silver medal..	June 11, 1877
N. A. Petersen.....	do	do	do	Do
Henry Spark	do	do	do	Do.
John McKenna	do	do	do	Do.
Barn Oleson	do	do	do	Do.
Anton Oleson	do	do	do	Do.
Charles H. Smith	Master of U. S. lighthouse tender Rose.	Rescue from drowning of a small boy named Thomas Walsh, who had fallen into the Christiana River at Wilmington, Del., Sept. 17, 1877. (An. Rpt., 1878.)	do	Nov. 23, 1877
Edward Nordall	Seaman on U. S. revenue cutter Tench Coxe.	Rescue from drowning of a man who had fallen from a capsized yacht into the Delaware River, and assisting in the rescue of several others, June 3, 1877. (An. Rpt., 1878.)	do	Do.
Malachi Corbell.....	Keeper of life-saving station.	Rescue of two fishermen whose boat had capsized on the outer bar near Caffey's Inlet, North Carolina, Nov. 25, 1875. (An. Rpt., 1878.)	do	Do.
Philip C. Bleil.....	Metropolitan police, New York.	Rescue of eighteen persons from drowning at various times. (An. Rpt., 1878.)	Gold medal...	Jan. 4, 1878
John Hussy	New York	Rescue of eighteen persons from drowning in and about the waters of New York Harbor. (An. Rpt., 1878.)	do	Mar. 28, 1878
H. C. T. Nye	Master, U. S. Navy.	Rescue from drowning of Lieut. J. James Franklin, U. S. Navy, off Monomoy Point, Cape Cod, Sept. 1, 1875. (An. Rpt., 1878.)	Silver medal..	Apr. 5, 1878
J. L. Hunsicker	do	do	do	Do.
Thomas McBride	Metropolitan police, New York.	Rescue of eighteen persons from drowning along his beat on the water front of the East River. (An. Rpt., 1878.)	Gold medal...	Do.
John Carey	Jersey City, N. J..	Rescue from drowning of Adolph Gabriel, who had fallen from a ferryboat into the North River, May 17, 1877. (An. Rpt., 1878.)	do	Apr. 13, 1878
Joseph Napier	Keeper of life-saving station.	Rescue of the crew of the schooner D. G. Williams near the harbor of St. Joseph, Mich., Oct. 10, 1877. (An. Rpt., 1878.)	do	May 1, 1878
Michael Gorman.....	Metropolitan police, New York.	Rescue of two men from drowning in the East River on Nov. 18, 1876, and Sept. 4, 1877, respectively. (An. Rpt. 1878.)	Silver medal..	May 3, 1878
Lucien Young	Ensign, U. S. Navy.	Rescuing and attempting to rescue his shipmates from the U. S. S. Huron, wrecked on the coast of North Carolina, Nov. 23 and 24, 1877. (An. Rpt., 1878.)	Gold medal...	June 12, 1878
Michael Gorman.....	Metropolitan police, New York.	Rescue of Fannie Starkley from drowning in the East River, Sept. 7, 1878, and attempting to rescue a boy, July 8, 1878.	do	Jan. 31, 1879

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Timothy C. Murphy....	Norwich, Conn ...	Rescue of a number of persons from drowning in the Thames River, at Norwich, Conn., at various times between 1874 and 1879. (An. Rpt., 1879.)	Silver medal...	Mar. 4, 1879
Antoine Williams.....	Seaman, U. S. Navy.	Rescuing and attempting to rescue his shipmates from the U. S. S. Huron, wrecked on the coast of North Carolina, Nov. 23 and 24, 1877. (An. Rpt., 1879.)	Gold medal...	Mar. 13, 1879
William Burke.....	Chicago, Ill.....	Rescue of the crew of the wrecked schooner Jo. Vilas, on Lake Michigan, Oct. 9, 1876. (An. Rpt., 1879.)	Silver medal...	Apr. 2, 1879
Patrick Langan.....	Buffalo, N. Y.....	Rescue of Maurice Langan, who was swept overboard from the schooner Chandler J. Wells, during a gale on Lake Erie, Oct. 6, 1876. (An. Rpt., 1879.)	Gold medal...	Apr. 25, 1879
Frank M. McQuirk.....	.....do.....	.....do.....	.....do.....	Do.
William McGee.....	.....do.....	.....do.....	.....do.....	Do.
Garret J. Benson.....	Albany, N. Y.....	Rescue of a number of persons from drowning in the Hudson River during the several years prior to 1879. (An. Rpt., 1879.)	Silver medal...	May 10, 1879
Thomas F. Sandsbury..	Nantucket, Mass..	Rescue of the crew of the stranded schooner John W. Hall, and the survivors of the crew of the wrecked schooner Emma G. Edwards off Nantucket during the gale of Apr. 1, 1879. (An. Rpt., 1879.)	Gold medal...	Do.
James C. Sandsbury....	.....do.....	.....do.....	Silver medal...	Do.
Henry C. Coffin.....	.....do.....	.....do.....	.....do.....	Do.
Marcus W. Dunham.....	.....do.....	.....do.....	.....do.....	Do.
John B. Dunham.....	.....do.....	.....do.....	.....do.....	Do.
Andrew Brooks.....	.....do.....	.....do.....	.....do.....	Do.
Edwin R. Smith.....	.....do.....	.....do.....	.....do.....	Do.
George E. Coffin.....	.....do.....	.....do.....	.....do.....	Do.
Frederick Kendrick ...	Ludington, Mich.	Rescue of a number of persons from the rigging of the sunken grain barge J. H. Rutter, at Ludington, in the face of a raging storm, Nov. 1, 1878. (An. Rpt., 1879.)	Gold medal...	May 12, 1879
William Cousins.....	Fireman on U. S. revenue cutter Hartley.	Rescuing, at various times, three persons from drowning in the harbor of San Francisco, Cal. (An. Rpt., 1879.)	Silver medal...	Do.
Alex. Labre.....	New York.....	Rescuing in a heroic manner several persons from drowning in the East River, New York, during the years 1875 to 1878. (An. Rpt., 1879.)	Gold medal...	July 1, 1879
John H. Rapp.....	.....do.....	Rescue from drowning in the East River, New York, of two persons; one in August, 1877, and the other in September, 1878. (An. Rpt., 1879.) A gold medal was subsequently, on the 4th of March, 1882, awarded Mr. Rapp for saving life.	Silver medal...	July 2, 1879
Joseph O. Doyle.....	Keeper of life-saving station.	Rescuing the crews of the stranded schooners E. P. Dorr (September, 1878) and Star (October, 1878), under specially hazardous circumstances. (An. Rpt., 1879.)	Gold medal...	Aug. 2, 1879

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
William Devan	Louisville, Ky	Rescuing from drowning in the Ohio River, at the falls at Louisville, at various times since 1875, of no less than forty-five persons. (An. Rpt., 1879.)	Gold medal...	Sept. 3, 1879
John Gillooly .....	.....do .....	.....do .....	.....do	Do.
John Tully .....	.....do .....	.....do .....	.....do	Do.
Isaac F. Mayo	Provincetown, Mass.	Rescuing several of the crew of the schooner Sarah J. Fort, wrecked on Cape Cod, Feb. 26, 1879. (An. Rpt., 1879.)	.....do	Nov. 10, 1879
Morris Dowd.....	Private, U. S. Army.	Rescue of a fellow-soldier named Charles Lock, from drowning in Frenchmans Creek Mont., July 20, 1879. (An. Rpt., 1880.)	Silver medal..	Feb. 4, 1880
John Delaney.....	Metropolitan police, New York.	Rescue of George McFadden from drowning in the East River, Dec. 4, 1879. (An. Rpt., 1880.)	.....do	Mar. 2, 1880
Cheney R. Prouty	Indianola, Tex ...	Rescuing three men from a capsized boat on the Texas coast, May 5, 1878, after almost superhuman exertions. (An. Rpt., 1880.)	Gold medal...	Mar. 16, 1880
Thomas Farley.....	Metropolitan police, New York.	Rescuing a number of persons from drowning in the East River during the years 1877, 1879, and 1880. (An. Rpt., 1880.)	.....do	Apr. 2, 1880
Lovell K. Reynolds ...	Ensign, U. S. Navy.	Rescuing at sea, during a gale, the crew of the wrecked Austro-Hungarian bark Olivo, Nov. 24, 1879, making several trips through the stormy sea between the U. S. frigate Constellation and the wreck in a small boat in effecting the rescue. (An. Rpt., 1880.)	.....do	Do.
William A. Clark.....	Glen Arbor, Mich.	Rescuing, at great risk to his life, two men, the survivors of the crew of seven of the wrecked schooner W. B. Phelps, Nov. 20, 1870, near Glen Arbor. (An. Rpt., 1880.)	.....do	Apr. 8, 1880
Charles A. Rosman.....	.....do .....	.....do .....	.....do	Do.
W. C. Ray .....	.....do .....	.....do .....	.....do	Do.
John Tobin .....	.....do .....	.....do .....	.....do	Do.
John Blanchfield .....	.....do .....	.....do .....	.....do	Do.
Charles H. Valentine...	Keeper of life-saving station.	Rescuing the crews of two vessels, the schooner E. C. Babcock and the Spanish brig Augustina, wrecked on the New Jersey beach during the terrible gale of Feb. 3, 1880. (An. Rpt., 1880.)	.....do	June 18, 1880
Garret H. White.....	Surfman.....	.....do .....	.....do	Do.
Nelson Lockwood.....	.....do .....	.....do .....	.....do	Do.
Benjamin C. Potter .....	.....do .....	.....do .....	.....do	Do.
William H. Ferguson .....	.....do .....	.....do .....	.....do	Do.
John Van Brunt .....	.....do .....	.....do .....	.....do	Do.
Jerome G. Kiah	Keeper of life-saving station.	Gallant attempt to reach the distressed scow J. H. Magruder, Apr. 23, 1880, in which the lifeboat was capsized and all but the keeper drowned. (An. Rpt., 1880.)	.....do	Nov. 8, 1880

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Richard Stockton.....	Trenton, N. J.	Rescue from drowning of a gentleman who, while bathing at Long Branch, N. J., got beyond his depth and was being carried seaward by the current July 31, 1879. (An. Rpt., 1880.)	Gold medal...	Nov. 9, 1880
Edith Morgan.....	Hamlin, Mich.	Rescuing and assisting to rescue two fishermen whose boat had capsized (Mar. 23, 1878), and the crew of the wrecked steamer City of Toledo (Dec. 21, 1879), near Grande Pointe au Sable Mich. (An. Rpt., 1880.)	Silver medal .	Do.
Charles Gnewuch.....	Manistee, Mich. ...	Rescuing from drowning twenty-four persons at various times between November, 1874, and October, 1880. (An. Rpt., 1881.)	Gold medal...	Apr. 18, 1881
William P. Chadwick..	Keeper of life-saving station.	Rescue of the crew of the schooner George Taulane, wrecked on the coast of New Jersey in the terrible storm of Feb. 3, 1880. (An. Rpt., 1881.)	.....do.....	June 10, 1881
Peter Sutfin.....	Surfman.....	do.....	.....do.....	Do.
Tylee C. Pearce.....	do.....	do.....	.....do.....	Do.
Benjamin Truex.....	do.....	do.....	.....do.....	Do.
William Vannote.....	do.....	do.....	.....do.....	Do.
Charles Seaman.....	do.....	do.....	.....do.....	Do.
John Flemming.....	do.....	do.....	.....do.....	Do.
William H. Brower.....	do.....	do.....	.....do.....	Do.
Lewis Truex.....	do.....	do.....	.....do.....	Do.
Abram J. Jones.....	do.....	do.....	.....do.....	Do.
Charles W. Flemming.....	do.....	do.....	.....do.....	Do.
Demerest T. Herbert.....	do.....	do.....	.....do.....	Do.
William L. Chadwick..	Volunteer.....	do.....	.....do.....	Do.
Isaac Osborn.....	do.....	do.....	.....do.....	Do.
David B. Fisher.....	do.....	do.....	.....do.....	Do.
David B. Clayton.....	do.....	do.....	.....do.....	Do.
Abner R. Clayton.....	do.....	do.....	.....do.....	Do.
Abner Herbert.....	do.....	do.....	.....do.....	Do.
Charles P. Smith.....	Queens County, N. Y.	Heroic conduct at the time of the burning of the steamer Seawanaka, of which he was captain, June 28, 1880, whereby nearly all of the three hundred persons on board were saved. (An. Rpt., 1881.)	.....do.....	June 25, 1881
Ida Lewis-Wilson.....	Keeper of Lime Rock light-house, Newport, R. I.	Rescuing from drowning at various times at least thirteen persons, and particularly for the rescue of two soldiers who had broken through the ice near Lime Rock on the afternoon of Feb. 4, 1881. (An. Rpt., 1881.)	.....do.....	July 16, 1881
Isaac H. Grant.....	Keeper of White Head light-house, Maine.	Rescue of two men from drowning, Aug. 7, 1881. (An. Rpt., 1882.)	Silver medal .	Jan. 31, 1882
John H. Rapp.....	New York.....	Rescuing a number of persons from drowning in the East River since the silver medal of the Service was awarded him in July, 1879. (An. Rpt., 1882.)	Gold medal...	Mar. 4, 1882
William Ross.....	Seaman on U. S. revenue cutter Commodore Perry.	Rescue from drowning of one of his shipmates, Charles Bates, on the 9th of June, 1877. (An. Rpt., 1882.)	Silver medal..	Mar. 14, 1882

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Samuel S. Cox.....	Metropolitan police, New York.	Rescuing from drowning at various times during the years 1878-1881 four persons. (An. Rpt., 1882.)	Silver medal..	Mar. 15, 1882
C. A. J. Queckberner ...	New York	Rescuing from drowning some thirty-five persons between the years 1876 and 1881. (An. Rpt., 1883.) A silver bar was awarded Mr. Queckberner June 14, 1886, for saving life in July and August, 1882.	.....do.....	May 17, 1882
William H. Daily	Santa Cruz, Cal... ..	Rescue of some twenty-eight persons from drowning at various times, and notably the saving of Mr. J. W. De Woolfe, at Santa Cruz, July 5, 1881. (An. Rpt., 1883.)	Gold medal...	Nov. 1, 1882
Dominick J. Ryder.....	New York	Rescue from drowning of eleven persons at Rock-away Beach, Long Island, between the years 1876 and 1881. (An. Rpt., 1883.)	.....do.....	Do.
Charles R. Rosevear.....	.....do.....	Rescue of James Haggerty from drowning, he having fallen overboard from a tug in the harbor of New York June 10, 1882. (An. Rpt., 1883.)	Silver medal..	Do.
John H. Theis.....	.....do.....	.....do.....	.....do.....	Do.
Julius W. Rohn	Milwaukee, Wis.. ..	Rescuing some thirty-nine persons from drowning at various times, and particularly for saving a party of eight excursionists in the harbor of Milwaukee, June 20, 1880. (An. Rpt., 1883.)	.....do.....	Mar. 16, 1883
Joseph Cardran	Mackinac Island, Michigan.	Rescuing from drowning, after heroic and persistent effort and at the imminent risk of his own life, the keeper of the Spectacle Reef lighthouse, Lake Huron, and two of his assistants, Apr. 15, 1883. (An. Rpt., 1883.)	Gold medal...	June 7, 1883
Alfred Cardran .....	.....do.....	.....do.....	.....do.....	Do.
Alfred M. Palmer	Second lieutenant, U. S. Army.	Rescue of two persons, father and son, from drowning at Angel Island, Cal., Aug. 19, 1878. (An. Rpt., 1884.)	Silver medal..	Mar. 15, 1884
William E. Bowman ...	Shawneetown, Ill.	Rescue of a boy named Herbert Martin from drowning, Feb. 22, 1883. (An. Rpt., 1884.)	.....do.....	Do.
William Wilson.....	Sergeant, U. S. Army.	Rescue from drowning at Angel Island, San Francisco Bay, Cal., of a twelve-year-old lad Oct. 22, 1882. (An. Rpt., 1884.)	.....do.....	Mar. 31, 1884
F. C. Bartholomew	Stony Creek, Conn.	Rescuing eight persons from the yacht Prodigal, capsized in Long Island Sound, Aug. 11, 1883. (An. Rpt., 1884.)	.....do.....	June 19, 1884
C. A. Harrison.....	.....do.....	.....do.....	.....do.....	Do.
John Sanders.....	Metropolitan police, New York.	Rescuing from drowning in the East River, N. Y., at great personal risk, several persons at various times during the summer of 1883. (An. Rpt., 1884.)	Gold medal..	June 27, 1884

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
John H. Hewitt	New Haven, Conn.	Rescue of the crew of the schooner Jane, wrecked off New Haven, Conn., during the furious gale of Feb. 29, 1884. (An. Rpt., 1885.)	Silver medal..	Nov. 29, 1884
Aaron Brandley	do	do	do	Do.
Frank Waters	do	do	do	Do.
James McFee	do	do	do	Do.
Thomas W. Perry	do	do	do	Do.
George E. Ball	do	do	do	Do.
Eugene Payne	do	do	do	Do.
John Burns	do	do	do	Do.
A. A. Gould	do	do	do	Do.
Alden C. Roberts	do	do	do	Do.
William J. Wilson	do	do	do	Do.
Charles Parketon	do	do	do	Do.
Henry C. Tuncks	do	do	do	Do.
E. P. H. Ley	do	do	do	Do.
Edward Smeed	Providence, R. I.	do	do	Do.
Carl Johnson	Charlestown, Mass.	do	do	Do.
Ross Ingalls	Baltimore, Md.	do	do	Do.
Charles C. Goodwin	Keeper of life-saving station.	Rescuing the crews, twenty-nine persons, of the Schooners Sophia Minch, John B. Merrill, and John T. Johnson, sunk off Cleveland, Ohio, on Oct. 31, and Nov. 1 and 11, 1883, respectively. Each service was performed at night and during the prevalence of a terrific gale. (An. Rpt., 1885.) Frederick T. Hatch was subsequently—see under date of Feb. 26, 1891—awarded a gold bar for saving life.	Gold medal ..	Dec. 3, 1884
Lawrence Distel	Surfman	do	do	Do.
John L. Eveleigh	do	do	do	Do.
Joseph Goodroe	do	do	do	Do.
William Goodwin	do	do	do	Do.
Frederick T. Hatch	do	do	do	Do.
Delos Hayden	do	do	do	Do.
Charles Learned	do	do	do	Do.
Jay Lindsay	do	do	do	Do.
Charles W. Fraser	Caldwell, N. Y.	Rescue of three men from a small sloop yacht capsized on Lake George, N. Y., Oct. 25, 1884. (An. Rpt., 1885.)	Silver medal..	Dec. 18, 1884
Dean Worden	Great Captains Island, New York.	Rescue from drowning of Mr. Charles P. Cowles, who broke through the ice while skating near Great Captains Island, Long Island Sound, Feb. 23, 1885. (An. Rpt., 1885.)	do	Apr. 24, 1885
Benjamin B. Dailey	Keeper of life-saving station.	Rescuing the crew of nine men from the rigging of the wrecked barkentine Ephraim Williams, off Cape Hatteras, Dec. 22, 1884. To accomplish the rescue they pulled 5 miles offshore during a gale and through a tremendous sea. (An. Rpt., 1885.)	Gold medal...	Do.
Patrick H. Etheridge	do	do	do	Do.
Isaac L. Jennett	Surfman	do	do	Do.
Thomas Gray	do	do	do	Do.
John H. Midgett	do	do	do	Do.
Jabez B. Jennett	do	do	do	Do.
Charles Fulcher	do	do	do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Cornelius Roach	Boston, Mass.	Rescuing several persons from drowning in the harbor at Boston during the years 1883-84, at the imminent risk of his own life. (An. Rpt., 1885.)	Gold medal...	Apr. 24, 1885
Marcus A. Hanna	Keeper of Cape Elizabeth Light Station, Maine.	Rescue of two of the crew of the schooner Australia, wrecked on Cape Elizabeth, Jan. 28, 1885, during a severe gale and intensely cold weather. (An. Rpt., 1885.)	.....do	Apr. 25, 1885
Harry Rutter	Atlantic City, N. J.	Rescue of a man from drowning in the surf at Atlantic City, July 26, 1883. (An. Rpt., 1885.)	Silver medal .	May 20, 1885
John P. F. Hagen	Philadelphia, Pa.	Rescue of thirteen boys who had broken through the ice on the Schuylkill River, Feb. 3, 1884. This feat was accomplished at great hazard to the rescuer. (An. Rpt., 1885.)	Gold medal...	May 22, 1885
David Miller.....	Captain of the schooner Driver.	Rescue of twelve persons, the survivors of the crew of the steamer H. C. Akeley, which foundered in Lake Michigan during the gale of Nov. 13, 1883. The mate and seaman of the Driver rendered specially meritorious service on this occasion. (An. Rpt., 1885.)	Silver medal .	June 2, 1885
Daniel F. Miller.....	Mate .....	.....do	Gold medal...	Do.
Patrick H. Daly	Seaman .....	.....do .....	.....do	Do.
Charles H. Biller.....	Newark, N. J.	Rescue from drowning of a man named Thomas O'Neil, at Asbury Park, N. J., Aug. 16, 1884. (An. Rpt., 1886.)	Silver medal .	Aug. 12, 1885
Joseph Greenwald	St. Louis, Mo.	Rescuing two persons from drowning in the Mississippi River. (An. Rpt., 1886.)	.....do	Dec. 2, 1885
James Larson	Sister Bay, Wis. ...	Rescuing, unaided, by means of a small boat, the entire crew—seven men—of the wrecked Canadian bark Two Friends, on the night of Oct. 16, 1880, during a heavy gale and snow-storm. (An. Rpt., 1886.)	Gold medal...	June 10, 1886
C. A. J. Queckberner ...	New York	Rescue of several persons from drowning in July and August, 1882. A silver medal had previously been awarded Mr. Queckberner for saving life. (See under date of May 17, 1882.)	Silver bar.....	June 14, 1886
Joseph Devine	Cranston, R. I.	Rescuing several persons from drowning in April, 1884, and July, 1885. (An. Rpt., 1887.)	Silver medal .	July 22, 1886
Michael J. Bradford....	Of the Volunteer Life-Saving Corps, Atlantic City, N. J.	Rescuing the crew of the schooner Flora Curtis, wrecked off Atlantic City on the 18th of Aug., 1879. Mr. Bradford had also rescued from drowning a great many persons at various times. (An. Rpt., 1887.)	Gold medal...	July 26, 1886
Jesse B. Bean .....	.....do .....	.....do	Silver medal .	Do.
E. Owens.....	.....do .....	.....do .....	.....do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Hiram Dudley Buck ...	Crown Point Center, N. Y.	Rescue from drowning of four persons at various times. (An. Rpt., 1887.)	Silver medal..	July 26, 1886
George W. Bloomer	Chatham, Mass ...	Rescue of the crew of five men of the schooner Grecian, wrecked on Chatham Bar early in the morning of Dec. 6, 1885. (An. Rpt., 1887.)	.....do.....	Do.
Benjamin Patterson .....	.....do.....	.....do.....	.....do.....	Do.
Andrew H. Bearse .....	.....do.....	.....do.....	.....do.....	Do.
Zenas W. Hawes .....	.....do.....	.....do.....	.....do.....	Do.
Otis C. Eldredge .....	.....do.....	.....do.....	.....do.....	Do.
Zenas H. Gould .....	.....do.....	.....do.....	.....do.....	Do.
Francisco Bloomer .....	.....do.....	.....do.....	.....do.....	Do.
William A. Bloomer .....	.....do.....	.....do.....	.....do.....	Do.
Willis I. Bearse .....	.....do.....	.....do.....	.....do.....	Do.
Wilber H. Patterson .....	.....do.....	.....do.....	.....do.....	Do.
Thomas Reynolds	Quartermaster on U. S. Coast Survey steamer McArthur.	Rescue from drowning of a shipmate who fell overboard in Haro Strait, Wash., while the vessel was under way, Sept. 19, 1886. (An. Rpt., 1887.)	.....do.....	Dec. 17, 1886
Charles Richardson....	Mate of light-house tender Shubrick.	Rescue of a man from the bottom of boat capsized in the breakers on Clatsop Spit, Columbia River, Oregon, Oct. 7, 1884. (An. Rpt. 1887.)	.....do.....	Dec. 24, 1886
John Jones.....	Seaman .....	.....do.....	.....do.....	Do.
Nicolas Dorie .....	.....do.....	.....do.....	.....do.....	Do.
Peter Nesman .....	.....do.....	.....do.....	.....do.....	Do.
August Ripetz .....	.....do.....	.....do.....	.....do.....	Do.
Axil Wiklund .....	.....do.....	.....do.....	.....do.....	Do.
John C. Patterson.....	Keeper of life-saving station.	Rescue of the crew of the yacht Foam, off Key East, N. J., on the 27th of July, 1885, during a heavy onshore gale. (An. Rpt., 1887.)	Gold medal..	Feb. 3, 1887
John Redmond	Surfman .....	.....do.....	Silver medal..	Do.
John H. Pearce .....	.....do.....	.....do.....	.....do.....	Do.
John H. Smith .....	.....do.....	.....do.....	.....do.....	Do.
David Kittell .....	.....do.....	.....do.....	.....do.....	Do.
Henry A. Bennett.....	.....do.....	.....do.....	.....do.....	Do.
Edward Brand .....	.....do.....	.....do.....	.....do.....	Do.
William Newman	Volunteer .....	.....do.....	.....do.....	Do.
Dixon McQueen	Of the fire boat Zophar Mills, New York harbor.	Rescuing a number of persons from drowning in the North River, N. Y., during the years 1878-1887. (An. Rpt., 1887.)	.....do.....	Feb. 4, 1887
Thomas Conroy.....	Niagara Falls, N. Y.	Rescuing a man from a rock in the Niagara River, just above the falls, where his boat had been swept by the strong current, on the night of Oct. 15, 1886. (An. Rpt., 1887.)	Gold medal..	Mar. 28, 1887
Frederic Kernochan...	New York	Rescue from drowning, at Highlands, N. J., on the 4th of Oct., 1886, of a young woman. (An. Rpt., 1887.)	.....do.....	Apr. 7, 1887
Edith Clarke.....	Oakland, Cal.....	Rescue from drowning in Lake Chabot on Aug. 31, 1886, while a pupil at the convent of Our Lady of the Sacred Heart, at Oakland, of a schoolmate. (An. Rpt., 1887.)	.....do.....	May 26, 1887

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
William Babb.....	Goderich, Ontario, Canada.	Rescuing the entire crew, seven people, of the American schooner A. C. Maxwell, stranded near Goderich on the morning of Dec. 9, 1885, during a fierce gale. (An. Rpt., 1888.)	Gold medal...	Nov. 12, 1887
Thomas Finn.....	do.....	do.....	Silver medal..	Do.
Daniel McIver.....	do.....	do.....	do.....	Do.
Malcolm McDonald.....	do.....	do.....	do.....	Do.
John McDonald.....	do.....	do.....	do.....	Do.
Neill McIver.....	do.....	do.....	do.....	Do.
John McLean.....	do.....	do.....	do.....	Do.
Henry H. Everett.....	Chicago, Ill.....	Rescue of several persons from drowning in Lake Michigan at different times in the years 1883-1885. (An. Rpt., 1888.)	do.....	Do.
William B. Everett.....	do.....	do.....	do.....	Do.
John F. Kilty.....	Boston, Mass.....	Rescue of ten persons from drowning on various occasions during the years 1874-1886. (An. Rpt., 1888.)	do.....	Do.
Frederick A. Walker...	Schenevus, N. Y....	Rescuing from drowning two boys who had broken through the ice while skating, Mar. 4, 1887. (An. Rpt., 1888.)	do.....	Jan. 21, 1888
James Huston.....	Bayfield, Ontario, Canada.	Rescuing the crew of eight men of the American schooner George W. Davis, wrecked near Bayfield, Dec. 1, 1886, during a heavy gale and snowstorm. (An. Rpt., 1888.)	do.....	Do.
Cornelius W. Johnston.	Winneconne, Wis.	Rescuing four persons from drowning during the years 1883-1886. (An. Rpt., 1888.)	do.....	Do.
Marie D. Parsons.....	Fireplace Point, Long Island, N. Y.	Rescuing a young man and a little girl from drowning, July 7, 1883. At that time the rescuer was but 10 years old. (An. Rpt., 1888.)	do.....	Feb. 7, 1888
James Behan.....	Metropolitan police, New York.	Rescue from drowning of a lad who had fallen from a dock into the East River, and was being swept away by the strong tide, Aug. 18, 1887. (An. Rpt., 1888.)	do.....	Do.
Thomas Sampson.....	New York.....	Rescue from drowning of five boys, three near Fort Hamilton, N. Y., June, 1854, and two in Hell Gate, East River, June, 1856. These rescues were effected in so heroic and gallant a manner that a medal was awarded Mr. Sampson by special act of Congress. (An. Rpt., 1888.)	Gold medal...	May 14, 1888, by an act of Congress, approved that date.
Henry F. Paige.....	Schenevus, N. Y....	Rescuing a companion from drowning in a deep pond near Schenevus, Aug. 8, 1887. (An. Rpt., 1888.)	Silver medal..	May 31, 1888
Charles Gibbons, jr....	Philadelphia, Pa.	Rescue from drowning, at great personal risk, of a man at Beach Haven, N. J., July 28, 1883. (An. Rpt., 1889.)	Gold medal...	July 7, 1888
William J. Venable....	New York.....	Rescuing from drowning at Coney Island, New York, at various times between 1879 and 1888, some thirty persons. (An. Rpt., 1889.)	Silver medal..	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Charles Mollhagen.....	St. Joseph, Mich ..	Rescuing four men, the survivors of the crew of seven of the schooner Havana, wrecked and sunk during the severe gale of Oct. 3, 1887. (An. Rpt., 1889.)	Gold medal...	July 7, 1888
August Kuehn.....	do	do	do	Do.
John H. Langley.....	do	do	Silver medal..	Do.
John Carrow.....	do	do	do	Do.
August Habel.....	do	do	do	Do.
George Schneider.....	do	do	do	Do.
Louis Mollhagen.....	do	do	do	Do.
Robert Mollhagen.....	do	do	do	Do.
Alexander Cran.....	do	do	do	Do.
Augustus S. Heckler...	New York	Rescue of two persons from drowning in the surf at Asbury Park, N. J., Aug. 11, 1885. (An. Rpt., 1889.)	do	Do.
William A. Harris.....	San Bernardino, Cal.	Rescue from drowning of a lad who was caught by the undertow while seining for fish and swept offshore beyond the line of breakers, Aug. 2, 1886. (An. Rpt., 1889.)	Gold medal...	Nov. 17, 1888
Mary Whiteley	Charleston, S. C. ...	Rescuing three men whose boat was capsized in the harbor of Charleston by the heavy wind prevailing on Aug. 21, 1888. (An. Rpt., 1889.)	Silver medal..	Do.
Maud King	do	do	do	Do.
Dennis O'Hara.....	Metropolitan police, New York.	Rescue from drowning of a woman who fell from a pier into the North River early in the morning of Dec. 2, 1885. (An. Rpt., 1889.)	do	Do.
Walter Claus.....	Ontario, Canada..	Rescuing, on Oct. 15, 1886, during a severe storm, four men from the rigging of the American schooner O. M. Bond, wrecked near Rondeau, Canada. (An. Rpt., 1889.)	do	Do.
Christopher Ludlam...	Keeper of life-saving station.	Rescuing, on the night of Dec. 4, 1886, during a heavy northeast gale and snowstorm, the entire crew, five men, of the schooner D. H. Ingraham, afire and stranded amongst the breakers on the bar at Hereford Inlet, N. J. (An. Rpt., 1889.)	Gold medal...	Do.
Jason Buck	Surfman.....	do	Silver medal..	Do.
Henry W. Hildreth.....	do	do	do	Do.
Willard F. Ware.....	do	do	do	Do.
Somers C. Godfrey.....	do	do	do	Do.
Smith S. Hand.....	do	do	do	Do.
Providence S. Ludlam.....	do	do	do	Do.
Harry A. George.....	Charlottesville, Va.	Rescuing from drowning a companion who had broken through the ice while skating, Jan. 28, 1888. (An. Rpt., 1889.)	do	Do.
James Manning.....	Private, Co. B, 6th U. S. Infantry.	Rescue of a fellow-soldier from drowning while crossing the Grand River, Utah, June 6, 1886. (An. Rpt., 1889.)	do	Do.
John Coyle	Co. B, 22d U. S. Infantry.	Rescuing a lady who but for his gallant action would have lost her life in the "Old Faithful Geyser," Yellowstone Park, Aug. 9, 1888. (An. Rpt., 1889.)	do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
John F. Condon.....	New York.....	Rescuing from drowning two persons, one a boy who had broken through the ice, the other a man who had ventured too far from shore while swimming. (An. Rpt., 1890.)	Silver medal..	Nov. 17, 1888
John T. De Liesseline ..	Charleston, S. C....	Rescuing from drowning an insane woman who had escaped from her keepers and jumped into the Ashley River, Aug. 13, 1888. (An. Rpt., 1889.)	.....do.....	Dec. 4, 1888
Silas H. Harding.....	Keeper of life-saving station.	Rescuing, on June 26, 1888, during a severe storm and heavy sea, four men from the schooner Oliver Dyer, wrecked on the rocks near the Jerrys Point Station, N. H. (An. Rpt., 1889.)	Gold medal...	Jan. 10, 1889
George W. Randall.....	Surfman.....	do.....	.....do.....	Do.
Winslow A. Amazeen.....	do.....	do.....	.....do.....	Do.
Ephraim S. Hall.....	do.....	do.....	.....do.....	Do.
Selden F. Wells.....	do.....	do.....	.....do.....	Do.
Ernest Robinson.....	do.....	do.....	.....do.....	Do.
John Smith.....	do.....	do.....	.....do.....	Do.
Joshua James.....	Volunteer of the Massachusetts Humane Society.	Rescuing the crew of eight men of the schooner Gertrude Abbott, wrecked on the rocks at Nantasket Roads by the furious gale early in the evening of Nov. 25, 1888. The heavy sea, together with the darkness and driving snowstorm, rendered the service extremely hazardous. Capt. Joshua James had charge of the rescuing boat. (An. Rpt., 1889.)	.....do.....	Do.
Osceola F. James.....	do.....	do.....	.....do.....	Do.
Alonzo L. Mitchell.....	do.....	do.....	.....do.....	Do.
H. Webster Mitchell.....	do.....	do.....	.....do.....	Do.
Ambrose B. Mitchell.....	do.....	do.....	.....do.....	Do.
John L. Mitchell.....	do.....	do.....	.....do.....	Do.
Eben T. Pope.....	do.....	do.....	.....do.....	Do.
George F. Pope.....	do.....	do.....	.....do.....	Do.
Joseph T. Galiano.....	do.....	do.....	.....do.....	Do.
Louis F. Galiano.....	do.....	do.....	.....do.....	Do.
Frederick Smith.....	do.....	do.....	.....do.....	Do.
Eugene Mitchell.....	do.....	Rescue of the survivors, five men, of the schooner H. C. Higginson, stranded on Nantasket Beach, Nov. 26, 1888. Two of the schooner's crew were washed overboard and lost, and one was frozen to death in the rigging before succor arrived. Capt. Joshua James, who figured so conspicuously in the preceding case, had charge of the boat on this occasion, and, besides the five men here named, was accompanied by several of his crew of the previous day (An. Rpt., 1889.)	Silver medal..	Do.
Eugene Mitchell, jr.....	do.....	do.....	.....do.....	Do.
William B. Mitchell.....	do.....	do.....	.....do.....	Do.
Alfred Galiano.....	do.....	do.....	.....do.....	Do.
George Augustus.....	do.....	do.....	.....do.....	Do.
John H. Hanley.....	New York.....	Rescue of several persons from drowning at Rock away Beach, Long Island, during the years 1887-88. (An. Rpt., 1890.)	.....do.....	July 2, 1889

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
James Quigley	Metropolitan police, New York.	Rescue of two persons from drowning in the East River. (An. Rpt., 1890.)	Silver medal .	July 2, 1889
William B. Miller	Elkton, Md.	Rescue from drowning of a lad who, together with several companions, of whom young Miller was one, was swimming in Big Elk Creek, Md., June 28, 1888. (An. Rpt., 1890.)	.....do	Do.
James S. Kintz	Surfman of life-saving station.	Rescuing two men from the yacht Collingwood, capsized at the mouth of the Genesee River, N. Y., Aug. 13, 1888. (An. Rpt., 1890.)	.....do	Do.
Thomas J. Truxton	Keeper of life-saving station.	Rescue from drowning of a bather at Rehoboth Beach, Del., July 23, 1888. (An. Rpt., 1890.)	.....do	Do.
C. Allen Maull	Lewes, Del.	Rescue of a woman from drowning in the surf at Rehoboth Beach, Del., July 23, 1888. (An. Rpt., 1890.)	.....do	Do.
James Macdonald	Gloucester, Mass. .	Rescuing, on Jan. 2, 1882, during a northeast gale and snowstorm, the crew of three men of the small schooner Dorado, (An. Rpt., 1890.)	.....do	Do.
Patrick G. McInnis ....	.....do .....	.....do .....	.....do	Do.
Alexander Brimmer .....	.....do .....	.....do .....	.....do	Do.
Fugi Hachitaro	Cabin steward of U. S. S. Trenton.	Rescue from drowning, at great personal risk, of Lieut. John C. Wilson, navigating officer of U. S. S. Vandalia, in Apia Harbor, Samoan Islands, during the great hurricane of Mar. 16, 1889. (An. Rpt., 1890.)	Gold medal...	Nov. 5, 1889
Albert K. Pike	Glens Falls, N. Y. .	Rescuing a child from drowning in Glen Lake, Sept. 20, 1889. (An. Rpt., 1890.)	Silver medal .	Dec. 9, 1889
Jonas Johns	Indian of the Quinault Agency, Wash.	Rescuing the entire crew (fourteen men) of the schooner Lilly Grace, wrecked near Grays Harbor, January, 1887, and, about a year later, rescuing three of the crew of the British ship Abercorn, wrecked not far from the same place. (An. Rpt., 1890.)	.....do	Do.
Sampson Johns .....	.....do .....	.....do .....	.....do	Do.
Richard F. Warren	Wilmington, N. C.	Rescuing from drowning at great hazard to himself, a young lady, who, while bathing at Wrightsville Beach, N. C., was carried out beyond the breakers by the strong current, June 15, 1889. (An. Rpt., 1890.)	Gold medal...	Apr. 23, 1890
John Boyne	South Haven, Mich.	Rescue from drowning of a child that had fallen from a wharf into the harbor of South Haven, Aug. 10, 1889. (An. Rpt., 1890.)	Silver medal..	Do.
Andrew M. Taylor	Rondout, N. Y.	Rescuing several persons from drowning during the years 1882-83. (An. Rpt., 1890.)	.....do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Joseph B. Sears.....	Brooklyn, N. Y. . .	Rescuing the crews— forty-one persons— of the steamers Cleopatra and Crystal Wave, wrecked in a collision off the capes of the Delaware early in the morning of Oct. 29, 1889. (An. Rpt., 1890.)	Silver medal .	Apr. 23, 1890
Dennis Tracy	Bangor, Me.	Rescue of several persons from drowning in the Penobscot and Ken- duskeag rivers at vari- ous times during the year 1880. (An. Rpt., 1890.)	.....do	Do.
Frank Tompkins.....	Governors Island, N. Y.	Rescue from drowning in the Narrows, entrance to harbor of New York, of a sailor, July 27, 1889. (An. Rpt., 1890.)	.....do	Do.
James S. Donahue	Keeper of light- house at South Haven, Mich.	Rescuing a number of persons from drowning at various times during the years 1875-1889. (An. Rpt., 1890.)	.....do	May 20, 1890
James McMahon.....	New York.....	Rescue of a man from drowning in the surf off Normandie, N. J., at the imminent risk of his life, July 26, 1890.	Gold medal...	Aug. 20, 1890
Jesse Howland.....	Seabright, N. J.	.....do .....	.....do	Do.
Arthur L. Finch	Lackawaxen, Pa.	Rescue from drowning of a lad who had fallen in- to Lackawaxen Creek, which at the time was much swollen by recent heavy rains, July 27, 1890.	Silver medal..	Sept. 11, 1890
Harry H. Moore	Brooklyn, N. Y. . .	Rescuing a girl from drowning near Coscob, Conn., Aug. 6, 1890.	.....do	Sept. 30, 1890
Lawrence O. Lawson ..	Keeper of life- saving station.	Rescue of the crew of the steamer Calumet, wrecked some fifteen miles from the Evans- ton Life-Saving Station, Ill., Nov. 28, 1889. The service was particularly hazardous, and the res- cue was effected only after the display of ex- traordinary courage and heroism by the boat's crew.	Gold medal...	Oct. 17, 1890
George Crosby	Surfman.....	.....do .....	.....do	Do.
William M. Ewing .....	.....do .....	.....do .....	.....do	Do.
Jacob Loining .....	.....do .....	.....do .....	.....do	Do.
Edson B. Fowler .....	.....do .....	.....do .....	.....do	Do.
William L. Wilson .....	.....do .....	.....do .....	.....do	Do.
Frank M. Kindig .....	.....do .....	.....do .....	.....do	Do.
Thomas M. Webb	Wilmington, N. C.	Rescue from drowning in the surf off Wrightsville, N. C., of two ladies who had been carried be- yond their depth by the tide, Aug. 30, 1890.	.....do	Do.
Daniel J. Reagan	South Boston, Mass.	Rescue of a man from drowning in the harbor at South Boston, July 4, 1890.	Silver medal..	Dec. 22, 1890
Thomas F. Freel	New York.....	Rescuing several persons from drowning in the harbor of New York at various times during the years 1884-89.	.....do	Jan. 9, 1891
Alfred Mitchell.....	Erie, Pa	Rescuing, while in com- mand of the steam barge Edward Smith No. 2, thirteen men of the steamer Annie Young, while she was burning on Lake Huron, Oct. 20, 1890.	Gold medal...	Jan. 10, 1891

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Jacob N. Lanstra.....	Assistant keeper of Grosse Point light - vessel, Lake Michigan.	Rescue from drowning of a boy who had broken through the ice, Dec. 29, 1890.	Silver medal..	Jan. 28, 1891
Frederick T. Hatch	Keeper of light-house, Cleveland, Ohio.	Rescue of a lady from drowning at the entrance to the harbor of Cleveland on the night of Oct. 26, 1890. Mr. Hatch had previously, while a surfman at the Cleveland Life-Saving Station, received the gold medal of the Service. (See under date of Dec. 3, 1884.)	Gold bar.....	Feb. 26, 1891
C. A. Carlssen	Boatswain's mate on the U. S. S. Despatch.	Rescuing from drowning a man who had broken through the ice off the Washington Navy-Yard, Jan. 9, 1891.	Silver medal..	Feb. 27, 1891
Patrick Kennedy	Ordinary seaman.	.....do.....	.....do.....	Do.
William Penn.....	Seaside Park, N. J.	Rescue from drowning of a boy who had fallen into the water from the railroad bridge at Barnegat Bay, N. J., Sept. 13, 1890.	.....do.....	Apr. 7, 1891
Eugene Longstreet	Brielle, N. J.....	.....do.....	.....do.....	Do.
Custis Harrison	Corporal, Troop D, 5th U. S. Cavalry.	Rescuing three persons from drowning in the Red River, Texas, Nov. 23, 1890.	.....do.....	Do.
Mabel Mason	Mamajuda light-station, Detroit River.	Rescuing a man who had been thrown from his boat into Detroit River by the swash of a passing steamer, May 11, 1890.	.....do.....	Apr. 15, 1891
Calvin Gunn.....	Washington, D. C.	Rescuing from drowning, with great peril to his own life, a boy who had fallen into the river from a wharf at Washington, D. C., May 25, 1891.	.....do.....	July 11, 1891
Albert Owen	Trescott, Me	Rescue from drowning, with a frail craft, of two men whose boat had capsized near Pembroke, Me., in the swift current, July 10, 1887.	.....do.....	July 16, 1891
Harry T. Thompson....	New York	Rescuing a number of persons from drowning at various times during the years 1882-1886, and particularly for gallantly taking six persons from a boat capsized in New York Bay, September, 1886.	Gold medal...	Oct. 14, 1891
Reuben Held .....	.....do.....	Rescue from drowning, June 18, 1891, of a boy who had gone beyond his depth while bathing, at Marlon, Mass.	Silver medal..	Oct. 23, 1891
Moritz Rosenthal	Riverside, Cal	Rescuing from drowning, Aug. 29, 1891, a man who was bathing in Spring Brook, San Bernardino County, Cal. The service was rendered particularly arduous and meritorious by the youth of the rescuer, a boy of 14 years.	.....do.....	Do.
Joseph Fernald	Surfman of life-saving station.	Rescuing a number of persons from drowning in Portsmouth Harbor, N. H., at various times during the year 1891.	.....do.....	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
John W. Brindley.....	Private, 15th U. S. Infantry.	Rescue from drowning, at great risk to his own life, of a boy whose boat had capsized in Lake Michigan, July 24, 1891.	Silver medal..	Jan. 20, 1892
Charles Van Buren	do	do	do	Do.
William Oakmore.....	do	do	do	Do.
John Regnier.....	Surfman of life-saving station.	Recovering the body of a child drowned on Dec. 22, 1888. While aiding in saving lives from the steam collier Mendocino, wrecked on Humboldt Bar, he sprang into the furious surf and took the child from the water after the surfboat had twice failed to make a recovery. (An. Rpt., 1899.)	Gold medal...	Feb. 6, 1892
John Bergman.....	Gardner, Oreg....	Rescuing eighteen or twenty persons from the steamer Tacoma, wrecked near the mouth of Umpqua River, Jan. 29, 1883. The work was accomplished in the face of great danger, the heavy surf several times capsizing the frail boats in which rescue was made.	do	Do.
Benjamin Dexter.....	Grays Harbor, Wash.	do	Silver medal..	Do.
Robert Breen	Empire City, Oreg.	do	do	Do.
Edward D. Ballentine..	Captain of steamer Elin-Mere.	Rescuing under circumstances of great hazard and difficulty the entire crew—thirteen men—of the steamer Oswegatchie, sinking off Sturgeon Point, Lake Huron, Nov. 26, 1891.	do	Feb. 23, 1892
John E. Johnson	Keeper of life-saving station.	Rescue of nineteen men from the wreck of the Spanish steamer San Albano, off Hog Island, Va., Feb. 23, 24, 1892. Two heroic but futile attempts were made to reach the vessel with the surfboat. Communication was finally made with the beach apparatus by means of the keeper's ingenuity, and all on board were landed in the life car. Medals were also bestowed upon Keeper Johnson and his crew, named below, by the Spanish Government, and their acceptance was authorized by Congress. (An. Rpt., 1892.)	Gold medal...	Mar. 21, 1892
James K. Carpenter	Surfman.....	do	Silver medal..	Do.
James A. Doughty	do	do	do	Do.
John R. Dunton.....	do	do	do	Do.
John E. Smith	do	do	do	Do.
John H. Dewald	do	do	do	Do.
Robert C. Joynes	do	do	do	Do.
William B. Goffigon	do	do	do	Do.
Joshua E. Berton	Substitute	do	do	Do.
Frank Lasley	Mackinac Island, Mich.	Rescuing, with great skill and heroism, three soldiers whose boat had been capsized in Mackinac Strait in the heavy wind and sea prevailing, Nov. 23, 1891.	Gold medal...	Apr. 2, 1892
Nicholas Shomin	do	do	do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Walter N. Chase.....	Keeper of life-saving station.	Rescuing, during heavy gale and sea, the crew of seven men from the rigging of the Canadian schooner H. P. Kirkham, wrecked on Rose and Crown Shoal, 15 miles seaward from Coskata Station, Nantucket, Mass., Jan. 21, 1892. The men were saved only by the utmost skill and bravery, and were brought to land after battling for twenty-three hours against wind and sea. (An. Rpt., 1892.)	Geld medal...	Apr. 2, 1892
Jesse H. Eldridge	Surfman.....	do	Silver medal..	Do.
Roland H. Perkins.....	do	do	do	Do.
Charles H. Cathcart.....	do	do	do	Do.
John Nyman.....	do	do	do	Do.
Josiah B. Gould.....	Temporary surfman.	do	do	Do.
George J. Flood.....	do	do	do	Do.
Mrs. Martha White.....	Copalis, Wash....	Rescuing from drowning in the breakers, at the imminent peril of her life, three sailors from the British bark Ferdale, wrecked on the coast of Washington, Jan. 29, 1892.	Gold medal...	Apr. 18, 1892
Frank D. Ring.....	Chicago, Ill.....	Rescuing, during a period of six or seven years, several persons from drowning, and particularly for marked heroism in saving the lives of a girl (May 1, 1889) and an old man (Sept. 12, 1890), both of whom had fallen into North River, New York.	do	Apr. 25, 1892
Elias S. Wingate.....	Charleston, S. C. . .	Rescuing from drowning a young woman who had fallen overboard in Charleston Harbor, Nov. 7, 1877.	Silver medal..	Do.
Herman C. Schumm	Second lieutenant, U. S. Army.	Rescuing, under circumstances which imperiled his own life, two men clinging to a capsized boat off Fort Schuyler, N. Y., June 16, 1891.	do	June 4, 1892
William Jones.....	Sergeant, Battery K, Second Artillery.	do	do	Do.
Harry Kenrick.....	Sergeant, Battery M, Second Artillery.	do	do	Do.
Waldo B. Carpenter.....	Corporal, Battery K, Second Artillery.	do	do	Do.
William A. Monck.....	Private, Battery M, Second Artillery.	do	do	Do.
James Ryan.....	Private, Battery K, Second Artillery.	do	do	Do.
James Quinlisk.....	do	do	do	Do.
Cyrus S. Van Amringe..	Wilmington, N. C.	Rescue from drowning, after a hard struggle, of a man who had become exhausted and was being carried out to sea by the tide, at Wrightsville, N. C., Sept. 3, 1891.	do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Benjamin U. Jackson ..	Bathing master, Spring Lake, N. J.	Rescue from drowning of two men carried out to sea by the current at Spring Lake, N. J., and recovering the bodies of a young man and a young woman drowned at the same time, Aug. 14, 1890.	Silver medal..	June 10, 1892
Bertie O. Burr	Lincoln, Nebr	Rescuing from drowning, with heroic bravery, two young women with whom she was bathing in Blue River, Nebr., July 23, 1891.	Gold medal...	June 14, 1892
Samuel Arundale.....	Charlottesville, Va	Rescue from drowning of a young man who had become exhausted and had sunk while attempting to swim across the Rivanna River, June 13, 1891.	Silver medal..	June 20, 1892
William N. Blow, jr	First lieutenant, U. S. Army.	Rescuing, with an unseaworthy craft, a man clinging to a boat that had capsized in the rough sea, about a mile from Fort Sheridan, Ill., Oct. 10, 1891.	.....do	Do.
Michael Kynan.....	Private, Company H, Fifteenth In- fantry.	.....do .....	.....do	Do.
Daniel H. Cleaveland..	U. S. Fish Com- mission steam launch Petrel.	Rescue from drowning of a small boy who had fallen into the water at Gloucester City, N. J., Apr. 22, 1892.	.....do	Do.
John McCloy	Niegara Falls, N. Y.	Rescued a man from the rocks at the foot of Horseshoe Falls, Oct. 5, 1886; and on Nov. 15, 1887, after many trials and with great personal risk, rescued a man from a rock just above the American Falls.	.....do	July 21, 1892
George Nobles	Seaman on U. S. revenue cutter Morrill.	Rescuing in a meritorious and heroic manner, by swimming and diving several times, a boy who had fallen into the water and become entangled at the bottom of the custom-house slip, Charleston, S. C., Aug. 1, 1892.	.....do	Sept. 14, 1892
John Nelson .....	.....do .....	.....do .....	.....do	Do.
Massie Milne	Newark, N. J	Rescued, by swimming to her assistance and bringing her ashore at Avon, N. J., Aug. 23, 1892, a woman who was going out to sea with the tide and who became unconscious. She was resuscitated after considerable effort.	.....do	Sept. 19, 1892
John J. Hayes.....	Wilmington, N. C.	Rescued on Aug. 19, 1892, at Wrightsville Beach, N. C., Jacob Eron from the surf, where he was in danger of drowning.	.....do	Sept. 28, 1892
Godfrey H. Macdonald.	First lieutenant, First U. S. Cav- alry.	Rescued, on the night of Aug. 14, 1892, by leaping from the ferryboat Atlantic in midstream, New York Harbor, a man who had fallen overboard, and who would have drowned but for the timely assist-	Gold medal...	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Godfrey H. Macdonald.	First lieutenant, First U. S. Cavalry.	ance in sustaining him until a life line could be thrown them. The night was dark and the current swift, making the action one of extraordinary heroism and daring.	Gold medal...	Sept. 28, 1892
Christian F Wolf	Sergeant, Battery M, Third U. S. Artillery.	Rescuing, in 1886, 1890, and 1892, several persons from drowning at Fort Monroe, Va., under circumstances of danger rendering the actions especially heroic.	Silver medal..	Oct. 6, 1892
Harvey McGuire.....	Private, Hospital Corps, U. S. Army.	Rescued from drowning a soldier who had been taken with cramps while bathing in the Licking River, near Fort Thomas, Ky., June 14, 1892, by swimming to his relief, and clinging to him manfully. In spite of his desperate struggles, which caused them to sink once, McGuire carried him safely to the shore.	.....do	Do.
Christopher A. Wenz...	Fireman on U. S. revenue cutter Woodbury.	Rescued two boys, belonging on the Woodbury, from death by drowning while bathing in the Kennebec River, at Bath, Me., Aug. 20, 1892. Wenz jumped overboard from the steamer and swam to the boys, who grasped him, and all three sank, but, aided by Lieutenant Berry, who waded into the stream, they were assisted to the shore.	.....do	Oct. 18, 1892
Julien H. Thomson	Port Huron, Mich.	Rescued, on Aug. 20, 1892, with great bravery and at peril of his life, a young woman, who, being unable to swim, had got beyond her depth while bathing in Lake Huron. He plunged into the surf, which was quite rough, without removing his clothing, reached the girl after she had sunk several times and was unconscious, and succeeded, after a hard struggle, in reaching shore with his charge.	Gold medal...	Do.
Thomas H. Herndon...	Birmingham, Ala.	Assisting to rescue, by a perilous journey in a small boat, two men who had been capsized in a sailboat, during a gale, on Lake Griffin, Florida, May 20, 1880, about 3 miles from shore.	Silver medal..	Jan. 28, 1893
Virgil L. Hopson	Leesburg, Fla.....	.....do .....	.....do	Do.
Henry P. Christiernin..	East Boston, Mass.	Rescuing three boys from drowning by leaping into the water from the deck of a ferryboat Sept. 6, 1887; also saving a woman from drowning in a ferry slip at East Boston, Mass., Jan. 8, 1891.	.....do	Feb. 16, 1893

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Joseph Devine	Fire department, Providence, R. I.	Rescued by jumping from a wharf at Providence, R. I., July 17, 1890, a man who had fallen into the water. The current was strong and the man unable to swim. Mr. Devine having received a silver medal previously (see record of July 22, 1886), a silver bar was awarded for his service.	Silver bar	Feb. 20, 1893
W. G. Lee	Savannah, Ga.	Rescuing on five different occasions—four of them being at night—between Dec. 18, 1878, and July 5, 1885, eight persons who had fallen into the waters on the coasts of Georgia and Florida. The assistance was rendered at great personal risk, placing the life of the rescuer in jeopardy.	Gold medal ..	Feb. 23, 1893
F. D. Webster	Lieutenant, U. S. Army.	Rescuing a man and his wife who had fallen through an air hole while crossing the ice between Jersey City and Bedloes Island, New York Harbor, on the evening of Jan. 18, 1893. The rescue was accomplished after arduous labor and at great hazard, the ice bending and almost giving way beneath the men engaged in the work, who were in imminent danger of being submerged.	Silver medal..	Do.
Denis Barry	Private, Co. A, Sixth Infantry.	.....do .....	.....do	Do.
John Buerger .....	.....do .....	.....do .....	.....do	Do.
Denis Guiney .....	.....do .....	.....do .....	.....do	Do.
Leroy S. Hotchkiss .....	.....do .....	.....do .....	.....do	Do.
Charles F. Rodenstein .....	.....do .....	.....do .....	.....do	Do.
Alex. M. Wetherill, jr .....	.....do .....	.....do .....	.....do	Do.
Benjamin Hewlett.....	Wilmington, N. C.	Rescuing on Aug. 8, 1892, two young girls bathing near the mouth of Hewletts Creek, Wrightsville Sound, North Carolina, who had got beyond their depth and were drifting out with the current. After a heroic struggle he reached shore with them, but was disabled several days by exhaustion and cuts on the feet caused by running over oyster beds to reach them.	.....do	Mar. 16, 1893
Harvey A. White.....	Bangor, Me	Rescued two boys from drowning in the Penobscot River, Maine, Aug. 15, 1892. One of the boys clutched him, but he shook himself free, and by using both hands in holding each by the hair, carried them safely ashore.	.....do	Do.
Valentine Jones	Master of the steamer Hudson.	Rescuing in the steamer Hudson, by superior seamanship and persistent courage, the crew of the barge Sunshine, consisting of six men and a woman, on the night of Oct. 29, 1892, on Lake Erie. The barge went to pieces soon after the crew had been saved.	.....do	Mar. 29, 1893

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Ed. F. Wiese.....	Milwaukee, Wis..	Rescuing, on the evening of Aug. 24, 1890, a man who had become helpless while bathing in the Milwaukee River. Wiese was then a lad only 17 years old.	Silver medal..	Apr. 15, 1893
James Whittaker.....	Corporal, U. S. Marine Corps.	Bravely attempting the rescue of a comrade, who had fallen into the icy waters of the Piscataqua River at the Portsmouth Navy-Yard, on the evening of Jan. 20, 1893. When the accident occurred the thermometer stood at zero, but he plunged boldly into the river and grasped the imperiled man, who so hampered his movements, however, that other assistance was necessary to get them safely ashore.	.....do.....	May 3 189
P. G. Lowe, jr.....	Second lieutenant, U. S. Army.	Assisting to rescue, by swimming to his relief after he had sunk twice and supporting him while returning to the shore, one of a party of scouts with whom they were crossing the swiftly flowing Pecos River, Texas, May 14, 1890. The service required the incurrence of danger and extraordinary exertion.	.....do.....	May 4, 1893
Julian Longorio.....	Corporal of Scouts, U. S. Army.	.....do.....	.....do.....	Do.
Martin Knudsen.....	Keeper of Portedes Morts light-station.	Rescuing, on the night of Oct. 28, 1892, the crew of the schooner A. P. Nichols, stranded on Pilot Island at the entrance to Green Bay, Wisconsin. The keeper waded to a sunken wreck where he was exposed in the storm and darkness to the waves as well as the falling spars of the stranded vessel, and from there guided and assisted the ship's company of eight persons to the shore.	.....do.....	May 8, 1893
Ingar Olsen.....	Surfman of life-saving station.	Rescued, by superior intelligence, remarkable strength, and courageous daring, a man, the sole survivor of fifteen men, from the water-works crib, Milwaukee, Wis., Apr. 20, 1893.	Gold medal...	May 24, 1893
G. W. S. Jenkins.....	Master of the tug Juno.	Rescuing on Apr. 11, 1893, the mate and seven sailors of the Norwegian bark Riga, which stranded on that date off Bay Point, near Beaufort, S. C., in a northeast gale, and was completely wrecked and broken up. Captain Jenkins went out in the tug Juno with a crew of nine men, and picked up the castaways, who were adrift on the	.....do.....	June 22, 1893

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
G. W. S. Jenkins	Master of the tug Juno.	wreckage. A public meeting of the citizens of Beaufort, May 6, 1893, passed resolutions commendatory of the work, which had been performed under conditions endangering the tug and the lives of all on board.	Gold medal...	June 22, 1893
Luther Sykes.....	Engineer on the tug Juno.	do	Silver medal ..	Do.
Lawrence Lawton	Fireman on the tug Juno.	do	do	Do.
Henry Porter	Deckhand on the tug Juno.	do	do	Do.
William Tompkins.....	do	do	do	Do.
Fred Lightburn.....	Cook on the tug Juno.	do	do	Do.
James F. Magrath.....	Volunteer on the tug Juno.	do	do	Do.
Agapito Zabaljanagui.....	do	do	do	Do.
Wm. B. Scherer.....	do	do	do	Do.
Robert Miller.....	do	do	do	Do.
George B. Dean.....	Cincinnati, Ohio.	Rescued, on July 17, 1893, at Gratiot Beach, Lake Huron, a youth who sank to the bottom while bathing about 100 yards off shore. The rescue was effected at great personal risk by diving and supporting the unconscious boy until both were taken from the water by boatmen.	do	Sept. 7, 1893
Patrick Kaine	Sergeant, Co. D., 3d Infantry.	Rescuing, on June 16, 1893, a comrade whose canoe had been capsized by a sudden squall while fishing in Leach Lake, Minnesota. Sergeant Kaine jumped into the lake, swam to the boat, towed it ashore, while the endangered man, who could not swim and was nearly exhausted, clung to it.	do	Dec. 26, 1893
E. H. Gault.....	Cleveland, Ohio ..	Rescued from drowning, by swimming to their relief and conveying each one to a boat near by, three ladies who unexpectedly got into deep water, where they sank several times, while bathing in Lake Erie, July 28, 1893.	do	Do.
William E. Wingate.....	Charleston, S. C. ..	Rescued from drowning in the harbor of Charleston, S. C., on Sept. 14, 1893, a lad who had fallen into the Cooper River. Wingate, a youth only 14 years old, sprang into the water without removing his clothing and rescued the boy, who was drifting away with the tide, and had gone under the third time.	do	Jan. 8, 1894
Alfred Sorensen.....	Captain of steamer Charles L. Mather.	Rescued with extraordinary effort and courage, by jumping into the sea and swimming to his relief, a man who fell from the steamer Charles L. Mather, in Boston Bay, Aug. 21, 1892.	Gold medal...	Feb. 28, 1894

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Dennis F. Ward	Patrolman, New York City police.	Rescued, by jumping from a wharf at the foot of 120th street, New York City, Mar. 24, 1892, a boy who was drifting outward with the tide. After a hard struggle in the freezing water the officer brought the benumbed and helpless lad to the shore.	Silver medal..	Feb. 23, 1894
Alfred Graeber.....	Belleville, Ill	Rescuing, on Aug. 4, 1893, by prompt action, superior skill, and with considerable risk, four ladies who were endangered while bathing in the Okaw River, near Venedy, Ill.	....do.....	May 11, 1894
Dr. Joseph B. Graham..	Savannah, Ga	Rescuing in a small boat, with the assistance of Peter Dodge, a colored man, three men from the British bark Mary E. Chapman, stranded on Stone Horse Reef, Tybee Island, Georgia, Feb. 24, 1894. The heroic example of Dr. Graham and his boatman inspired others to persist, in the face of adverse conditions, in efforts, which were finally successful, to rescue seven men remaining on board the imperiled vessel.	Gold medal...	Aug. 4, 1894
Peter Dodge.....	..do.....	..do.....	Silver medal..	Do.
James Russell.....	Quartermaster, U. S. revenue cutter Forward.	Bravely rescuing, Apr. 2, 1894, a ship's boy who had fallen overboard and was drifting with the tide into deep water. Russell sprang from the deck, encumbered by his clothing and shoes, dived for the lad, who had sunk beneath the surface, recovered and swam with him toward the vessel until aid therefrom reached them.	....do.....	Sept. 26, 1894
Daniel E. Lynn	Port Huron, Mich.	During a fierce gale and high sea, attempted to reach the water-logged schooner William Shupe in a yawl boat towed by a tug, on May 19, 1894, to render assistance to the imperiled crew. The boat was capsized and all of its occupants, except Mr. Lynn, were drowned. He was washed ashore in an unconscious condition, half a mile from the vessel.	Gold medal...	Mar. 2, 1897 (special act).
Gilbert T. Hadlock.....	Master of steamer Islesford.	Daring seamanship, June 19, 1894, in navigating the small steamer Islesford in a dense fog and high sea through a tortuous and dangerous channel to the wreck of the schooner Effie T. Kemp, stranded on Thumper Ledge, Bakers Island, Maine, with seas breaking over her, and in rescuing thirteen men from her bowsprit by the skillful management of a dory.	Silver medal..	Mar. 18, 1896

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Benjamin G. Cameron .	Keeper of life-saving station.	Rescuing and assisting to rescue 103 persons from shipwreck on various occasions from 1875 to 1897.	Silver medal..	Feb. 20, 1899
Michael F. Barry	Brooklyn, N. Y. ...	Heroic services in rescuing from drowning, at the peril of his life, several people under the most trying difficulties on several occasions between the years 1887 and 1897.	Gold medal...	Apr. 25, 1899, by joint resolution of Congress, approved Feb. 27, 1899.
Alvin H. Cleveland	Vineyard Haven, Mass.	Rescuing and assisting to rescue fifteen persons from the wrecks of the American schooners E. J. Hamilton, Annie A. Booth, and Leora M. Thurlow, in the Harbor of Vineyard Haven, Mass., during the great hurricane of Nov. 27, 1896. This work was accomplished in the face of grave difficulties, and at the imminent risk of his own life.	...do	July 28, 1899
Isaac C. Norton ...	...do .....	...do .....	...do	Do.
F. Horton Johnson.....	...do	Rescuing and assisting to rescue ten persons from the wrecks of the American schooners Annie A. Booth and Leora M. Thurlow, at the same time and under the same conditions as the foregoing.	...do	Do.
Frank Golart, jr. ....	...do	Rescuing and assisting to rescue five persons from the wreck of the American schooner E. J. Hamilton, at the same time and under the same conditions as described above.	...do	Do.
Stanley Fisher	Cottage City, Mass.	Rescuing and assisting to rescue four persons from the wreck of the American schooner Leora M. Thurlow, at the same time and under the same conditions as described above.	...do	Do.
Conrad F. Strand.....	Master of steamer Point Arena.	Bravely assisting in the rescue of twenty-five persons from the wreck of the steamer San Benito, at Point Arena, Cal., Nov. 22 and 23, 1896. Captain Strand stood by the wreck in a dangerous sea and sent a boat to it several times, saving all who had stayed by the wreck.	Silver medal..	Oct. 17, 1899
Lars E. Olsen.....	Member of crew of steamer Point Arena.	Bravely rescuing and assisting to rescue twenty-five persons from the wreck of the steamer San Benito, at Point Arena, Cal., Nov. 22 and 23, 1896, by making several trips to the wreck through a dangerous sea.	...do	Do.
P. Anderson.....	...do .....	...do .....	...do	Do.
A. Henrikson .....	...do .....	...do .....	...do	Do.
Andrew O. Lilleland ..	...do .....	...do .....	...do	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Jefferson M. Brown ...	Keeper of light station, Point Arena, Cal.	Heroic daring in attempting to rescue the crew of the wrecked steamer San Benito, at Point Arena, Cal., Nov. 22, 1896, by going out three times in an unseaworthy boat, only to be hurled back by the force of the seas.	Gold medal...	Oct. 17, 1899
Sam Miller.....	Point Arena, Cal.	.....do.....	.....do.....	Do.
Lazar Poznanovich	Elk, Cal	.....do.....	.....do.....	Do.
Rasmus S. Midgett	Surfman.....	Extraordinary heroism in rescuing, single-handed, ten men from the wreck of the barkentine Priscilla, 3 miles south of Gull Shoal Station, N. C., Aug. 18, 1899. The rescue was effected at night and during the height of a disastrous storm which inundated the whole coast in that vicinity.	.....do.....	Oct. 18, 1899
Robert M. Lavender ...	Boston, Mass	Bravely assisting in the rescue of a man from the sunken schooner F. H. Smith, in Provincetown Harbor, Mass., during the great storm of Nov. 27, 1898. The rescue was effected by a volunteer crew of eleven men, who braved the storm in an open boat.	Silver medal...	Oct. 19, 1899
Charles A. Foster	Provincetown, Mass.	.....do.....	.....do.....	Do.
James Brown, jr .....	.....do.....	.....do.....	.....do.....	Do.
Charles T. Forrest .....	.....do.....	.....do.....	.....do.....	Do.
Antoine K. Souza .....	.....do.....	.....do.....	.....do.....	Do.
Benjamin T. Benson .....	.....do.....	.....do.....	.....do.....	Do.
Ernest A. Horton .....	.....do.....	.....do.....	.....do.....	Do.
James L. Worth .....	.....do.....	.....do.....	.....do.....	Do.
Joseph H. Settes .....	.....do.....	.....do.....	.....do.....	Do.
James A. Lopez .....	.....do.....	.....do.....	.....do.....	Do.
James M. Burke .....	.....do.....	.....do.....	.....do.....	Do.
Otto B. Storbeck	Oshkosh, Wis.....	Bravely rescuing four women who were thrown into the Fox River by the capsizing of a rowboat on Sept. 2, 1885. Storbeck plunged into the cold water, which was deep and running swiftly, and succeeded in putting four women on the upset boat and towing it to the shore. Nine occupants of the boat were drowned.	.....do.....	July 3, 1900
H. R. Mayo Thom	Baltimore, Md....	Heroic services in rescuing a woman from drowning on Jan. 12, 1900. A partially blind colored woman having fallen overboard from a steamer off Urbana, Va., Mr. Thom jumped into the water, and, after sinking with the woman beneath the ice-covered surface of the river, tied around her body a rope, by means of which she was hauled out of the water.	Gold medal...	Aug. 20, 1900

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
Philip Bierschenk	Brooklyn, N. Y. ...	Rescued from drowning, on July 1, 1900, a boy who had fallen overboard from a tug bound from Green Point to Glen Cove, Long Island. Bierschenk jumped into the water, swam to the boy, and supported him until the tug turned and picked them up, the boy being unconscious and his rescuer so exhausted that he was unable to stand or speak.	Silver medal..	Nov. 20, 1900
E. T. Brown	Captain, U. S. Army.	Rescuing and assisting to rescue the passengers of the Government tug Resolute, which was sunk by a collision with the tug Swartara in Boston Harbor on Jan. 3, 1900. After the sinking of the Resolute Captain Brown supported in the water and saved from drowning, at the peril of his life, a woman who weighed over 200 pounds.	Gold medal...	Do.
John F. Crimmings ...	Private, U. S. Marine Corps.	Rescue of a shipmate who fell overboard from a steam launch and became entangled in a bicycle which he was holding, while a party of liberty men were bound to the U. S. S. Iowa from Tacoma, Wash., on June 19, 1900.	Silver medal..	Dec. 14, 1900
Charles Reiner.....	Formerly second mate of wrecked steamer Weeott.	Bravely swimming to the jetty with a line from the steamer Weeott, which was wrecked on Dec. 1, 1899, while crossing the bar at the entrance to Humboldt Bay, Cal. This was a daring and hazardous undertaking, as the heavy surf was breaking with violence over the jagged rocks of the jetty, and it resulted in the saving of many lives.	Gold medal...	Jan. 30, 1901
W. C. Penoyar	Bay City, Mich. ...	Rescue of a girl who had been carried into deep water by the undertow while bathing on the shore of Lake Huron, near Lexington, Mich., on Aug. 2, 1900. This rescue was accomplished after the girl had sunk twice, and showed cool judgment as well as remarkable bravery on the part of the rescuers, who were 15 and 12 years old, respectively.	Silver medal..	Feb. 18, 1901
Ralph E. V. Penoyar ...	.....do.....	.....do.....	.....do.....	Do.
E. Alexander	Master of steamer Mexico.	Rescue of an insane man who dropped into the water between the wharf and steamer Mexico at Port Harford, Cal., before daylight on Apr. 3, 1890. Captain Alexander sprang overboard and rescued the man at the risk of being crushed between the steamer and the wharf, as there was a heavy sea rolling in at the time.	Gold medal...	Do.

List of medalists—Continued.

Name.	Residence, etc.	Service rendered.	Award.	Date of award.
W. W. Griesser	Keeper Buffalo Life-Saving Station.	Rescue of a man who was clinging to a pile in Buffalo Harbor, about 500 feet from shore, during a heavy gale on Nov. 21, 1900. After the capsizing of the lifeboat Keeper Griesser swam out with a line and, after battling with the waves for three-fourths of an hour, succeeded in reaching the man, who was safely hauled to the shore.	Gold medal...	Feb. 23, 1901
André Fourchy	New Orleans, La..	Bravely rescuing a man who was drifting seaward with the ebb tide while bathing at Virginia Beach on Aug. 27, 1900.	Silver medal..	Apr. 22, 1901
John Farrell	Buffalo, N. Y.....	Bravely rescuing and assisting to rescue several persons from drowning, in the vicinity of Buffalo Harbor, between Oct. 14, 1886, and Aug. 1, 1899.	.....do	Apr. 27, 1901
Archie Farrell .....	.....do	Rescue of a woman who was in imminent danger of drowning while in bathing at Woodlawn Beach on Aug. 15, 1897.	.....do	June 7, 1901

TABLE OF CASUALTIES

WITHIN THE FIELD OF OPERATIONS OF THE LIFE-SAVING
SERVICE.

SEASON OF 1900-1901.

Table of casualties,

DISTRICT NO. 1.—EMBRACING COASTS

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
July 10	One-third of a mile southwest of station.	Fletchers Neck...	Sc. Rose, Portland, Me...	Maston	5
July 15	Three miles south-southwest of station.	Hunniwells Beach	St. y. Nohoko, * Boston, Mass.	Brown.....	14
July 18	Four miles northwest of station.	Cranberry Isles...	Catboat Marget, Cranberry Island, Me.	.....	.....
July 25	Eight miles northeast by east of station.	Crumple Island...	Sc. Freeport, Machias, Me.	Sawyer	38
July 25	Little River Point.....	Damariscove Island.	Sc. William Churchill, New London, Conn.	Parker	432
Aug. 1	Otter Island Ledge.....	White Island	Sc. Nellie Grant, Ellsworth, Me.	Dodge	139
Aug. 10	Three miles north of station.	Quoddy Head.....	Str. Frank and Lloyd, Lubec, Me.	Shannon ..	16
Aug. 14	Stone Island	Burnt Island	Slp. Mess Mate, Waldoboro, Me.	Cushman..	7
Aug. 20	Six miles north by east of station.	Damariscove Island.	Sloop, Boothbay, Me .....	.....	.....
Aug. 29	Grindstone Ledge.....	White Head	Sc. Lizzie C. Rich, Bangor, Me.	Rietta	92
Aug. 30	Negro Island Bar	Fletchers Neck...	Sc. Mary A. Brown, Gloucester, Mass.	Mosetive ..	15
Sept. 10	Spruce Point Ledge.....	Damariscove Island.	Sc. Tacoma, Gloucester, Mass.	McDonald ..	71
Sept. 12	Turkey Point	Burnt Island	Sc. Mystic Tie, St. George, Me.	Harris	39
Sept. 12	One mile north-northeast of station.	Fletchers Neck...	Slp. y. Bonnie Doon, Boston, Mass.	Orcutt	9
Sept. 12	Near station	Jerrys Point	Sailboat .....	.....	.....
Sept. 12	One and one-half miles east of station.	.....do	Yacht, Portsmouth, N. H.	.....	.....
Sept. 12	.....do.....	.....do	Slp. y. Trouble, Portsmouth, N. H.	.....	.....
Sept. 14	Two and one-half miles northwest of station.	Burnt Island	Sloop, Waldoboro, Me.....	.....	.....
Oct. 4	Seal Harbor.....	White Head	Sc. Lizzie Williams, St. George, Me.	Candage...	60
Oct. 5	Trundys Reef	Cape Elizabeth...	Sc. Eastern Queen, Ellsworth, Me.	Ray	68
Oct. 5	One mile northeast by north of station.	Wallis Sands	Sc. Onward, Bucksport, Me.	Thurston ..	99
Oct. 8	Two miles north by west of station.	Crumple Island ..	Sc. Josie, Machias, Me ...	Clark.....	83
Oct. 10	One and one-quarter miles east-northeast of station.	Quoddy Head	Sc. Sarah A. Reed, Calais, Me.	Boardman..	158
Oct. 11	Marshall's Point.....	Burnt Island	Sc. Hattie S. Collins, Deer Isle, Me.	Greenlaw..	122
Oct. 14	Seal Harbor.....	White Head	Sc. Annie and Adaline, Rockland, Me.	.....	.....
Oct. 16	Wormells Beach	Quoddy Head	Sc. Twilight, Lubec, Me..	Wallace ...	7
Oct. 17	One mile east-northeast of station.	.....do	Sc. Mary Lee Newton, Calais, Me.	Colman.....	112
Oct. 17	Two miles northwest of station.	Cross Island	Sc. Olive G., Lubec, Me ..	Ball	15
Oct. 17	One mile east of station.	White Head	Sc. S. Sawyer, ^b Rockland, Me.	Clark.....	69
Oct. 24	Two hundred yards northeast of station.	Damariscove Island.	Slp. Viola, Portland, Me..	Benson	8
Oct. 29	Stage Island	Hunniwells Beach	Sc. Freighter, Boothbay, Me.	Moore	8
Oct. 30	Three and one-half miles northeast of station.	Burnt Island	Sc. Wallula, St. John, New Brunswick.	Greenfield ..	82
Nov. 9	Seven miles north by east of station.	Crumple Island ..	Str. Mizpah, Lubec, Me ..	Beal.....	8

* In dangerous position, requiring the assistance of the life-saving crew.

^b In dangerous position, from which life saving crew extricated her.

season of 1900-1901.

OF MAINE AND NEW HAMPSHIRE.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons recovered at station.	Days' succor afforded.
Gloucester, Mass., to Harpswell, Me.		\$300		\$300	\$250	\$50	1	1		1	4
Boston, Mass., to Wiscasset, Me.		2,000		2,000	2,000		2	2			
Northeast Harbor to Cranberry Island, Me.		75		75	75		1	1			
Jonesboro to Jonesport, Me.	Cedar logs	700	\$250	950	935	15	2	2			
Boston, Mass., to Pools Landing, Me.		15,000		15,000		15,000	7	7			
Portland to Ellsworth, Me.		3,000		3,000	2,900	100	5	5			
Letong, New Brunswick, to Lubec, Me.	Fish	3,500	100	3,600	3,250	350	3	3			
Fishing trip to Friendship, Me.		500		500	500		2	2			
		375		375	375						
Bangor, Me., to Lynn, Mass.	Lumber	1,500	2,000	3,500	3,450	50	3	3			
Fishing trip to Wood Island Harbor, Me.		800		800	800		8	8			
Gloucester, Mass., on fishing trip.		12,000		12,000	11,500	500	18	18			
Dragged anchors and stranded.		600		600	550	50	2	2			
do.		1,500		1,500	1,490	10					
Parted moorings.		75		75	75						
Pleasure trip.		100		100	90	10	1	1			
do.		450		450	425	25	2	2			
Fishing trip.		300		300	285	15	3	3			
Bangor, Me., to Boston, Mass.	Laths	500	650	1,150	1,110	40	2	2			
Boston, Mass., to Ellsworth, Me.		1,000		1,000		1,000	2	2		1	4
Boston, Mass., to Portsmouth, N. H.	Cement, white lead, and oil.	500	1,500	2,000	575	1,425	3	3		3	11
Boston, Mass., to Machias, Me.	Corn	2,000	400	2,400	1,300	1,100	4	4		1	1
New York City to Eastport, Me.	Coal	2,500	1,000	3,500	3,200	300	5	5			
Boston, Mass., to Deer Isle, Me.		1,000		1,000	1,000		4	4			
Dragged anchors.		350		350	350		3	3			
Fishing trip.		275		275	250	25	2	2			
Boston, Mass., to Red Beach, Me.	General	1,200	3,000	4,200	2,000	2,200	4	4		4	4
Jonesport to Lubec, Me.		700		700	500	200	2	2			
Boston, Mass., to Rockland, Me.	General	1,200	1,000	2,200	2,185	15	3	3			
Fishing trip.		525		525	525		2	2			
Georgetown to Southport, Me.		300		300	295	5	2	2			
St. John, New Brunswick, to Boston, Mass.	Lumber	1,000	2,000	3,000	3,000		5	5			
Fishing trip.		3,000		3,000	2,900	100	2	2			

Table of casualties, season

DISTRICT NO. 1.—EMBRACING COASTS OF

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Nov. 12	One-half mile east-south-east of station.	Hunniwells Beach	Str. Temperance Belle, St. John, New Brunswick.	Tufts	91
Nov. 14	One-quarter mile east-southeast of station.	.....do	Sc. Henry Clausen, jr., ^a Bath, Me.	McLaughlin.	549
Nov. 15	One and one-quarter miles east-southeast of station.	.....do	Sc. Lygonia, ^b Boston, Mass.	Anderson..	181
Nov. 16	Hay Island Ledge	White Head	Sc. Annie Sargent, Boothbay, Me.	Tibbetts ..	66
Nov. 17	Seal Harbor .....	.....do	Sc. C. M. Gillmor, St. George, Me.	Elwell	43
Nov. 17	One-third mile east by south of station.	Hunniwells Beach	Str. Mona, ^c Boothbay, Me.	Rice	5
Nov. 28	One mile north of station.	Fletchers Neck...	Sc. Northern Light, Machias, Me.	Anderson..	51
Nov. 30	Seal Harbor	White Head	Sc. Ulrica R. Smith, ^a Machias, Me.	Nash	125
Dec. 5	One mile north of station.	Fletchers Neck...	Sc. R. P. Chase, Bath, Me.	Toole	102
Dec. 5	.....do .....	.....do	Sc. Thomas B. Reed, Bath, Me.	Chase	115
Dec. 9	Three and one-half miles northeast of station.	Burnt Island	Sc. Mary Farrow, St. George, Me.	Teel	99
Dec. 10	Ram Island	Damariscove Island.	Sc. Corinto, Parrsboro, Nova Scotia.	Salter	98
Dec. 17	One mile northwest of station.	Fletchers Neck...	Sc. Lygonia, Boston, Mass.	Anderson..	181
Dec. 23	One-half mile east by north of station.	Hunniwells Beach	Slp. Emma C., Bath, Me..	Potter	27
Dec. 29	Three miles east-southeast of station.	White Head	Slp. Novelty, Waldoboro, Me.	Lewes	11
1901.					
Jan. 2	Port Clyde	Burnt Island	Sc. Wasp, New York City.	Chadwick .	14
Jan. 5	Three miles south-southeast of station.	Cranberry Isles...	Small boat, Cranberry Island, Me.	.....	.....
Jan. 13	Fifty yards east by south of station.	Damariscove Island.	Str. Iris, Portland, Me....	Hatch	11
Jan. 21	Whales Back	Hunniwells Beach	Sc. Joseph Luther, New London, Conn.	Francis ...	422
Feb. 9	Bear Island Bar	Cranberry Isles...	Str. Robert and Edwin, Portland, Me.	Ingalls ...	30
Feb. 13	Bald Head Ledge	Hunniwells Beach	Sc. S. H. Sawyer, Machias, Me.	Kelley	107
Feb. 21	Negro Island Bar	Fletchers Neck...	Sc. Mabelle Leavitt, Saco, Me.	Leavitt ...	21
Mar. 7	One-quarter mile east-northeast of station.	Great Boars Head.	Fish boat, Hampton, N. H.	.....	.....
Mar. 8	Sillmans Ledge	Jerrys Point	Bge. Black, Sheridan, Wilson Co., No. A., Baltimore, Md.	Bullock ...	936
Mar. 23	Duck Island, Isles of Shoals.	.....do	Sc. Eliza B. Campbell, Gloucester, Mass.	Nickerson .	100
Mar. 26	Twenty miles east-southeast of station.	White Head	Sc. Bessie, Digby, Nova Scotia.	Everett ...	88
Mar. 31	Seal Rocks	Crumple Island...	Sc. Seven Sisters, Jonesport, Me.	.....	.....
Apr. 5	One mile southeast of station.	Burnt Island	Sc. Loduskia, ^a Ellsworth, Me.	Johnson ...	108
Apr. 7	One mile north-northwest of station.	Cape Elizabeth...	Sc. Wendall Burpee, St. John, New Brunswick.	Merseburg.	99
Apr. 7	One mile north of station.	Fletchers Neck...	Sc. Ripley, Rockport, Me.	Sughrue ...	68
Apr. 7	.....do .....	.....do	Sc. James A. Gray, ^a Saco, Me.	Garland ...	130
Apr. 16	One mile northwest of station.	Burnt Island	Sc. Commerce, Rockland, Me.	Pearson ...	107

^a In dangerous position from which life-saving crew extricated her.

^b Extricated from extreme peril by life-saving crew.

of 1900-1901—Continued.

MAINE AND NEW HAMPSHIRE—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Boston, Mass., to Bath, Me.	.....	\$1,500	.....	\$1,500	\$1,000	\$500	5	5	.....	4	6
Georgia to Bath, Me.	Timber...	1,200	\$8,000	9,200	9,200	.....	7	7	.....	.....	.....
Port Johnson, N. J., to Gardiner, Me.	Coal.....	3,000	150	3,150	3,150	.....	5	5	.....	.....	.....
Rockport, Me., to Boston, Mass.	Lime.....	1,000	750	1,750	1,750	.....	3	3	.....	.....	.....
Rockland, Me., to Portsmouth, N. H.	do.....	600	500	1,100	1,100	.....	3	3	.....	.....	.....
Small Point to Boothbay, Me.	.....	1,800	.....	1,800	1,800	.....	4	4	.....	.....	.....
Boothbay, Me., to Boston, Mass.	Brick.....	600	350	950	950	.....	2	2	.....	.....	.....
Millbridge, Me., to Jersey City, N. J.	Staves....	3,000	2,000	5,000	5,000	.....	4	4	.....	.....	.....
Boston, Mass., to Bath, Me.	.....	1,200	.....	1,200	900	300	4	4	.....	4	8
Boston, Mass., to Gardiner, Me.	.....	1,500	.....	1,500	900	600	5	5	.....	5	10
Bangor, Me., to New York City.	Lumber..	500	1,500	2,000	1,950	50	4	4	.....	.....	.....
Boston, Mass., to Windsor, Nova Scotia.	Provisions	3,000	3,000	6,000	4,700	1,300	5	5	.....	.....	.....
Gardiner, Me., to New York City.	Lumber..	2,000	2,000	4,000	4,000	.....	5	5	.....	.....	.....
Boothbay to Bath, Me.	Sand.....	1,500	30	1,530	1,530	.....	3	3	.....	.....	.....
Rockland to Green Island, Me.	.....	700	.....	700	700	.....	2	2	.....	.....	.....
Tennants Harbor to Port Clyde, Me.	.....	1,500	.....	1,500	1,500	.....	2	2	.....	.....	.....
Fishing trip.....	.....	10	.....	10	10	.....	1	1	.....	.....	.....
Bristol to Damariscove Island Harbor, Me.	.....	1,000	.....	1,000	1,000	.....	3	3	.....	.....	.....
Bath to Clark's Cove, Me.	.....	15,000	.....	15,000	.....	15,000	7	7	.....	7	28
Portland to Prospect Harbor, Me.	.....	8,000	.....	8,000	8,000	.....	4	4	.....	.....	.....
Boston, Mass., to Jonesport, Me.	.....	1,500	.....	1,500	1,450	50	4	4	.....	.....	.....
Fishing trip.....	.....	3,000	.....	3,000	3,000	.....	5	5	.....	.....	.....
Parted moorings.....	.....	40	.....	40	35	5	.....	.....	.....	.....	.....
Baltimore, Md., to Cape Porpoise, Me.	Coal.....	31,000	3,950	34,950	34,950	.....	5	5	.....	.....	.....
Fishing banks to Gloucester, Mass.	Fish.....	10,000	3,400	13,400	.....	13,400	18	18	.....	.....	.....
Port Gilbert, Nova Scotia, to Boston, Mass.	Piling....	2,500	650	3,150	2,850	300	5	5	.....	.....	.....
Fishing trip.....	.....	250	.....	250	225	25	2	2	.....	.....	.....
Stonington, Me., to New York City.	Granite...	2,000	1,200	3,200	3,200	.....	4	4	.....	.....	.....
New York City to St. John, New Brunswick.	Coal.....	4,000	450	4,450	450	4,000	4	1	3	1	2
Rockport, Me., to Boston, Mass.	Lime.....	1,500	900	2,400	2,400	.....	6	6	.....	.....	.....
Saco, Me., to Boston, Mass.	Brick.....	3,000	800	3,800	3,800	.....	5	5	.....	.....	.....
New York City to Rockland, Me.	Coal.....	2,000	600	2,600	2,600	.....	4	4	.....	.....	.....

• Disabled and in dangerous position, requiring assistance.

Table of casualties, season

DISTRICT NO. 1.—EMBRACING COASTS OF

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1901.					
Apr. 19	One mile northeast of station.	Rye Beach.....	Catboat, Rye, N. H.....		
Apr. 21	.....do.....	.....do.....	Catboat, Rye, N. H.....		
May 3	One-sixth mile southeast of station.	Damariscove Island.	Sc. Twilight, Lubec, Me..	Wallace ...	7
May 5	Wood Island Ledge.....	Jerrys Point.....	Sc. Helen, Machias, Me..	Cotton.....	194
May 6	Sugar Loaf.....	Hunniwells Beach	Sc. James A. Gray, Saco, Me.	Garland ...	130
May 11	One-half mile northeast of station.	Great Boars Head.	Fishboat.....		
May 12	One-quarter mile southeast of station.	White Head.....	Sc. Emma S. Briggs,* Bath, Me.	Osborne ...	294
May 19	Grindstone Ledge.....	.....do.....	Sc. Dacotah, Machias, Me.	Dennison..	57
May 19	One hundred yards northeast of station.	Great Boars Head.	Fishboats (5).....		
May 20	One and one-half miles northeast of station.	.....do.....	Fishboat.....		
May 27	Hart Island Bar.....	Burnt Island.....	Sc. Hobo, Rockport, Me.	Corthell ...	10
June 1	Six miles east-northeast of station	White Head.....	Sc. Lizzie Maud, North Haven, Me.	Ames.....	83
June 2	Grindstone Ledge.....	.....do.....	Sc. Yankee Maid, Rockland, Me.	Stanton ...	58
June 2	Two and one-half miles northeast of station.	.....do.....	Sc. St. Mary, Bermuda..	McNally...	167
June 24	Great Cranberry Island..	Cranberry Isles...	Slp. W. Kaler, Islesford, Me.	Bunker....	5
June 24	Pond Island.....	Hunniwells Beach	Sc. Annie and Reuben, Bath, Me.....	Mathews ..	128
	Total.....	.....do.....	.....do.....	.....do.....	.....do.....

DISTRICT NO. 2.—EMBRACING

1900.					
July 3	One mile west by north of station.	City Point.....	Sc. Rambler, Boston, Mass.		
July 8	One-half mile north-northwest of station.	.....do.....	Yht. La Viva, Boston, Mass.		
July 11	One-quarter mile from station.	.....do.....	St. y. Vim, Boston, Mass..		
July 11	One and one-quarter miles east by south of station.	.....do.....	St. y. Jessie, Boston, Mass.		
July 14	One mile south by east of station.	.....do.....	Slp. Cassey, Boston, Mass.		
July 14	Rainsford Island.....	.....do.....	Slp. y. Everett, Boston, Mass.		
July 14	One-half mile east-southeast of station.	.....do.....	Slp. y. Dosis, Boston, Mass.		
July 18	One and one-quarter miles southwest by south of station.	.....do.....	Launch No. 34, Boston, Mass.		
July 21	One and one-half miles east by south of station.	.....do.....	Slp. y. Rilma, Boston, Mass.		
July 29	Two and one-quarter miles south by east of station.	.....do.....	Yht. Sallie Brass, Boston, Mass.		
Aug. 3	One and one-half miles north of station.	.....do.....	Launch Haller, Boston, Mass.		
Aug. 5	One-quarter mile east of station.	Gap Cove.....	Slp. y. Aetha, Gloucester, Mass.		
Aug. 5	One and one-quarter miles southwest of station.	City Point.....	Catboat Sprite, Boston, Mass.		

* In dangerous position, from which life-saving crew extricated her.

of 1900-1901—Continued.

MAINE AND NEW HAMPSHIRE—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Fishing trip.....		\$50		\$50	\$50		1	1			
Parted moorings and stranded.		50		50	50						
Boothbay to Lubec, Me.		300		300	225	\$75	2	2		2	4
South Amboy, N. J., to Rockland, Me.	Coal	2,500	\$750	3,250	300	2,950	5	5		5	15
Boston, Mass., to Bath, Me.		5,000		5,000	5,000		5	5			
Fishing trip.....		10		10	10		1	1			
Boston, Mass., to Frankfort, Me.		8,000		8,000	8,000		6	6			
Machias, Me., to Boston, Mass.	Lumber	400	740	1,140	795	345	3	3			
Fishing trip.....		60		60	50	10					
Dragging anchor		40		40	40						
Fishing trip	Fish	1,800	100	1,900	1,900		5	5			
do		5,000		5,000	4,600	400	16	16			
Rockport, Me., to Boston Mass.	Lime	1,800	650	2,450	2,290	160	2	2			
Bangor, Me., to Hutton, Bermuda,	Ice	4,000	900	4,900	4,900		5	5			
Bar Harbor to Cranberry Isles, Me.		470		470	470		1	1			
Bath, Me., to New York City.	Laths	3,500	1,000	4,500	4,500		5	5			
		201,205	46,270	247,475	185,420	62,055	302	299	3	38	97

COAST OF MASSACHUSETTS.

Parted chains and stranded.		\$300		\$300	\$300						
Pleasure trip.....		1,000		1,000	985	\$15	1	1			
do		500		500	500		2	2			
do		1,000		1,000	995	5	7	7			
do		350		350	330	20	3	3			
do		800		800	780	20	2	2			
do		1,800		1,800	1,720	80	7	7			
do		750		750	750		13	13			
do		1,500		1,500	1,425	75	4	4			
do		400		400	325	75	4	4			
Parted moorings and struck bridge.		900		900	875	25	3	3			
Gloucester to Annisquam, Mass.		1,200		1,200	1,200		2	2			
Pleasure trip.....		25		25	25		2	2			

Table of casualties, season

DISTRICT NO. 2.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Aug. 8	One and one-quarter miles north of station.	Plum Island.....	Small boat, Newburyport, Mass.	.....
Aug. 12	One-quarter mile south of station.	City Point.....	Small boat, Boston, Mass.	.....
Aug. 12	Two and one-quarter miles south of station.	Monomoy.....	Sc. y. Ivanhoe, New York City.	Sawyer.....	64
Aug. 15	Browns Bank.....	Gurnet.....	Slp. Anthony, Plymouth, Mass.	.....
Aug. 15	.....do.....	.....do.....	Slp. Petrel, Gloucester, Mass.	Brasier.....	10
Aug. 19	One and one-quarter miles northeast of station.	City Point.....	Launch Leo, Boston, Mass.	.....
Aug. 19	One-quarter mile north-northwest of station.	Cuttyhunk.....	Slp. Nautilus, New Bedford, Mass.	.....
Aug. 21	One and one-half miles northeast by east of station.	City Point.....	Slp. Jessie, Boston, Mass.	.....
Aug. 24	Four and one-eighth miles east by south of station.	.....do.....	Slp. y. Lassie, Boston, Mass.	.....
Aug. 25	Three miles west-northwest of station.	Coskata.....	Catboat Laura, Nantucket, Mass.	.....
Aug. 30	Two miles east of station.	Highland.....	Slp. y. Wanda, Lynn, Mass.	.....
Sept. 3	One and one-half miles east of station.	Plum Island.....	Small boat, Newburyport, Mass.	.....
Sept. 3	Two-sevenths of a mile west of station.	.....do.....	Small boat, Newburyport, Mass.	.....
Sept. 3	One mile east by north of station.	City Point.....	Slp. Bess, Boston, Mass.	.....
Sept. 3	Shovelful Shoal.....	Monomoy.....	Sc. Lizzie Smith, Brooklin, Me.	Lane.....	77
Sept. 5	One-half mile northeast of station.	Plum Island.....	Sc. Paxtang, Philadelphia, Pa.	Pierson.....	954
Sept. 5	Three-quarters of a mile northwest by west of station.	Gap Cove.....	Slp. Lucy B., Rockport, Mass.	.....
Sept. 7	One-half mile northeast of station.	City Point.....	Slp. Attempt, Boston, Mass.	.....
Sept. 9	Two and one-half miles northwest of station.	North Scituate...	Str. John Endicott, Boston, Mass.	Litchfield.	399
Sept. 12	One and one-quarter miles northwest of station.	Plum Island.....	Sloop-yacht, Newburyport, Mass.	.....
Sept. 12	One mile northwest of station.	.....do.....	Sc. James Baker, Boston, Mass.	Romer.....	62
Sept. 12	.....do.....	.....do.....	Slp. y. Dewey, Newburyport, Mass.	.....
Sept. 12	Sixteen miles northeast by north of station.	Gap Cove.....	Sc. J. V. Wellington, Belfast, Me.	Pattershall	256
Sept. 12	One-half mile northwest of station.	City Point.....	Slp. y. Nelka, Boston, Mass.	Coy.....	7
Sept. 12	.....do.....	.....do.....	Slp. y. Mary, Boston, Mass.	.....
Sept. 12	.....do.....	.....do.....	Sc. Ellen M., Gloucester, Mass.	.....	6
Sept. 12	Two-thirds of a mile northwest of station.	.....do.....	Slp. Lena, Camden, N. J.	.....	6
Sept. 12	.....do.....	.....do.....	Slp. y. Marquette, Boston, Mass.	.....
Sept. 12	One-half mile southeast of station.	.....do.....	Sc. y. Raven, Boston, Mass.	Carrol.....	8
Sept. 12	One-quarter mile northwest of station.	.....do.....	Slp. y. Bohemian, Boston, Mass.	.....
Sept. 12	One-quarter mile east of station.	.....do.....	Slp. y. Mallard, Boston, Mass.	.....	11

*No assistance required of life-saving crew.

*Those on board were taken ashore by a nearby boat before life-saving crew arrived.

of 1900-1901—Continued.

COAST OF MASSACHUSETTS—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons rescued at station.	Days' succor afforded.
Adrift.....		\$20		\$20	\$20		1	1			
Fishing trip.....		100		100	95	\$5	3	3			
Boston, Mass., to Newport, R. I.		3,200		3,200	3,200		8	8			
Pleasure trip.....		700		700	700		7	7		5	5
Fishing trip.....		1,000		1,000	1,000		5	5			
.....		450		450	440	10	2	2			
Dragged anchors.....		600		600	600		6	6			
Quincy to City Point, Mass.		400		400	385	15	2	2			
Pleasure trip.....		750		750	750		8	8			
.....do.....		150		150	145	5	2	2			
Marblehead, Mass., to Stamford, Conn.		700		700		700	3	3		2	2
Fishing trip.....		25		25	25		2	2		1	1
Pleasure trip.....		20		20	20		2	2			
.....do.....		75		75	75		2	2			
Rockland, Me., to New York City.	Lime	1,750	\$770	2,520		2,520	3	3			
Philadelphia, Pa., to Newburyport, Mass.	Coal	25,000	5,000	30,000	30,000		4	4			
Pleasure trip.....		700		700	685	15	(b)				
.....do.....		45		45	45		7	7			
Plymouth to Boston, Mass.		12,000		12,000	12,000		265	265			
Adrift.....		300		300	300						
Dragged anchors.....	Sand	800	100	900	800	100	3	3			
.....do.....		900		900	900						
Port Johnson, N. J., to Belfast, Me.	Coal	3,000	2,600	5,600	5,300	300	6	6			
Lying at moorings.....		700		700	475	225					
Dragged anchor.....		200		200	140	60					
.....do.....		400		400	325	75					
Lying at moorings.....		400		400	250	150					
Dragged anchor and stranded.		300		300	300						
Dragged anchor.....		600		600	600						
Parted moorings.....		350		350	300	50					
Dragged anchor.....		1,000		1,000	1,000						

• In distress, requiring the assistance of the life-saving crew.

Table of casualties, season

DISTRICT NO. 2.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Sept. 12	One-sixth mile west of station.	City Point	Slp. y. Ocean Lily, Boston, Mass.	.....	9
Sept. 12	One-quarter mile northwest of station.	.....do	Slp. y. Metric, Boston, Mass.	.....
Sept. 12	One-half mile northeast of station.	.....do	Slp. Sans Souci, Boston, Mass.	.....
Sept. 12	.....do .....	.....do	Slp. y. Everett, Boston, Mass.	.....
Sept. 12	Two-thirds of a mile north of station.	.....do	Launch Dirigo, Boston, Mass.	.....
Sept. 12	Two-thirds of a mile north one-half west of station.	.....do	Slp. Emily, New York City.	.....
Sept. 12	Four-sevenths of a mile northeast of station.	Highland	Catboat Faustina, Chatham, Mass.	Bassett	6
Sept. 14	One and one-quarter miles north of station.	City Point	Sloop, Boston, Mass.	.....
Sept. 16	One mile west of station.	.....do	Slp. y. V. and I., Boston, Mass.	.....
Sept. 16	Seven-eighths of a mile southwest of station.	Race Point	Sc. Nellie Blanche, ^b Windsor, Nova Scotia.	Morrison ..	89
Sept. 18	One and one-half miles south of station.	Cahoons Hollow ..	Slp. Black Bird, Perth Amboy, N. J.	Kelly	435
Sept. 18	Seven miles northwest of station.	Coskata	Sc. N. H. Skinner, ^c Boston, Mass.	Wheatley ..	299
Sept. 21	One-half mile northeast of station.	Plum Island	Sc. Loring C. Ballard, Bath, Me.	Crowell	660
Sept. 24	Thompsons Island	City Point	Slp. y. Mary, Boston, Mass.	.....
Sept. 27	Great Ledge, Buzzards Bay.	Cuttyhunk	Sc. Florida, Rockland, Me.	Thomas	79
Oct. 3	South end of the Dry Salvages.	Gap Cove	Bge. Edward Easton, Albany, N. Y.	Sheldon	344
Oct. 6	Three-quarters of a mile northeast of station.	North Scituate ..	Sc. Stephen Bennett, Boston, Mass.	Glass	243
Oct. 6	One mile east-southeast of station.	Peaked Hill Bars.	Sc. Katie G. Robinson, Somers Point, N. J.	Anderson ..	299
Oct. 7	One and one-quarter miles south-southwest of station.	City Point	Sloop-yacht, Boston, Mass.	.....
Oct. 10	Two and one-half miles east of station.	Gay Head	Catboat Annie, Newport, R. I.	.....
Oct. 14	One mile southwest by west of station.	City Point	Slp. y. Boreas, Boston, Mass.	.....
Oct. 16	One mile north-northwest of station.	Nahant	Sloop, Lynn, Mass.	.....
Oct. 16	Two miles east of Highland Station.	Highland and Farnet River.	Sc. General Sheridan, New York City.	Anderson ..	153
Oct. 16	Two-thirds of a mile southeast by south of station.	City Point	Slp. y. Wabasso, Boston, Mass.	.....
Oct. 17	One and one-quarter miles northwest by west of station.	Gap Cove	Sc. W. C. Norcross, Rockport, Me.	Lane	72
Oct. 17	Black Rock	Point Allerton ..	Lighter Sampson, Boston, Mass.	.....
Oct. 17	Three miles south one-half west of station.	Chatham	Sc. Lawrence Haines, ^b Bath, Me.	Blake	256
Oct. 17	Five miles south one-half west of station.	Monomoy	Sc. Snow Flake, ^a Portland, Me.	Joyce	166
Oct. 17	Three-quarters of a mile north of station.	Coskata	Sc. J. Arthur Lord, Edgartown, Mass.	Eaton	212
Oct. 17	One-fifth mile north of station.	.....do	Sc. T. W. Cooper, Machias, Me.	Libby	158

^aIn distress, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

COAST OF MASSACHUSETTS—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Dragged anchor		\$500		\$500	\$500						
.....		400		400	250	\$150					
Parted moorings		500		500	500						
do.....		800		800	725	75					
do.....		1,000		1,000	1,000						
Parted moorings and stranded.		300		300	250	50					
Chatham to Gloucester, Mass.		700		700	700		2	2			
Capsized		75		75	75		1	1			
Adrift.....		400		400	395	5					
St. John, New Brunswick, to Norwich, Conn.	Shingles..	1,600	\$1,900	3,500	3,300	200	5	5			
Newburg, N. Y., to Boston, Mass.	Coal	8,000	5,000	13,000	13,000		3	2	1	2	2
Gardiner, Me., to Philadelphia, Pa.	Ice	7,500	600	8,100	7,800	300	6	6			
Philadelphia, Pa., to Newburyport, Mass.	Coal	5,000	3,400	8,400	8,250	150	9	9			
Dragged anchor and stranded.		200		200	200						
New Bedford to Taunton, Mass.	Lime	1,200	400	1,600	1,600		3	3			
Dover, N. H., to Boston, Mass.	Clay	15,000	500	15,500		15,500	4	4			
Philadelphia, Pa., to Boston, Mass.	Coal	4,000	1,125	5,125	5,125		6	6			
Calais, Me., to Philadelphia, Pa.	Lumber ..	8,000	5,000	13,000	400	12,600	7	7		7	20
Parted moorings		350		350	350						
Fishing trip.....	Fish	250	25	275	255	20	2	2			
Broke from moorings and stranded.		500		500	480	20					
Pleasure trip		125		125	125		2	2			
Perth Amboy, N. J., to Boston, Mass.	Piping....	4,000	5,000	9,000		9,000	5	5		5	10
Hull to City Point, Mass.		750		750	750		2	2			
Boston, Mass., to Rockland, Me.	Cement....	1,500	450	1,950		1,950	3	3		3	3
Parted cables and stranded.		5,000		5,000	1,500	3,500	4	4		4	4
Bath, Me., to South Amboy, N. J.	Feldspar ..	6,000	1,000	7,000	7,000		6	6			
South Gardiner, Me., to Vineyard Haven, Mass.	Lumber ..	2,000	5,000	7,000	7,000		5	5			
Mount Desert, Me., to Brooklyn, N. Y.	Granite....	2,000	2,000	4,000	3,500	500	6	6		2	2
Machias, Me., to New York City.	Lumber ..	2,500	2,000	4,500	3,300	1,200	5	5		1	1

^b In dangerous position, from which the life-saving crew assisted to extricate her.

Table of casualties, season

DISTRICT NO. 2.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Oct. 17	Tuckernuck Shoal.....	Muskeget.....	Sc. Francis R. Baird, Providence, R. I.	Greenlaw	342
Oct. 21	One and one-half miles east-southeast of station.	City Point.....	Yawl, Boston, Mass.....		
Oct. 27	Ledge three-quarters of a mile northeast of station.	North Scituate ...	Sc. Mary G. Powers, Boston, Mass.	Powers	133
Oct. 30	One mile west of station.	City Point.....	Rowboat, Boston, Mass ..		
Oct. 30	Two-thirds of a mile southwest of station.	.....do.....	Rowboat, Boston, Mass ..		
Oct. 30	One mile north-northwest of station.	Chatham.....	Slp. Sunny Side, Chatham, Mass.	Eldridge	16
Oct. 30	Two-thirds of a mile west-northwest of station.	City Point.....	Launch Lulu, Boston, Mass.		
Nov. 7	Three-quarters of a mile south-southwest of station.	Gurnet.....	Sc. J. Arthur Lord, Edgartown, Mass.	Eaton	212
Nov. 8	Cuttyhunk Pond.....	Cuttyhunk.....	Catboat Nellie, Onset, Mass.		
Nov. 8	.....do.....	.....do.....	Catboat Fleetwing, Onset, Mass.		
Nov. 9	Lower Middle Ground...	City Point.....	Str. Gazelle, Boston, Mass.	James	10
Nov. 9	One-half mile northeast of station.	.....do.....	Catboat Gisella, Boston, Mass.		
Nov. 9	One-half mile north-northwest of station.	.....do.....	Sloop-yacht, Boston, Mass.		
Nov. 9	One-half mile north-east of station.....	.....do.....	Catboat Lily, Boston, Mass.		
Nov. 9	One mile west of station.	Chatham.....	Catboat Faustina, Chatham, Mass.	Bassett	6
Nov. 10	Two-thirds of a mile northeast by north of station.	City Point.....	Slp. Thistle, Boston, Mass.		
Nov. 10	One-quarter mile east by north of station.	.....do.....	Slp. y. Fearless, Boston, Mass.		
Nov. 10	One-half mile north-northwest of station.	.....do.....	Slp. y. Empire, Boston, Mass.		
Dec. 3	Sow and Pigs Ledge.....	Cuttyhunk.....	Sc. Friscilla, Liverpool, Nova Scotia.	Digdon	130
Dec. 5	One mile west-northwest of station.	Plum Island.....	Sc. Satellite,* York, Me..	Perkins	49
Dec. 5	One and one-half miles north-northwest of station.	.....do.....	Sc. Morning Star,* Boston, Mass.	Perkins	80
Dec. 5	Three miles east of station.	Gay Head.....	Catboat Vivian, Gay Head, Mass.		
Dec. 8	Browns Island Shoal.....	Gurnet.....	Slp. Venus, Marblehead, Mass.	Harrison	21
Dec. 24	Shovelful Shoal.....	Monomoy.....	Bge. C. R. R. of N. J., No. 10, New York City.	Turpie	862
1901.					
Jan. 3	Browns Island Shoal	Gurnet.....	Sc. Massasoit, Plymouth, Mass.	Bremer	32
Jan. 3	Two and one-quarter miles south of Nauset Station.	Nauset and Orleans.	Sc. Lily, Windsor, Nova Scotia.	Kerr	381
Jan. 7	Two and one-half miles north by east of station.	Monomoy.....	Small boat.....		
Jan. 11	Three-quarters of a mile west of station.	Race Point.....	Small boats (2).....		
Jan. 14	One-half mile west of station.	.....do.....	Small boats (10).....		
Jan. 19	Two and one-quarter miles east by south of station.	Cuttyhunk.....	Sc. George P. Davenport, Bath, Me.	McLeod	1,461

* In dangerous position, requiring assistance.

of 1900-1901—Continued.

COAST OF MASSACHUSETTS—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Portland, Me., to New York City.	Lumber ..	\$1,200	\$3,000	\$4,200	\$4,000	\$200	8	8	.....	.....	.....
Pleasure trip .....	.....	5	.....	5	5	.....	3	3	.....	3	3
South Channel to Boston, Mass.	Fish	10,000	1,500	11,500	11,500	.....	22	22	.....	.....	.....
Fishing trip .....	.....	10	.....	10	10	.....	2	2	.....	.....	.....
Pleasure trip .....	.....	5	.....	5	5	.....	1	1	.....	.....	.....
Sunk at moorings.....	.....	300	.....	300	275	25	.....	.....	.....	.....	.....
Adrift .....	.....	1,000	.....	1,000	1,000	.....	.....	.....	.....	.....	.....
New York City to Duxbury, Mass.	Coal	2,000	1,800	3,800	3,800	.....	5	5	.....	.....	.....
Fishing trip .....	.....	600	.....	600	600	.....	2	2	.....	.....	.....
.....do.....	.....	500	.....	500	500	.....	2	2	.....	.....	.....
Lynn to Boston, Mass.	Fish	2,000	50	2,050	2,030	20	3	3	.....	.....	.....
Adrift .....	.....	125	.....	125	125	.....	.....	.....	.....	.....	.....
.....do.....	.....	100	.....	100	100	.....	.....	.....	.....	.....	.....
.....do.....	.....	55	.....	55	50	5	.....	.....	.....	.....	.....
Fishing trip .....	.....	500	.....	500	500	.....	.....	.....	.....	.....	.....
Adrift .....	.....	150	.....	150	85	65	.....	.....	.....	.....	.....
.....do.....	.....	200	.....	200	200	.....	.....	.....	.....	.....	.....
.....do.....	.....	500	.....	500	500	.....	.....	.....	.....	.....	.....
New York City to Halifax, Nova Scotia.	Coal	6,000	1,000	7,000	6,700	300	5	5	.....	.....	.....
Boston, Mass., to York, Me.	Kerosene, molasses, etc.	500	500	1,000	1,000	.....	4	4	.....	.....	.....
Boston to Plum Island, Mass.	Sand	2,000	100	2,100	2,100	.....	4	4	.....	.....	.....
Broke from moorings .....	.....	250	.....	250	240	10	3	3	.....	.....	.....
Fishing trip	Fish	1,500	200	1,700	1,700	.....	9	9	.....	.....	.....
Bayonne, N. J., to Boston, Mass.	Coal	20,000	9,000	29,000	29,000	.....	4	4	.....	.....	.....
Fishing trip .....	.....	7,000	.....	7,000	7,000	.....	12	12	.....	.....	.....
New York City to St. John, New Brunswick.	Coal	10,000	3,000	13,000	.....	13,000	8	8	.....	7	28
Caught in the ice .....	.....	10	.....	10	10	.....	1	1	.....	.....	.....
Fishing trip	Fish	100	30	130	130	.....	4	4	.....	.....	.....
.....do.....	.....do.....	350	300	650	650	.....	20	20	.....	.....	.....
Norfolk, Va., to Boston, Mass.	Coal	70,000	7,000	77,000	.....	77,000	10	10	.....	9	11

Table of casualties, season

DISTRICT NO. 2.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1901.					
Jan. 20	Four miles south-southwest of station.	Monomoy	Sc. Lizzie Cochran,* Machias, Me.	Kent	183
Jan. 21	One and one-half miles west by north of station.	Chatham	Sc. Electa Bailey, Bangor, Me.	Clay	344
Jan. 21	Three miles south of station.	Monomoy	Sc. Silver Spray, Rockland, Me.	McFadden	124
Jan. 25	Browns Island Shoal	Gurnet	Sc. Emerald, Gloucester, Mass.	Greenlaw	42
Feb. 20	Three miles northeast of station.	Orleans	Sc. Clara Jane,* Calais, Me.	Maroney	124
Mar. 6	One and one half miles northeast of station.	Plum Island	Small boat, Salisbury Beach, Mass.	.....	.....
Mar. 11	Two miles southwest of station.	High Head	Sc. W. H. Oler, Dennis, Mass.	Studley	698
Apr. 3	Saquis Beach	Gurnet	Sc. Moselle, Boston, Mass.	Hurley	9
Apr. 7	One and one-half miles west of station.	Race Point	Sc. Sarah C. Smith, ^b Philadelphia, Pa.	Wood	297
Apr. 9	One and one-quarter miles south of station.	Fourth Cliff	Sc. Geo. S. Boutwell, Boston, Mass.	Galiono	66
Apr. 15	Three miles southwest of station.	Orleans	Catboat, Chatham, Mass.	.....	.....
May 4	One-quarter mile northwest of station.	City Point	Sailboat, Boston, Mass.	.....	.....
May 6	Three-quarters of a mile northwest by west of station.	Wood End	Sc. Nightingale, Bangor, Me.	Grant	158
May 7	Six miles southwest by west of station.	Monomoy	Bk. Ethel, Portland, Me.	Hudgins	734
May 10	Two and one-half miles southwest of station.	Race Point	Sc. Two Forty, Gloucester, Mass.	Hayes	41
May 11	One-half mile north-northeast of station.	City Point	Slp. y. Perhaps, Boston, Mass.	.....	.....
May 12	Spectacle Island .....	.....do	Sloop-yacht, Boston, Mass.	.....	.....
May 17	One and one-half miles southwest by west of station.	.....do	Sc. Julia Baker, Bucksport, Me.	Hopkins	108
May 17	Three miles southwest of station.	Monomoy	Sc. Francis Whalen, Boston, Mass.	Whalen	135
May 23	Three-quarters of a mile southwest by west of station.	Gurnet	Sc. Lettie G. Howard, Salem, Mass.	Serwin	59
May 24	One and one-quarter miles west of station.	City Point	Slp. y. Irene, Boston, Mass.	.....	.....
May 24	One-half mile northwest of station.	Gurnet	Slp. Idella, Provincetown, Mass.	Rieh	6
May 24	One-quarter mile northwest of station.	.....do	Slp. Albert Drummond, Provincetown, Mass.	Willard	7
May 24	.....do .....	.....do	Slp. Jennie A. Hupper, Portland, Me.	Kelley	8
May 25	Two-thirds of a mile west by north of station.	City Point	Slp. y. Don, Boston, Mass.	.....	.....
May 25	Four and one-half miles east by south of station.	.....do	Catboat, Boston, Mass.	.....	.....
May 25	Three miles from station.	Great Neck	Str. Waquoit, Nantucket, Mass.	Smith	17
May 26	One mile northeast of station.	City Point	Slp. y. Trix, Boston, Mass.	.....	.....
May 29	Three-quarters of a mile southwest of station.	Gurnet	Sc. A. S. Caswell, Gloucester, Mass.	Larkins	72
June 1	One-half mile west-northwest of station.	City Point	Slp. y. Perhaps, Boston, Mass.	.....	.....
June 3	One-quarter mile west by south of station.	.....do	Slp. y. Venture, Boston, Mass.	.....	.....
June 3	One and two-thirds miles southwest of station.	.....do	Slp. y. Medora, Boston, Mass.	.....	.....

* In distress, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

COAST OF MASSACHUSETTS—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Calais, Me., to New Bedford, Mass.	Lumber ..	\$4,500	\$3,200	\$7,700	\$7,200	\$500	5	5	.....	.....	.....
Boothbay, Me., to Norfolk, Va.	Ice	3,000	500	3,500	750	2,750	6	6	.....	5	10
Blue Hill, Me., to New York City.	Stone	1,500	4,000	5,500	5,300	200	4	4	.....	.....	.....
Fishing trip.....	.....	3,000	.....	3,000	3,000	.....	11	11	.....	.....	.....
New York City to Boothbay, Me.	Coal	1,500	700	2,200	1,700	500	4	4	.....	.....	.....
Adrift.....	.....	15	.....	15	15	.....	1	1	.....	1	1
Sargentville, Me., to Baltimore, Md.	Ice	40,000	900	40,900	40,700	200	8	8	.....	.....	.....
Fishing trip.....	.....	400	.....	400	400	.....	2	2	.....	.....	.....
New York City to Boston, Mass.	Tarred paper and asphalt.	3,000	5,000	8,000	8,000	.....	5	5	.....	.....	.....
Portsmouth, N. H., to Hull, Mass.	Paving stones.	2,000	500	2,500	.....	2,500	5	5	.....	5	13
Pleasure trip .....	.....	100	.....	100	95	5	1	1	.....	.....	.....
.....do.....	.....	10	.....	10	10	.....	2	2	.....	.....	.....
Perth Amboy, N. J., to Bangor, Me.	Coal	1,600	800	2,400	2,400	.....	4	4	.....	.....	.....
Fernandina, Fla., to Boston, Mass.	Lumber ..	15,000	22,000	37,000	37,000	.....	8	8	.....	.....	.....
Fishing trip.....	Fish	3,000	350	3,350	3,350	.....	12	12	.....	.....	.....
Pleasure trip.....	.....	500	.....	500	480	20	3	3	.....	.....	.....
.....do.....	.....	20	.....	20	20	.....	.....	.....	.....	.....	.....
Neponset, Mass., to Bangor, Me.	Cypress...	1,600	2,000	3,600	3,600	.....	4	4	.....	.....	.....
Boston to Monomoy, Mass.	.....	12,000	.....	12,000	11,500	500	24	24	.....	.....	.....
Fishing trip.....	.....	6,000	150	6,150	6,150	.....	16	16	.....	.....	.....
Adrift.....	.....	200	.....	200	200	.....	.....	.....	.....	.....	.....
Provincetown to Plymouth, Mass.	.....	800	.....	800	780	20	2	2	.....	2	2
.....do.....	.....	1,100	.....	1,100	1,100	.....	3	3	.....	3	6
.....do.....	.....	1,000	.....	1,000	995	5	2	2	.....	2	2
Adrift .....	.....	450	.....	450	450	.....	.....	.....	.....	.....	.....
Capsized and sunk...	.....	20	.....	20	20	.....	1	1	.....	.....	.....
Fishing trip.....	Fish	2,500	50	2,550	2,550	.....	5	5	.....	.....	.....
Pleasure trip.....	.....	600	.....	600	600	.....	5	5	.....	.....	.....
Gloucester to Plymouth, Mass.	.....	8,000	.....	8,000	8,000	.....	16	16	.....	.....	.....
Pleasure trip.....	.....	500	.....	500	500	.....	4	4	.....	.....	.....
Adrift.....	.....	650	.....	650	650	.....	.....	.....	.....	.....	.....
Pleasure trip.....	.....	100	.....	100	90	10	2	2	.....	.....	.....

• In dangerous position, from which life-saving crew extricated her.

Table of casualties, season

DISTRICT NO. 2.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
June 7	One-half mile west of station.	City Point	Sc. Northern Light, Machias, Me.	.....	.....
June 8	One and one-half miles southwest of station.	.....do	Small boat, Boston, Mass.	.....	.....
June 13	One-quarter mile north-east of station.	.....do	Catboat Silane, Boston, Mass.	.....	.....
June 15	One-half mile east of Peaked Hill Bars Station.	Peaked Hill Bars, Race Point, and High Head.	Sc. Theta, Windsor, Nova Scotia.	Marsters...	462
June 17	One-half mile north by west of station.	City Point	Catboat, Boston, Mass. ...	.....	.....
June 19	Two miles east-northeast of station.	Gay Head	Sc. Altama, Marblehead, Mass.	Peeples....	31
June 21	One mile northeast by north of station.	City Point	Sc. y. Thora, Boston, Mass.	Dannie....	18
June 23	One-half mile west-southwest of station.	.....do	Slp. y. Smuggler, Boston, Mass.	.....	.....
June 27	Two-thirds of a mile northwest of station.	.....do	Catboat Joe, Boston, Mass.	.....	.....
June 27	One-half mile northeast of station.	.....do	Slp. y. Namenah, Boston, Mass.	.....	.....
June 27	Sow and Pigs Ledge	Cuttyhunk	Sc. Hannah F. Carleton, * Machias, Me.	Hardy.....	225
June 29	One and one-quarter miles northeast of station.	City Point	Sailboat Natalie, Boston, Mass.	.....	.....
June 30	Near station .....	.....do	Rowboat, Boston, Mass. .	.....	.....
	Total.....	.....	.....	.....	.....

DISTRICT No. 3.—EMBRACING COASTS OF

1900.					
Aug. 23	One-quarter mile east of station.	New Shoreham...	Sc. y. Shamrock, New York City.	Ward.....	50
Oct. 17	One and one-quarter miles southwest of station.	Point Judith	Sc. Swallow, St. John, New Brunswick.	Fullerton..	150
Oct. 23	Eastons Beach	Brenton Point....	Sc. Westport, New Bedford, Mass.	Fritz	11
Nov. 5	One-quarter mile south-southeast of station.	Quonochontaug ..	Fishboat, Quonochontaug, R. I.	.....	.....
Nov. 9	One and three-quarters miles north-northwest of station.	New Shoreham...	Slp. Martha, New London, Conn.	Knipe.....	15
1901.					
Mar. 31	Catumb Reef.....	Watch Hill	Sc. George A. Pierce, Boston, Mass.	Pinkham ..	104
May 23	Two and one-half miles south-southeast of station.	Sandy Point.....	Sc. Polar Wave, Boston, Mass.	Warren....	90
	Total.....	.....	.....	.....	.....

DISTRICT NO. 4.—EMBRACING

1900.					
July 22	Three-quarters of a mile northwest of station.	Tiana.....	Catboat, Tiana Creek, N. Y.	.....	.....
Aug. 11	Jones Inlet.....	Point Lookout and Short Beach.	Bk. Abiel Abbott, New York City.	Hawkins..	589
Sept. 2	One-half mile northwest of station.	Long Beach	Catboat, Lawrence, N. Y.	.....	.....

* Got off by wreckers.

of 1900-1901—Continued.

COAST OF MASSACHUSETTS—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Dragged anchors.....		\$300		\$300	\$300						
Pleasure trip.....		80		80	80		3	3			
.....do.....		100		100	65	\$35	2	2			
Windsor, Nova Scotia, to New York City.	Gypsum	20,000	\$2,200	22,200	22,200		8	8		8	8
Adrift.....		125		125	125						
Fishing trip.....	Fish	1,000	100	1,100	1,080	20	5	5			
Deer Isle, Me., to Dorchester, Mass.		3,000		3,000	3,000		3	3			
Pleasure trip.....		250		250	250		2	2			
Capsized.....		75		75	75		3	3			
Adrift.....		350		350	350						
Bangor, Me., to New York City.	Lumber	4,000	3,500	7,500	6,050	1,450	8	8			
Weymouth to Boston, Mass.		500		500	500		3	3			
Pleasure trip.....		15		15	15		2	2			
.....		428,730	115,300	544,030	394,925	149,105	813	812	1	77	134

RHODE ISLAND AND FISHERS ISLAND.

Narragansett Pier to Block Island, R. I.		\$12,000		\$12,000	\$11,900	\$100	10	10			
St. John, New Brunswick, to Westerly, R. I.	Lumber	1,500	\$2,000	3,500	3,400	100	4	4			
Fishing trip.....	Salt.....	1,000		1,000	980	20	4	4		4	4
.....do.....		30		30	25	5	2	2		2	2
.....do.....		550		550		550	3	3		3	15
Newport R. I., to New York City.		1,500		1,500		1,500	4	4		4	4
Boston, Mass., to Block Island, R. I.	Fish and salt.	2,600	1,000	3,600		3,600	17	17			
.....		19,180	3,000	22,180	16,305	5,875	44	44		13	25

COAST OF LONG ISLAND.

Pleasure trip.....		\$75		\$75	\$75		1	1			
Porto Rico, West Indies, to New York City.	Sugar.....	8,000	\$60,000	68,000	68,000		11	11			
Pleasure trip.....		50		50	50		3	3			

Table of casualties, season

DISTRICT NO. 4.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Sept. 21	One-half mile east of station.	Point of Woods...	Catboat, Point of Woods, N. Y.	.....	.....
Oct. 16	One-quarter mile south-west of station.	Rockaway.....	Slp. Fenella, * Greenport, N. Y.	Vail.....	23
Oct. 17	One mile east of station..	Point of Woods...	Slp. Mary Emma, Amityville, N. Y.	.....	.....
Oct. 17	Two and one-half miles west of station.	.....do.....	Catboat Jessie Lee, Patchogue, N. Y.	.....	.....
Oct. 30	Jones Inlet.....	Short Beach.....	Sc. Valentine Koon, Patchogue, N. Y.	Miller.....	22
Nov. 9	One mile east of station..	Blue Point.....	Sloop, Patchogue, N. Y.	.....	.....
Nov. 9	One and one-half miles west of station.	Point of Woods...	Sloop, Bayshore, N. Y.	.....	.....
Nov. 9	.....do.....	.....do.....	Catboat Jessie Lee, Patchogue, N. Y.	.....	.....
Nov. 9	One-quarter mile north-east of station.	.....do.....	Sloop, Patchogue, N. Y.	.....	.....
Nov. 9	Two miles east of station.	Long Beach.....	Slp. Lida F. Price, Patchogue, N. Y.	Pearsall...	8
Nov. 21	One mile northeast of station.	Zachs Inlet.....	Slp. Alberta, Amityville, N. Y.	.....	.....
Dec. 4	Two miles east of station.	Point Lookout...	Slp. Ripple, Babylon, N. Y.	.....	.....
Dec. 9	Seven miles west of station.	Rocky Point.....	Sc. y. Rosina, Philadelphia, Pa.	Matthews..	29
Dec. 26	Two miles east-northeast of station.	Shinnecock.....	Slp. Henrietta, Newport, R. I.	Bellows....	6
Dec. 31	One hundred and fifty feet south of station.	Quogue.....	Small boat, Quogue, N. Y.	.....	.....
1901.					
Jan. 3	Two and three-quarters miles west of station.	Long Beach.....	Sc. Julia, New York City.	Hartley...	57
Jan. 3	Three miles west of station.	.....do.....	Slp. Flirt, New York City.	Van Name..	16
Jan. 9	One mile northwest of station.	Blue Point.....	Catboat, Blue Point, N. Y.	.....	.....
Jan. 20	Three miles north of station.	.....do.....	Skiff, Blue Point, N. Y.	.....	.....
Mar. 6	Two miles west of station.	Fire Island.....	Slp. Jennie C. Brown, Patchogue, N. Y.	Clock.....	24
Mar. 26	Two miles east of station.	Long Beach.....	Str. Gwent, Bergen, Norway.	Berger....	670
Mar. 31	One and one-half miles west of station.	Fire Island.....	Slp. Lizzie M. Jones, New York City.	Hill.....	21
Apr. 10	Two miles south of station.	Oak Island.....	Sc. Puritan, Belfast, Me..	Sargent....	116
Apr. 25	One and one-half miles west of station.	Fire Island.....	Sc. Valentine Koon, Patchogue, N. Y.	Rakow....	22
Apr. 29	One mile northeast of station.	.....do.....	Sc. Crystal Falce, New Haven Conn.	.....	16
May 4	Two and one-half miles southeast of Oak Island Station.	Oak Island and Fire Island.	Sc. Myra W. Spear, Perth Amboy, N. J.	Lewis.....	156
May 5	Three-quarters of a mile northwest of station.	Point of Woods...	Slp. Greyhound. Patchogue, N. Y.	Bishop....	8
May 10	Two and one-half miles west of station.	Point Lookout...	Sc. A. R. Keene, Machias, Me.	Keene.....	364
May 17	Three miles west of station.	Long Beach.....	Sc. Valentine Koon, Patchogue, N. Y.	Rakow....	22
May 28	.....do.....	.....do.....	Slp. Bay Queen, Patchogue, N. Y.	Herbert...	19
May 30	Three-quarters of a mile east of station.	Point Lookout...	Bkn. Vilette, Philadelphia, Pa.	Lohnes....	568
	Total.....	.....	.....	.....	.....

* Disabled and in dangerous position, requiring assistance.

of 1900-1901—Continued.

COAST OF LONG ISLAND—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Pleasure trip.....		\$40		\$40	\$40		2	2			
Fishing trip.....		1,200		1,200	1,100	\$100	9	9		9	9
.....do.....	Fish.....	400	\$25	425	425		2	2			
Patchogue to Oak Island, N. Y.	Oysters.....	100	15	115	115		1	1			
New York City to Patchogue, N. Y.		1,000		1,000	1,000		3	3			
Dragged anchor and stranded.		100		100	100		1	1			
.....do.....		300		300	300						
.....do.....		100		100	100		1	1			
.....do.....		300		300	300						
Dragged anchors.....		250		250	250						
Capsized.....		100		100	100		1	1			
Babylon to Sing Sing, N. Y.		65		65	65		2	2	2	6	
Lynn, Mass., to Atlantic City, N. J.		10,000		10,000	9,500	500	5	5			
Parted moorings and stranded.		200		200	200						
Capsized.....	Fish.....	20	5	25	20	5	3	2	1		
Long Beach to New York City.	Sand.....	1,500	125	1,625	1,625		5	5			
East Rockaway to New York City.	Oysters.....	500	500	1,000	1,000		4	4			
Adrift.....		25		25	25						
.....		30		30	20	10	1	1			
Sayville, N. Y., to New York City.	Oysters.....	1,500	700	2,200	2,200		2	2			
Banes, Cuba, to New York City.	Fruit.....	75,000	5,000	80,000	75,500	4,500	22	22			
Bay Shore, N. Y., to Chincoteague, Va.		500		500	500		2	2			
Georgetown, S. C., to Patchogue, N. Y.	Lumber.....	6,000	3,000	9,000	9,000		6	6			
Northport to Sayville, N. Y.	Oysters.....	1,200	600	1,800	1,800		2	2			
New Haven, Conn., to Patchogue, N. Y.	.....do.....	1,000	500	1,500	1,500		2	2			
Smith Mills, S. C., to Patchogue, N. Y.	Lumber.....	8,000	4,000	12,000	12,000		7	7			
Fire Island to Sayville, N. Y.		600		600	600		9	9	9	9	
Zaza, Cuba, to New York City.	Cedar.....	20,000	10,000	30,000		30,000	7	7	6	12	
Patchogue to Longport, N. Y.		1,000		1,000	1,000		3	3			
Oyster Bay to East Rockaway Bay, N. Y.	Oysters.....	2,000	625	2,625		2,625	2	2			
Porto Rico, West Indies, to New York City.		9,000		9,000	9,000		8	8	8	8	
.....		150,155	85,095	235,250	197,510	37,740	127	126	1	84	44

Table of casualties, season

DISTRICT NO. 5—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
July 10	One-half mile east of station.	Monmouth Beach	Skiff, Seabright, N. J.		
July 14	One and one-half miles east of station.	Avalon	St. y. Avalon,* Avalon, N. J.		
July 16	One and one-half miles northwest of station.	Cape May	Slp. Big Beck		
July 19	Three-quarters of a mile west of station.	Great Egg	Yht. Lizzie, Somers Point, N. J.		
Aug. 6	One-half mile southwest of station.	Little Beach	Yht. Anna W., Beach Haven, N. J.		
Aug. 6	One-quarter mile east of station.	Hereford Inlet	Launch Ocean Wave, Angiesca, N. J.		
Aug. 10	Three-quarters of a mile west-southwest of station.	Great Egg	Slp. M. and R. Remde, Somers Point, N. J.	Sharp	6
Aug. 12	One and three-quarters miles north-northwest of station.	Barnegat	Str. Connetquot, Camden, N. J.	Johnson	42
Aug. 12	One and one-half miles northwest of station.	.....do	Catboat B. C. Pennington, Atlantic City, N. J.		
Aug. 21	Five miles east-northeast of Great Egg Station.	Great Egg and Ocean City.	Slp. y. Speedway, Atlantic City, N. J.		
Aug. 30	One mile northeast of station.	Avalon	Slp. Penrose, Somers Point, N. J.	Townsend	9
Sept. 9	One-quarter mile east-northeast of station.	Atlantic City	Slp. Dart, Somers Point, N. J.	Monroe	6
Sept. 10	Absecon Inlet.	.....do	Yht. George M., Atlantic City, N. J.		
Sept. 12	One-half mile southwest of station.	Monmouth Beach	Sailboat Pumpkin, Shrewsbury River, N. J.		
Sept. 15	Point of Sandy Hook	Sandy Hook	Catboat Alma, Brooklyn, N. Y.		
Sept. 15	Two and one-half miles southeast of station.	Little Beach	Sc. Willie,* New York City.	Anderson	13
Sept. 16	One and one-half miles northwest of station.	Cape May	Sloop		
Sept. 17	One and one-third miles northeast of Ocean City Station.	Ocean City and Great Egg.	Sharpie, Sea View, N. J.		
Sept. 20	One mile southwest of station.	Great Egg	Catboat, Camden, N. J.		
Sept. 23	One and three-quarters miles south of station.	.....do	Yht. Bertha Lee, Pleasantville, N. J.		
Sept. 26	One mile west by south of station.	Turtle Gut	Sc. Eugene H. Cathrall, Bridgeton, N. J.	Smith	42
Oct. 2	Two hundred yards west of station.	Monmouth Beach	Rowboat, Gaillie, N. J.		
Oct. 3	Three-quarters of a mile southwest of station.	Great Egg	Catboat Ella, Atlantic City, N. J.		
Oct. 9	Two miles west-southwest of station.	.....do	Yht. Bertha, Pleasantville, N. J.		
Oct. 9	Two miles east of Holly Beach Station.	Holly Beach and Hereford Inlet.	Slp. Speedway, Atlantic City, N. J.		
Oct. 13	One mile west of station.	Cold Spring	Rowboat, Cape May City, N. J.		
Oct. 17	One and one-quarter miles south of station.	Monmouth Beach	Slp. Idaho, Greenpoint, N. Y.	Wilson	13
Oct. 31	One-half mile south of Cedar Creek Station.	Cedar Creek and Forked River.	Slp. Lady Louie, Babylon, N. Y.		
Nov. 3	One and one-half miles south of Little Egg Station.	Little Egg and Little Beach.	Sc. Emma A. Chesebro, Stonington, Conn.	Burke	86
Nov. 3	Three-quarters of a mile north-northwest of station.	Ocean City	Sc. A. L. Lee, Somers Point, N. J.	Gaskill	87
Nov. 9	One-sixth mile west-northwest of station.	Sandy Hook	Sloop, Fort Hancock, N. J.		

* Disabled, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

COAST OF NEW JERSEY.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days succor afforded.
Capsized		\$60		\$60	\$60		2	2			
Fishing trip.....		2,000		2,000	2,000		4	4			
Pleasure trip.....		150		150	75	\$75					
.....do.....		200		200	200		5	5			
Atlantic City to Beach Haven, N. J.		200		200	200		4	4			
Parted cables and stranded.		500		500	500		(b)				
Atlantic City to Bealeys Point, N. J.		300		300	300		3	3		4	4
Barnegat Pier to Barnegat City, N. J.		10,000		10,000	10,000		4	4			
Barnegat City to Atlantic City, N. J.		1,000		1,000	1,000		8	8			
Fishing trip.....		300		300	300		4	4			
.....do.....		800		800	800		14	14			
.....do.....		600		600	600		14	14			
.....do.....		600		600	600		2	2			
Pleasure trip.....		400		400	400		4	4			
.....do.....		300		300	300		4	4		2	2
Fishing trip.....		1,000		1,000	1,000		4	4		4	4
Trenton to Atlantic City, N. J.		100		100	90	10	2	2			
Fishing trip.....		20		20	20		1	1			
Camden to Atlantic City, N. J.		25		25		25	1	1		1	1
Fishing trip.....		300		300	300		8	8			
Cape May, N. J., to Philadelphia, Pa.	Sand	1,500	\$80	1,580	1,530		4	4			
Capsized		15		15	15		1	1			
.....do.....		30		30	30		17	17			
Egg Harbor River to Pleasantville, N. J.	Oysters	300	75	375	370	5	2	2			
Fishing trip.....		300		300	270	30	4	4		4	10
.....do.....		10		10	10		4	3	1		
Rockaway, N. Y., to Sandy Hook, N. J.		800		800		800	2	2		2	4
Babylon, N. Y., to Norfolk, Va.		200		200	190	10	3	3		3	18
New York City to Barnegat, N. J.	Stone	2,000	250	2,250	2,230	20	3	3			
New York City to Ocean City, N. J.	Brick	3,000	550	3,550	3,550		4	4			
Sunk at dock		50		50	50		1	1			

^b No one on board.

^c In distress, requiring the assistance of the life-saving crew.

Table of casualties, season

DISTRICT NO. 5.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Nov. 9	One-sixth mile west-northwest of station.	Sandy Hook.....	Launch John T. Oakley, Fort Hancock, N. J.	.....	.....
Nov. 9	.....do .....	.....do	Sc. Grover Cleveland, Port Jefferson, N. Y.	Chevalier..	51
Nov. 9	One and three-quarters miles north of station.	Spermaceti Cove..	Slp. Victorine, Perth Amboy, N. J.	Arnold	9
Nov. 9	One-quarter mile north of station.	Forked River.....	Yht. Lila, Toms River, N. J.	.....	.....
Nov. 9	Three-quarters of a mile north of station.	.....do	House boat, Waretown, N. J.	.....	.....
Nov. 9	Two and one-half miles north-northwest of station.	Little Beach.....	Slp. y. Virginia, Tuckerton, N. J.	.....	.....
Nov. 9	One-third mile west-southwest of station.	Great Egg	Sc. Joetta, Somers Point, N. J.	Hickman..	12
Nov. 9	Five miles southeast of station.	Avalon	Sc. Ida B. Gibson, Tuckerton, N. J.	Falkenburg	235
Nov. 11	One and one-quarter miles southwest of station.	Little Egg	Sc. Emma A. Chesebro, Stonington, Conn.	Burke	86
Nov. 11	.....do .....	.....do	Slp. Wm. E. Cox, Tuckerton, N. J.	Cox	24
Nov. 12	One and one-half miles west-southwest of station.	Great Egg	Sc. Sadie, Somers Point, N. J.	Smith	6
Nov. 21	One and one-half miles north of station.	Spermaceti Cove .	Slp. Jaquette, Perth Amboy, N. J.	Hall	6
Dec. 4	Three-quarters of a mile south of Chadwick Station.	Chadwick and Mantoloking.	Sc. Oliver Scofield, New York City.	Bragg	393
Dec. 7	Two miles west-southwest of station.	Great Egg	Yht. Irena, Scullville, N. J.	.....	.....
Dec. 16	Three-quarters of a mile southwest of station.	Spermaceti Cove .	Sc. y. Rosina, Philadelphia, Pa.	Mathews ..	29
Dec. 24	One and one-quarter miles east of Ocean City Station.	Ocean City and Great Egg.	Str. Antilla, Nassau, New Providence.	Montell ...	929
Dec. 25	One mile south of station.	Atlantic City	Sc. Edna Earl, Camden, N. J.	Allen	42
1901.					
Jan. 9	One and one-half miles west of station.	Great Egg	Slp. Emma W., Somers Point, N. J.	Hand.....	12
Jan. 11	One-quarter mile north of station.	.....do	Skiff .....	.....	.....
Jan. 19	Two and one-half miles west-northwest of station.	.....do	Cat yacht J. A. Gault, Somers Point, N. J.	Risley	5
Jan. 19	Two and one-half miles east of station.	Cold Spring	Sc. John Russell, Bridgeton, N. J.	Thomas	156
Jan. 20	Absecon Bar	Atlantic City	Sc. A. T. Coleman, Bridgeton, N. J.	Sharp	66
Jan. 20	Two miles southwest of station.	South Brigantine.	Fishboat, Atlantic City, N. J.	.....	.....
Feb. 17	One mile east of Avalon Station.	Avalon and Townsends Inlet.	Sc. Ringleader, New York City.	Hopkins... 1,183	
Feb. 17	.....do .....	.....do	Sc. Fawn, New York City.	Grindle.... 1,041	
Feb. 25	Three miles northeast of station.	Sandy Hook.....	Sc. Anna, Port Jefferson, N. Y.	Gillette.... 488	
Mar. 11	One and one-half miles south of Long Beach Station.	Long Beach, Ship Bottom, and Bonds.	Sc. Nathaniel T. Palmer, Bath, Me.	Kreger 2,440	
Mar. 13	Three-quarters of a mile west-southwest of station.	Great Egg	Slp. John Wesley, Chincoteague, Va.	Fruitt	15
Mar. 21	.....do .....	.....do	Catboat Maud S., Somers Point, N. J.	Gaskill 5	
Mar. 26	One-half mile southeast of station.	Holly Beach.....	Slp. Belle, Bridgeton, N. J.	Johnson... 16	

of 1900-1901—Continued.

COAST OF NEW JERSEY—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
.....	.....	\$450	.....	\$450	\$440	\$10	.....	.....	.....	.....	.....
Sunk at dock	Lumber ..	300	\$2,000	2,300	1,000	1,300	4	4	.....	4	7
From Keyport, N. J. ....	.....	500	.....	500	490	10	2	2	.....	2	2
Toms River to Allens Cove, N. J. ....	.....	400	.....	400	400	.....	1	1	.....	.....	.....
Parted moorings.....	.....	200	.....	200	200	.....	1	1	.....	1	1
Tuckerton to Atlantic City, N. J. ....	.....	500	.....	500	500	.....	2	2	.....	2	2
Scullyville to Longport, N. J.	Brush	200	45	245	245	.....	2	2	.....	.....	.....
Norfolk, Va., to New York City.	Lumber ..	3,000	3,500	6,500	5,000	1,500	6	6	.....	.....	.....
New York City to Barnegat, N. J.	Stone.....	2,000	250	2,250	2,250	.....	3	3	.....	.....	.....
West Creek, N. J., to Hog Island, Va. ....	.....	1,500	.....	1,500	1,500	.....	2	2	.....	.....	.....
Great Egg Harbor River to Pleasantville, N. J.	Oysters ...	350	55	405	405	.....	1	1	.....	.....	.....
Oyster dredging .....	.....	300	.....	300	300	.....	3	3	.....	3	3
Norfolk, Va., to New York City.	Lumber ..	5,000	4,000	9,000	2,000	7,000	6	6	.....	5	10
Great Egg Harbor River to Pleasantville, N. J.	Oysters ...	250	40	290	290	.....	2	2	.....	.....	.....
Lynn, Mass., to Atlantic City, N. J. ....	.....	2,500	.....	2,500	2,500	.....	6	6	.....	.....	.....
Nassau, New Providence, to New York City.	General ..	60,000	23,000	83,000	83,000	.....	25	25	.....	2	2
Delaware Breakwater, Del., to Atlantic City, N. J. ....	.....	3,500	.....	3,500	3,500	.....	9	9	.....	.....	.....
Atlantic City to Tuckahoe River, N. J. ....	.....	300	.....	300	300	.....	2	2	.....	.....	.....
Capsized .....	.....	10	.....	10	10	.....	2	1	1	.....	.....
Somers Point to Longport, N. J. ....	.....	400	.....	400	400	.....	3	3	.....	.....	.....
Bogue Inlet, N. C., to New Haven, Conn.	Lumber ..	10,000	1,800	11,800	9,700	2,100	6	6	.....	6	13
Newbern, N. C., to Atlantic City, N. J. ....	.....do ..	1,800	800	2,600	100	2,500	4	4	.....	4	14
Broke from moorings. ....	.....	50	.....	50	50	.....	.....	.....	.....	.....	.....
New York City to Newport News, Va. ....	.....	2,000	.....	2,000	2,000	.....	5	5	.....	.....	.....
.....do .....	.....	2,000	.....	2,000	2,000	.....	4	4	.....	.....	.....
Fernandina, Fla., to Perth Amboy, N. J.	Lumber ..	10,000	3,500	13,500	13,500	.....	7	7	.....	.....	.....
Portland, Me., to Philadelphia, Pa. ....	.....	80,000	.....	80,000	53,000	27,000	12	12	.....	.....	.....
Chincoteague, Va., to Pleasantville, N. J.	Oysters ...	800	250	1,050	1,050	.....	2	2	.....	.....	.....
Pleasantville, N. J., to Delaware River. ....	.....	200	.....	200	200	.....	2	2	.....	.....	.....
Franklin, Va., to Ocean View, N. J.	Oysters ...	600	250	850	700	150	2	2	.....	2	2

Table of casualties, season

DISTRICT NO. 5.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Ton- nage.
1901.					
Mar. 28	Two and one-half miles east of Cold Spring Station.	Cold Spring and Turtle Gut.	Sc. C. G. Cranmer, Philadelphia, Pa.	Hanson....	222
Mar. 29	Three-quarters of a mile south-southwest of station.	Spermaceti Cove..	Sc. William T. Parker, Perth Amboy, N. J.	Chadwick .	26
Mar. 30	One and one-half miles southwest by west of station.	Turtle Gut.....	Yacht .....	.....	.....
Mar. 31	Two and one-half miles east-northeast of station.	Little Beach.....	Sc. James W. Lee, Bridgeton, N. J.	Buck	20
Apr. 7	Two miles west-southwest of station.	Great Egg	Yht. Frances, Ocean City, N. J.	.....	.....
Apr. 10	One mile west-southwest of station.	.....do	Yht. Ella, Atlantic City, N. J.	.....	.....
Apr. 14	Three and one-half miles southwest of station.	.....do	Sailboat Wasp, Longport, N. J.	.....	.....
Apr. 15	Two miles west of station.	.....do	Catboat Pequod, Atlantic City, N. J.	.....	.....
Apr. 20	One and one-half miles south of Chadwick Station.	Chadwick and Toms River.	Sc. Mola, St. John, New Brunswick.	McKeller..	367
Apr. 24	Two miles north of station.	Little Egg	Sc. Emma M. Robinson, Chincoteague, Va.	Hickman..	63
Apr. 27	Two and one-half miles southwest of Bonds Station.	Bonds and Little Egg.	Slp. Federalist, Perth Amboy, N. J.	Kilpatrick.	20
Apr. 29	Three miles southeast of station.	Little Egg	Sc. Altama,* Marblehead, Mass.	Peoples....	31
May 13	Romer Shoals.....	Sandy Hook.....	Sc. Lydia A. Harvey, Boston, Mass.	Bushey....	52
May 13	Three-quarters of a mile west-southwest of station.	Great Egg	Sc. Gen'l J. L. Selfridge, Somers Point, N. J.	Willits....	20
May 16	One-half mile south-southeast of Turtle Gut Station.	Turtle Gut and Holly Beach.	Sc. Eugene H. Cathrall, Bridgeton, N. J.	Smith	42
May 23	One-quarter mile south of Ship Bottom Station.	Ship Bottom and Long Beach.	Bk. Bianca Aspasia, Genoa, Italy.	Vincenzo..	466
May 28	Two miles east of station.	Cold Spring	Launch Two Brothers, Camden, N. J.	.....	.....
June 5	Three-quarters of a mile west of station.	Great Egg	Yht. Francis, Ocean City, N. J.	.....	.....
June 16	Point of Sandy Hook	Sandy Hook.....	Catboat Marguerite .....	.....	.....
June 18	One-half mile south of station.	Shark River.....	Slp. y. Mayoeg, New York City.	.....	.....
June 30	Two and one-half miles east of station.	Mantoloking	Launch Nellie White, ^b Oceanport, N. J.	.....	.....
	Total.....	.....	.....	.....	.....

DISTRICT NO. 6, EMBRACING COAST BETWEEN

1901.					
Aug. 2	Two hundred yards north of station.	Rehoboth Beach .	Sc. Starlight, Wilmington, Del.	Magee.....	9
Aug. 25	Two miles southeast of station.	Metomkin Inlet ..	Launch Winnie, Chincoteague, Va.	.....	.....
Aug. 30	Three-quarters of a mile southwest of station.	.....do	Slp. Wing.....	.....	.....
Sept. 19	One and seven-eighths miles north of Cape Henlopen Station.	Cape Henlopen and Lewes.	Sc. John Shay, Somers Point, N. J.	Sprague ...	305

*In dangerous position, from which life-saving crew extricated her.

of 1900-1901—Continued.

COAST OF NEW JERSEY—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
James River, Va., to New York City.	Wood.....	\$3,000	\$950	\$3,950	\$3,850	\$100	6	6	.....	.....	.....
Port Reading to Seabright, N. J.	Coal.....	1,000	280	1,280	1,160	120	2	2	.....	.....	.....
Pleasantville, N. J., to Delaware Bay.	.....	250	.....	250	250	.....	4	4	.....	.....	.....
Hereford Inlet to Little Egg Harbor, N. J.	.....	900	.....	900	900	.....	2	2	.....	.....	.....
Ocean City to Longport, N. J.	.....	300	.....	300	300	.....	1	1	.....	.....	.....
Somers Point to Atlantic City, N. J.	.....	600	.....	600	600	.....	2	2	.....	.....	.....
Adrift.....	.....	40	.....	40	40	.....	.....	.....	.....	.....	.....
Dragged anchor and stranded.	.....	250	.....	250	250	.....	.....	.....	.....	.....	.....
Buenos Ayres, S. A., to New York City.	Hides.....	12,000	64,000	76,000	32,000	44,000	8	8	.....	8	8
James River, Va., to Tuckerton Bay, N. J.	Oysters...	3,000	1,000	4,000	4,000	.....	4	4	.....	.....	.....
Barneget to Atlantic City, N. J.	.....	1,000	.....	1,000	1,000	.....	3	3	.....	.....	.....
Fishing trip.....	.....	1,500	.....	1,500	1,500	.....	5	5	.....	.....	.....
.....do.....	.....	2,000	.....	2,000	.....	2,000	6	6	.....	6	6
Oyster Bay, N. Y., to Pleasantville, N. J.	Oysters...	1,200	500	1,700	1,700	.....	3	3	.....	.....	.....
Cape May, N. J., to Hog Island, Va.	.....	1,000	.....	1,000	1,000	.....	3	3	.....	.....	.....
Palenque, San Domingo, to New York City.	Sugar.....	18,000	37,000	55,000	.....	55,000	15	15	.....	.....	.....
Camden to Ocean City, N. J.	.....	900	.....	900	800	100	4	4	.....	4	28
Longport to Ocean City, N. J.	.....	300	.....	300	295	5	8	8	.....	.....	.....
Cruising.....	.....	100	.....	100	100	.....	5	5	.....	.....	.....
New York City to Shark River, N. J.	.....	600	.....	600	600	.....	3	3	.....	.....	.....
Oceanport to Little Egg, N. J.	.....	1,000	.....	1,000	1,000	.....	3	3	.....	1	1
.....	.....	265,110	144,125	409,235	265,365	143,870	346	344	2	70	142

CAPE HENLOPEN AND CAPE CHARLES.

Millville, Del., to Millville, N. J.	Lumber ..	\$250	\$75	\$325	\$300	\$25	2	2	.....	2	2
Chincoteague, Va., to Pocomoke City, Md.	.....	1,200	.....	1,200	1,200	.....	3	3	.....	3	3
To Chincoteague, Va.	Clams.....	250	50	300	295	5	3	3	.....	.....	.....
New York City to Philadelphia, Pa.	.....	4,000	.....	4,000	.....	4,000	7	7	.....	7	7

^b In distress and disabled, requiring the assistance of the life-saving crew.

Table of casualties, season

DISTRICT NO. 6.—EMBRACING COAST BETWEEN

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Oct. 8	Three-quarters of a mile southwest of station.	Metomkin Inlet ..	Slp. Georgia Lee, Chincoteague, Va.	Marriner ..	7
Oct. 16	Point of Cape Henlopen .	Cape Henlopen and Lewes.	Sc. Carrie E. Pickering, Deer Isle, Me.	Haskell....	277
Nov. 6	Two and one-half miles east of station.	Parramore Beach.	Sc. Helen M.,* Chincoteague, Va.	Fruitt	30
Nov. 10	Williams Shoal	Wallops Beach ..	Slp. Mascott, Somers Point, N. J.	Tabb	13
Nov. 10	New Inlet Shoals	Cobb Island	Slp. Jordan, Somers Point, N. J.	Leeds.....	25
Nov. 25	Two hundred yards east-southeast of station.	Isle of Wight	Str. Margaret Jones, Cardiff, Wales.	Thomas ...	1,841
Dec. 1	Four and one-half miles southeast of station.	Hog Island	Sc. S. B. Wheeler, Baltimore, Md.	Fedderman	280
Dec. 9	Four miles northeast of Assateague Beach Station.	Assateague Beach and Popes Island.	Slp. y. Sagitta, New York City.	McNett....	27
Dec. 18	Three miles west of Assateague Beach Station.	Assateague Beach and Wallops Beach.	Sc. Joseph Allen, Norfolk, Va.	Dedham...	27
Dec. 20	One and one-half miles north-northwest of station.	North Beach	Shanty boat, Ocean City, Md.	.....	.....
Dec. 20	Horse Shoe Channel	Parramore Beach.	Slp. Volunteer, Chincoteague, Va.	Bowden ...	6
Dec. 21	Two miles north of Cape Henlopen Station.	Cape Henlopen and Lewes.	Sc. N. H. Skinner, Boston, Mass.	Wheatley..	299
Dec. 23	Four miles south of station.	Assateague Beach	Sc. J. Howell Leeds, Philadelphia, Pa.	Bateman ..	414
Dec. 24	Eight miles northeast of station.	Smith Island	Sc. Rondout, New York City.	Buhr	815
Dec. 24	Ship Shoal	Smith Island and Cobb Island.	Str. Ocean King, New York City.	Chase.....	201
Dec. 24	.....do.....	.....do.....	Sc. Astoria, New York City.	Smith	1,381
Dec. 25	One-half mile west by north of station.	Lewes	Slp. Kestrel, New Haven, Conn.	Wright	10
Dec. 27	Hog Island Shoals	Hog Island	Slp. Kestrel, New Haven, Conn.	Wright	10
1901.					
Jan. 4	Turners Shoal.....	Assateague Beach and Wallops Beach.	Sc. James Young, Thomaston, Me.	Bulger	261
Jan. 9	One and one-half miles northeast of station.	Wallops Beach ...	Sc. John R. Walter, Chincoteague, Va.	Richardson	8
Jan. 13	Turners Shoal.....	Assateague Beach	Sc. Annie B. Mitchell, New London, Conn.	Mehaffey ..	463
Jan. 19	One-half mile west of point of Cape Henlopen.	Cape Henlopen and Lewes.	Bge. Hercules, Philadelphia, Pa.	.....	.....
Jan. 24	One and three-quarter miles north-northeast of station.	North Beach	Str. Starcross, Cardiff, Wales.	Milburn ...	2,823
Jan. 25	One and one-quarter miles northwest by north of station.	Parramore Beach.	Slp. C. N. Chesser, Chincoteague, Va.	.....	.....
Feb. 23	Point of Cape Henlopen .	Lewes and Cape Henlopen.	Sc. L. S. Levering, Somers Point, N. J.	Falkenberg	298
Mar. 11	One mile west of station.	Assateague Beach	Sc. Mary Standish, Boston, Mass.	Gillchrist ..	272
Apr. 3	Two and one-half miles south of station.	Wallops Beach ...	Sc. Oriental, Annapolis, Md.	Mason	19
Apr. 4	Three miles south of station.	Assateague Beach	Sc. Early Bird, Baltimore, Md.	Hamburg..	58
Apr. 9	Three and one-half miles southwest by south of station.	North Beach	Sharple Wave, Conners Point, Md.	.....	.....
Apr. 9	Three-quarters of a mile south of station.	Wachapreague ...	Sc. B. T. Riffin, Cape Charles, Va.	Jeffers	12

* Disabled, requiring assistance.

of 1900-1901—Continued.

CAPE HENLOPEN AND CAPE CHARLES—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Horntown, Va., for oysters.		\$450		\$450	\$450		2	2			
New York City to Philadelphia, Pa.		4,000		4,000	\$4,000		6	6		6	10
James River to Chincoteague, Va.	Oysters	900	\$230	1,130	1,090	40	3	3		3	3
Cobbs Island to Chincoteague, Va.	do	1,000	50	1,050	1,050		2	2			
Indian Town to Back River, Va.	do	1,000	125	1,125	1,125		3	3			
Malta to Delaware Breakwater, Del.		150,000		150,000	150,000		22	22			
Philadelphia, Pa., to Claremont, Va.		2,000		2,000	2,000		6	6		6	16
New York City to North Carolina.		3,000		3,000	2,800	200	2	2		2	12
Chincoteague to Norfolk, Va.	Oysters	2,000	550	2,550	2,300	250	4	4		2	2
Winter Quarters to Ocean City, Md.		150		150	145	5					
Hog Island to Chincoteague, Va.	Oysters	400	30	430		430	4	4			
Wilmington, N. C., to New York City.	Lumber	2,800	4,000	6,800		6,800	9	9		5	5
Philadelphia, Pa., to Wilmington, N. C.	Fertilizer.	12,000	17,500	29,500	27,500	2,000	7	7		2	6
New York City to Baltimore, Md.		7,000		7,000		7,000	4	4		4	4
do		25,000		25,000		25,000	10	10		3	3
do		10,000		10,000		10,000	4	4		1	1
Fishing trip		500		500		500	4	4			
New Haven, Conn., to Jacksonville, Fla.		500		500		500	4	4		4	16
Bermuda Hundred, Va., to New York City.	Lumber	3,000	3,000	6,000	5,000	1,000	6	6			
Wachapreague to Chincoteague, Va.	Oysters	400	75	475	475		2	2			
Norfolk, Va., to New Haven, Conn.	Pig iron	16,000	10,000	26,000	26,000		7	7			
Philadelphia, Pa., to Delaware Breakwater, Del.		9,000		9,000		9,000	2	2			
Dakar, Africa, to Philadelphia, Pa.		150,000		150,000	150,000		25	25			
Hog Island to Chincoteague, Va.	Oysters	250	50	300	300		3	3			
Pamunkey River, Va., to New York City.	Wood	2,000	1,600	3,600	3,600		6	6			
New York City to City Point, Va.		5,000		5,000		5,000	6	6		6	20
Atlantic City, N. J., to Chincoteague, Va.		1,000		1,000	950	50	4	4		2	2
James River, Va., to Maurice River, N. J.	Oysters	3,000	800	3,800	3,800		4	4			
Green Run to Ocean City, Md.	Fish	75	15	90	90		1	1			
Chincoteague to Wachapreague, Va.		300		300	300		3	3			

Table of casualties, season

DISTRICT NO. 6.—EMBRACING COAST BETWEEN

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1901.					
Apr. 15	Two-sevenths of a mile south of station.	Hog Island	Sc. Diadem, Newbern, N. C.	Brown.....	9
Apr. 26	Two and one-half miles north-northeast of station.	Wallops Beach ...	Str. Globe, Wisharts Point, Va.	.....	.....
June 16	Two miles north of station.	Rehoboth Beach .	Launch Em, Philadelphia, Pa.	.....	.....
June 16	.....do.....	.....do.....	Bge. Annabelle, Philadelphia, Pa.	.....	.....
	Total.....	.....	.....	.....	.....

DISTRICT NO. 7.—EMBRACING COAST

1901.					
July 22	Outer Diamond Shoals...	Cape Hatteras, Creeds Hill, and Big Kinnakeet.	Str. St. Georg, Hamburg, Germany.	Krutzfelar.....	2,593
Aug. 8	Six miles northwest $\frac{1}{2}$ north of station.	Portsmouth	Str. Pamlico, New York City.	Wynne	40
Aug. 9	Outer Diamond Shoals...	Cape Hatteras, Creeds Hill, and Big Kinnakeet.	Str. Palestro, Liverpool, England.	Armstrong ..	2,410
Aug. 22	One and one-half miles west of station.	Durants	Sc. Freddie L. Hamblen, Edenton, N. C.	Gaskins.....	50
Sept. 10	Two-thirds of a mile northeast by east of station.	Cape Heury	Str. Moonstone, London, England.	Williams ..	2,076
Sept. 18	Four miles north by west of station.	Durants	Slp. Rebecca, Engelhard, N. C.	.....	.....
Oct. 9	Four miles north by east of station.	.....do.....	Sc. Mary Wood, Edenton, N. C.	Stowe	34
Oct. 19	Two and one-half miles northwest of station.	Core Bank.....	Sc. Marvin D. White, Newbern, N. C.	Bowen	27
Oct. 30	Two miles northwest of station.	.....do.....	Slp. y. Truant, New York City.	Hains.....	20
Nov. 9	Two and one-half miles northwest of Kill Devil Hills Station.	Kill Devil Hills and Kitty Hawk.	Sc. Ella Creef, Edenton, N. C.	Cooper.....	8
Nov. 21	One-half mile east-northeast of station.	Bodie Island	Fish boat, Roanoke Island, N. C.	.....	.....
Dec. 21	Two-sevenths of a mile northeast of Dam Neck Mills Station.	Dam Neck Mills and Seatack.	Sc. Jennie Hall, Machias, Me.	Lampson ..	412
1901.					
Jan. 20	Four miles north-northwest of station.	Durants	Sc. Lorena, Edenton, N. C.	Quidely ...	16
Jan. 25	One mile west-southwest of station.	Bodie Island	Slp. Lavinia, Manteo, N. C.	.....	.....
Jan. 25	One and one-half miles north-northwest of station.	Durants	Sailboat, Trent, N. C.	.....	.....
Jan. 31	Three and three-quarters miles north-northeast of Cape Hatteras Station.	Cape Hatteras, Big Kinnakeet, and Creeds Hill.	Sc. George R. Congdon, New York City.	Bayles.....	458
Feb. 20	One mile southwest of station.	Core Bank.....	Sc. Gertie Lord, Beaufort, N. C.	Mason.....	6
Feb. 25	Five miles west of station.	Big Kinnakeet ...	Sc. Gen'l E. L. F. Hardcastle, Baltimore, Md.	.....	66
Mar. 4	One-half mile south-southeast of Gull Shoal Station.	Gull Shoal, Chicomico and Little Kinnakeet.	Sc. Genl. S. E. Merwin, New Haven, Conn.	Rutledge ..	789
Mar. 4	Eight miles south-southeast of station.	Cape Lookout....	Str. Camperdown, Glasgow, Scotland.	Smith	2,554
Mar. 7	One and one-half miles northwest of station.	Core Bank.....	Sc. Robert F. Bratton, Beaufort, N. C.	Harris	53
Apr. 29	Two and one-half miles east of station.	False Cape	Str. Helga, Grimstead, Norway.	Braastead ..	1,900

of 1900-1901—Continued.

CAPE HENLOPEN AND CAPE CHARLES.—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Machipongo to Hog Island, Va.		\$300		\$300	\$300		2	2			
Chincoteague to Wiharts Point, Va.		600		600	600		3	3		1	1
Philadelphia, Pa., to Atlantic City, N. J.		400		400	375	\$25	2	2		2	2
do		200		200	200						
		419, 925	\$38, 150	458, 075	380, 745	77, 330	187	187		61	115

BETWEEN CAPE HENRY AND CAPE FEAR.

Cuba to Chester, Pa.	Iron ore ..	\$95, 000	\$4, 375	\$99, 375	\$93, 575	\$5, 800	27	27			
Newbern to Edenton, N. C.		10, 000		10, 000	10, 000		7	7			
Pensacola, Fla., to Liverpool, England.	Lumber ..	150, 000	15, 000	165, 000		165, 000	30	30		30	90
Elizabeth City to Hatteras, N. C.	Junk	1, 000	75	1, 075	1, 075		4	4			
Sabine Pass, Tex., to Rotterdam, Holland.	Lumber ..	60, 000	25, 300	85, 300	85, 300		21	21			
Hyde County to Hatteras, N. C.		400		400	400		2	2			
Elizabeth City to Hatteras, N. C.	General ..	1, 000	600	1, 600	1, 580	20	3	3			
Harbor Island to Marshallburg, N. C.	Oysters ...	1, 000	50	1, 050	950	100	2	2			
Baltimore, Md., to Jacksonville, Fla.		2, 000		2, 000	2, 000		4	4			
Elizabeth City to Kitty Hawk, N. C.		300		300	300		2	2			
Fishing trip	Fish and nets.	150	75	225	225		3	3			
Port of Spain, Trinidad, to Baltimore, Md.	Asphalt ..	10, 000	6, 000	16, 000		16, 000	8	5	3	5	35
Elizabeth City to Hatteras, N. C.	Merchandise.	700	1, 500	2, 200	2, 200		3	3			
Dragged ashore	Wood.....	150	10	160	160						
Drifting	Corn and furniture.	100	15	115	115						
Georgetown, S. C., to Perth Amboy, N. J.	Railroad ties.	14, 000	3, 000	17, 000		17, 000	7	7		7	78
Atlantic to Neuse River, N. C.		200		200	200						
Baltimore, Md., to Elizabeth City, N. C.		5, 000		5, 000	5, 000		5	5			
Boston, Mass., to Norfolk, Va.	Copper ore.	17, 000	25, 000	42, 000		42, 000	7	7		7	11
Tampico, Mexico, to New York City.	Sugar.....	120, 000	300, 000	420, 000	420, 000		22	22			
Wit, N. C., to Baltimore, Md.	Canned oysters.	2, 000	6, 000	8, 000	8, 000		4	4			
Daiquiri, Cuba, to Baltimore, Md.	Iron ore ..	75, 000	4, 500	79, 500	79, 500		24	24			

Table of casualties, season

DISTRICT NO. 7.—EMBRACING COAST BETWEEN

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1901.					
May 3	Six miles northwest of Paul Gamiels Hill Station.	Paul Gamiels Hill and Caffey's Inlet.	Slp. Eugene, Edenton, N. C.	Baum	8
May 20	Three miles north of station.	Core Bank	Sc. Lydia, Atlantic, N. C.	.....	.....
May 21	One-half mile north of station.	Kitty Hawk	Fish boat, Kitty Hawk, N. C.	.....	.....
May 25	One and one-half miles northwest of station.	Cape Henry	Str. Robinia, North Shields, England.	Lash	2,038
June 28	Lookout Shoals	Cape Lookout	Str. Starcross, Cardiff, Wales.	Millburn ..	2,823
	Total .....	.....	.....	.....	.....

DISTRICT NO. 8.—EMBRACING COASTS OF SOUTH

1900.					
Aug. 2	One mile west of station.	Sullivans Island..	Bateau, Charleston, S. C.	.....	.....
Aug. 3	Abreast of station .....	.....do	Fish boats (3), Sullivans Island, S. C.	.....	.....
Sept. 9	Fourteen miles north of station.	Bethel Creek	Sc. Mary E. Morse, Bath, Me.	Newbury ..	644
Sept. 14	One and one-half miles southwest of station.	Sullivans Island..	Fish boat, Charleston, S. C.	.....	.....
Oct. 19	Three-quarters of a mile northwest of station.	Mosquito Lagoon.	Catboat Wantagh, Hawks Park, Fla.	.....	.....
Nov. 3	One-half mile southwest of station.	Sullivans Island..	Sloop, Charleston, S. C.	.....	.....
Dec. 21	Two and one-half miles southwest of station.	.....do	Sc. Victory, Nassau, New Providence.	Munroe....	131
Dec. 27	Four miles south-south-east of station.	.....do	Str. Davenry, West Hartlepool, England.	Wilson	2,455
1901.					
Mar. 15	One and one-half miles north-northwest of station.	.....do	Catboat Jubilee, Charleston, S. C.	.....	.....
Mar. 18	One and one-half miles south-southwest of station.	.....do	Catboat, James Island, S. C.	.....	.....
Apr. 7	One and one-half miles north-northwest of station.	.....do	Slp. Little Harry, Charleston, S. C.	.....	.....
Apr. 9	Two and one-half miles northeast of station.	.....do	Catboat Laura, Charleston, S. C.	.....	.....
Apr. 17	One-eighth mile northwest of station.	Fort Lauderdale .	Yaw! Etta May, St. Augustine, Fla.	.....	14
May 6	One mile west of station.	Sullivans Island..	Fish boat, Charleston, S. C.	.....	.....
June 23	Two miles southeast by south of station.	Jupiter Inlet	Str. Comal, New York City.	Young.....	2,251
	Total .....	.....	.....	.....	.....

DISTRICT NO. 9.—EMBRACING GULF

1900.					
July 6	Two miles north-north-east of station.	Aransas	Slp. y. Lark, Tarpon, Tex.	.....	.....
Aug. 9	Two miles east-northeast of station.	Galveston	Boat belonging to light-ship Galveston, Galveston, Tex.	.....	.....
Aug. 29	One and one-half miles north-northwest of station.	.....do	Sc. Hardtimes, Galveston, Tex.	Myers	28

of 1900-1901—Continued.

CAPE HENRY AND CAPE FEAR—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons rescued at station.	Days' support afforded.
Indian Creek, Va., to Powells Point, N. C.	Corn.....	\$400	\$100	\$500	\$500	.....	1	1	.....	.....	.....
Broad Creek, to Atlantic, N. C.	.....	100	.....	100	50	\$50	2	2	.....	.....	.....
Fishing trip.....	.....	100	.....	100	75	25	5	5	.....	.....	.....
Charleston, S. C., to Baltimore, Md.	.....	100,000	.....	100,000	100,000	.....	24	24	.....	.....	.....
Brunswick, Ga., to Bremen, Germany.	Cotton and phosphates.	400,000	198,565	598,565	598,565	.....	24	24	.....	.....	.....
.....	.....	1,065,600	590,165	1,655,765	1,409,770	245,995	241	238	3	49	214

CAROLINA, GEORGIA, AND EASTERN FLORIDA.

Charleston to Sullivans Island, S. C.	.....	\$50	.....	\$50	\$50	.....	2	2	.....	.....	.....
Fishing trip.....	Fish.....	30	\$5	35	35	.....	6	6	.....	.....	.....
Pascagoula, Miss., to New York City.	Lumber..	20,000	20,000	40,000	21,000	\$19,000	9	9	.....	.....	.....
Fishing trip.....	Fish.....	45	5	50	45	5	1	1	.....	.....	.....
Hawks Park to Titusville, Fla.	Palmetto berries.	200	150	350	350	.....	2	2	.....	2	2
Fishing trip.....	.....	15	.....	15	15	.....	1	1	.....	1	1
Charleston, S. C., to Kingston, Jamaica.	Shingles..	10,000	1,200	11,200	11,200	.....	7	7	.....	.....	.....
Hamburg, Germany, to Charleston, S. C.	Kainite...	80,000	16,000	96,000	96,000	.....	29	29	.....	.....	.....
Pleasure trip.....	.....	50	.....	50	50	.....	4	4	.....	4	4
James Island to Charleston, S. C.	Furniture	150	40	190	190	.....	7	7	.....	.....	.....
Charleston to McClellanville, S. C.	.....	75	.....	75	75	.....	3	3	.....	.....	.....
Charleston to Dewees Island, S. C.	Provisions	100	200	300	300	.....	2	2	.....	.....	.....
Daytona to Biscayne, Fla.	.....	900	.....	900	900	.....	6	6	.....	.....	.....
Fishing trip.....	.....	10	.....	10	10	.....	2	2	.....	.....	.....
New York City to Galveston, Tex.	General..	200,000	100,000	300,000	300,000	.....	64	64	.....	.....	.....
.....	.....	311,625	137,600	449,225	430,220	19,005	145	145	.....	7	7

COAST OF THE UNITED STATES.

Pleasure trip.....	.....	\$75	.....	\$75	\$75	.....	2	2	.....	.....	.....
Capsized.....	.....	250	.....	250	75	\$175	3	3	.....	.....	.....
Orange to Bolivar, Tex.	Lumber..	1,500	\$400	1,900	1,900	.....	3	3	.....	.....	.....

Table of casualties, season

DISTRICT NO. 9.—EMBRACING GULF

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Aug. 30	One and one-half miles northeast of station.	Galveston	Launch Galveston, *Galveston, Tex.	.....	.....
Sept. 8	Five miles west-southwest of station.	San Luis.....	Catboat Pearl W., Galveston, Tex.	.....	.....
Sept. 17	Four miles north-northwest of station.	Santa Rosa	Sc. Emma E., New Orleans, La.	Johnson ...	20
Oct. 8	Seven miles northeast of station.	Velasco.....	Sc. Annie, Corpus Christi, Tex.	Johnson ...	8
Nov. 13	Pelican Spit	Galveston	Sc. Ofelia, Galveston, Tex.	Neal.....	11
Dec. 5	Four miles southwest by west of station.	Santa Rosa.....	Str. Chatham, London, England.	Hill	1,352
Dec. 31	Five miles east of station.	.....do	Slp. Marie, St. Andrews, Fla.	.....	.....
1901.					
Jan. 16	One and one-half miles west of station.	Galveston	Slp. Violetta, ^b Galveston, Tex.	.....	.....
Jan. 18	Three miles northeast of station.	Aransas	Sc. Josephine D., Galveston, Tex.	Bowers....	15
Feb. 20	Four miles northeast of station.	Santa Rosa	Sc. Clara R. Grimes, Pensacola, Fla.	Goodman- sen.	34
Feb. 20	Three and one-half miles northeast by north of station.	Saluria	Catboat Rambler, Galveston, Tex.	.....	.....
Feb. 25	Two miles northwest of station.	Galveston	Slp. Louise, Galveston, Tex.	.....	.....
Mar. 2	Three miles north-northeast of station.	Saluria	Slp. Sallie Black, Matagorda, Tex.	.....	.....
Mar. 5	One-quarter mile north of station.	Aransas	Slp. Zenid, Corpus Christi, Tex.	Gray.....	8
Mar. 21	One-half mile northwest of station.	Brazos.....	Sc. C. H. Moore, Lake Charles, La.	Herms....	49
Apr. 18	Three miles west of station.	Santa Rosa	Sc. Agnes, Pensacola, Fla.	Good	14
May 5	One mile north one-half east of station.	Brazos	Str. Olga, Brownsville, Tex.	Woodhouse	82
May 18	One-quarter mile north of station.	Aransas.....	Sloop, Tarpon, Tex.....	.....	.....
May 22	One and one-half miles north of station.	.....do	Slp. Helen, Tarpon, Tex.	.....	.....
May 26	Four miles north-northwest of station.	Santa Rosa	Catboat, Pensacola, Fla.	.....	.....
June 4	Five miles east of station.	Galveston	Catboat, Galveston, Tex.	.....	.....
June 30	One-half mile north of station.	.....do	Dredge No. 3, ^c Galveston, Tex.	.....	.....
	Total .....	.....	.....	.....	.....

DISTRICT NO. 10.—EMBRACING

1900.					
July 4	Three miles southeast of station.	Buffalo	Yht. Caprice, Buffalo, N. Y.	.....	.....
July 5	One mile northwest of station.	.....do	Str. Queen, Buffalo, N. Y.	.....	29
July 7	One-half mile north of station.	Charlotte.....	Sloop, Charlotte, N. Y.	.....	.....
July 7	One-quarter mile southwest of station.	Cleveland	Slp. y. Jane, Cleveland, Ohio.	.....	.....
July 8	Fifty yards north of station.	Charlotte.....	Yht. It Is, Charlotte, N. Y.	.....	.....
July 8	Three-quarters of a mile northeast of station.	.....do	Yht. Spook, Charlotte, N. Y.	.....	.....
July 8	One and one-half miles north of station.	Buffalo	Yht. Windward, Buffalo, N. Y.	.....	.....
July 8	.....do .....	.....do	Yht. Rena, Buffalo, N. Y.	.....	.....

* Disabled, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

COAST OF THE UNITED STATES—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Pleasure trip.....		\$1,200		\$1,200	\$1,195	\$5	22	22			
Capsized and sunk....		200		200	100	100	1	1		1	2
Fishing trip.....		1,500		1,500	1,500		5	5			
Rockport to Galveston, Tex.		600		600	600		2	2			
Employed in harbor ..		500		500	500		1	1			
Pascagoula, Miss., to Pensacola, Fla.	Timber	100,000	\$25,000	125,000	125,000		24	24			
St. Andrews to Pensacola, Fla.	Oysters	200	150	350	200	150	2	2		2	2
Fishing trip.....		200		200	180	20	3	3			
Galveston to Corpus Christi, Tex.	General	2,500	1,500	4,000	4,000		4	4			
In Pensacola Harbor..		2,500		2,500	2,500		4	4			
Quintana to Port Lavaca, Tex.		300		300	300		3	3			
Dragged anchor and stranded.		175		175	125	50	4	4		4	2
Capsized.....	Vegetables.	150	10	160	160		1	1		1	1
Tarpon to Rockport, Tex.		1,000		1,000	1,000		4	4			
Isabel to Galveston, Tex.	Cotton	2,250	2,500	4,750	4,750		3	3			
Parted moorings and stranded.		400		400	250	150	2	2			
Isabel, Tex., to New Orleans, La.	Cotton-seed and bones.	8,000	2,000	10,000	10,000		5	5			
Pleasure trip		35		35	35		4	4			
.....do.....		150		150	150		3	3			
Capsized		100		100	100		2	2			
Fishing trip.....		75		75		75	3	3			
Employed in harbor ..		25,000		25,000		25,000	5	5			
.....		148,860	31,560	180,420	154,695	25,725	115	115		8	7

LAKES ERIE AND ONTARIO.

Pleasure trip.....		\$250		\$250	\$225	\$25					
Buffalo to Tonawanda, N. Y.		6,000		6,000	6,000		4	4			
Pleasure trip.....		200		200	200		3	3			
.....do.....		2,000		2,000	2,000		27	27			
.....do.....		200		200	200		2	2			
.....do.....		250		250	250		3	3			
Dragged anchors and stranded.		200		200	200						
.....do.....		200		200	200						

^b Dismasted, requiring assistance.

^c Destroyed by fire.

Table of casualties, season

DISTRICT NO. 10.—EMBRACING LAKES

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
July 8	One-half mile southwest of station.	Cleveland	Scow No. 8, Cleveland, Ohio.	.....	.....
July 8	Three miles north of station.	Point Marblehead	Str. Ida, Port Huron, Mich.	Daugherty	57
July 9	One-half mile northeast of station.	Fort Niagara	Lighter, Toronto, Ontario	.....	.....
July 11	Three and one-half miles southwest of station.	Big Sandy	Sc. y. Klondike, Port Ontario, N. Y.	.....	.....
July 12	Two and one-half miles north of station.	.....do	St. y. Genevieve, Clayton, N. Y.	.....	.....
July 13	Two hundred yards northeast of station.	Oswego	Rowboat, Hamilton, Ontario.	.....	.....
July 16	Falls of the Ohio	Louisville	Launch Success, Evansville, Ind.	.....	.....
July 17	Eighteen miles west of station.	Cleveland	Str. Edward Smith, Port Huron, Mich.	McCanartney.	748
July 19	One-half mile west of station.	Fort Niagara	Skiff, Youngstown, N. Y.	.....	.....
July 21	.....do	Erie	Rowboat, Erie, Pa .....	.....	.....
July 22	Three-eighths of a mile south of station.	Fort Niagara	Skiff, Niagara, Ontario .....	.....	.....
July 22	One-quarter mile northeast of station.	Louisville	Shanty boat, Cincinnati, Ohio.	.....	.....
July 29	One mile east of station.	Charlotte	Yht. Verona, Charlotte, N. Y.	.....	.....
July 29	One-third mile northwest of station.	Louisville	Sailboat Valiant, Louisville, Ky.	.....	.....
Aug. 1	One mile east-northeast of station.	Cleveland	Catboat Onway, Cleveland, Ohio.	.....	.....
Aug. 4	One hundred yards south of station.	.....do	Launch Alida, Cleveland, Ohio.	.....	.....
Aug. 11	One hundred and fifty yards west of station.	Charlotte	Slp. y. Elveah, Charlotte, N. Y.	.....	.....
Aug. 11	One-half mile southeast of station.	Fort Niagara	Catboat, Youngstown, N. Y.	.....	.....
Aug. 15	Starve Island Reef	Point Marblehead	Yht. Varuna, Detroit, Mich.	.....	.....
Aug. 16	Falls of the Ohio	Louisville	Skiff, Louisville, Ky. ....	.....	.....
Aug. 19	One-half mile northeast of station.	Point Marblehead	Launch Lakeside, Lakeside, Ohio.	.....	.....
Aug. 22	Kentucky Chute, Falls of the Ohio.	Louisville	Flat, Louisville, Ky. ....	.....	.....
Aug. 28	Three miles west by north of station.	Buffalo	Str. Seattle, Port Huron, Mich.	Still	429
Sept. 2	Fifty yards south-southeast of station.	Fairport	Sailboat, Painesville, Ohio.	.....	.....
Sept. 3	One mile east of station.	Ashtabula	Launch Wm. Spielder, Buffalo, N. Y.	.....	.....
Sept. 12	One-sixth mile east of station.	Oswego	Sc. Albacore, Bowmansville, Ontario.	Redfern ...	327
Sept. 12	One-half mile northeast of station.	Charlotte	Launch Brownie, Charlotte, N. Y.	.....	.....
Sept. 12	One and one-half miles southeast of station.	Buffalo	Scow No. 6, Buffalo, N. Y.	.....	.....
Sept. 12	Three miles south of station.	.....do	Scow, Buffalo, N. Y. ....	.....	.....
Sept. 28	Two hundred and fifty feet northeast of station.	Louisville	St. y. Clitheroe, Louisville, Ky.	.....	.....
Oct. 18	Off station	Erie	Lighter, Erie, Pa .....	.....	.....
Nov. 1	Two miles southwest of station.	Cleveland	Scow Huron, Cleveland, Ohio.	.....	.....
Nov. 3	One mile northwest of station.	Louisville	Skiff, Louisville, Ky. ....	.....	.....
Nov. 5	Four miles east of station.	Oswego	Sc. Fred L. Wells, Cape Vincent, N. Y.	Lake	79

* Disabled, requiring the assistance of the life-saving crew.

of 1900-1901.—Continued.

ERIE AND ONTARIO—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Dragged anchors and stranded.		\$10,000		\$10,000	\$10,000						
Mount Clemens, Mich., to Kelleys Island, Ohio.		2,000		2,000	2,000		6	6		6	6
Broke from moorings.		100		100	100						
Big Sandy Creek to Port Ontario, N. Y.		50		50	40	\$10	1	1			
Oswego to Clayton, N. Y.		850		850	850		3	3			
Pleasure trip.		50		50	50		4	4			
do.		300		300	300		1	1			
Superior, Wis., to Cleveland, Ohio.	Iron ore	40,000	\$6,360	46,360	20,360	26,000	16	16			
Pleasure trip.		5		5	5		2	2			
Adrift.		5		5	5		1	1			
Youngstown, N. Y., to Niagara, Ontario.		50		50	50		3	2	1		
Cincinnati, Ohio, to Hawesville, Ky.	Household furniture.	50	25	75	75		4	4			
Sodus to Charlotte, N. Y.		200		200	200		3	3			
Pleasure trip.		65		65	65		3	3			
Parted lines and stranded.		100		100	100						
On fire at dock.		600		600	300	300	1	1			
Pleasure trip.		300		300	285	15	4	4			
do.		50		50	50		2	2			
Detroit, Mich., to Put in Bay, Ohio.		4,000		4,000	3,700	300	5	5			
Fishing trip.		5		5	5		1	1			
Lakeside to Sandusky, Ohio.		1,200		1,200	1,200		2	2			
Pleasure trip.		5		5	5		5	5			
Oscoda, Mich., to Tonawanda, N. Y.	Cedar ties and shingles.	16,000	8,000	24,000	24,000		12	12			
Capsized.		10		10	10		4	4			
Pleasure trip.		300		300	300		1	1			
Hamilton, Ontario, to Oswego, N. Y.		4,000		4,000	3,000	1,000	7	7		1	1
Adrift.		500		500	500						
do.		1,000		1,000	1,000						
		550		550	550		1	1			
Adrift and on fire.		700		700	600	100					
Adrift.		900		900	900						
Parted lines and stranded.	Stone	8,000	280	8,280	8,080	200	8	8			
Pleasure trip.		15		15	15		1	1			
Sacketts Harbor to Oswego, N. Y.		1,200		1,200		1,200	4	4			

Table of casualties, season

DISTRICT No. 10.—EMBRACING LAKES

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Nov. 5	Three miles northeast of station.	Charlotte.....	Str. John S. Parsons, ^a Cape Vincent, N. Y.	Phelps.....	208
Nov. 9	Six miles southeast of station.	Point Marblehead	Sc. Jupiter, Port Huron, Mich.	Ragan.....	258
Nov. 18	One hundred and sixty-five yards southeast of station.	Cleveland.....	Catboat, Cleveland, Ohio	.....	.....
Nov. 19	One-half mile west of station.	Point Marblehead	Launch Lakeside, ^b Lakeside, Ohio.	.....	.....
Nov. 21	Two and one-half miles southeast of station.	Buffalo.....	Derrick No. 5 and a scow, Buffalo, N. Y.	.....	.....
Nov. 21	One mile east of Lorain, Ohio.	Cleveland.....	Sc. St. Lawrence, Detroit, Mich.	Baker.....	281
Nov. 23	One mile east of station.	Ashtabula.....	Launch, Ashtabula, Ohio	.....	.....
Nov. 25	One mile southwest of station.	Cleveland.....	Scow No. 8, Cleveland, Ohio.	.....	.....
Nov. 26	.....do.....	.....do.....	Launch Emma D., Cleveland, Ohio.	.....	.....
Nov. 26	One mile west of station.	Point Marblehead	Launch Lakeside, Lakeside, Ohio.	.....	.....
Nov. 26	Five miles southeast of station.	.....do.....	Sc. Charles Spademan, Port Huron, Mich.	Guillette..	306
Nov. 26	.....do.....	.....do.....	Sc. Melvina, Port Huron, Mich.	Larson.....	270
Nov. 29	Falls of the Ohio.....	Louisville.....	Flat, Louisville, Ky.....	.....	.....
Nov. 29	.....do.....	.....do.....	Barge, Louisville, Ky.....	.....	.....
Dec. 2	Above cross dam, Falls of the Ohio.	.....do.....	Skiff, Jeffersonville, Ind.	.....	.....
Dec. 12	.....do.....	.....do.....	Shanty boat, Cincinnati, Ohio.	.....	.....
Dec. 22	Falls of the Ohio.....	.....do.....	Flat, Louisville, Ky.....	.....	.....
1901.					
Jan. 29	Indiana Chute, Falls of the Ohio.	.....do.....	Shanty boat, Sistersville, W. Va.	.....	.....
Apr. 15	Falls of the Ohio.....	.....do.....	Flat, Louisville, Ky.....	.....	.....
Apr. 20	One-quarter mile west of station.	Oswego.....	Sc. Two Brothers, Port Hope, Ontario.	Patterson..	300
Apr. 20	One mile west of station.	Point Marblehead	Launch Lakeside, Lakeside, Ohio.	.....	.....
Apr. 28	Falls of the Ohio.....	Louisville.....	Skiff, Louisville, Ky.....	.....	.....
May 5	Above cross dam, Falls of the Ohio.	.....do.....	Shanty boat, Pittsburg, Pa.	.....	.....
May 10	Two hundred and seventy-five yards north-northwest of station.	Ashtabula.....	Scow, Ashtabula, Ohio...	.....	.....
May 11	Four and one-half miles east-northeast of station.	Cleveland.....	Str. Dan Kunz, Cleveland, Ohio.	Farayher..	99
May 30	Nine miles west of station.	Oswego.....	Str. John Milne, Collingwood, Ontario.	Smith.....	96
May 31	One mile northwest of station.	Buffalo.....	Slp. y. Fellowcraft, Buffalo, N. Y.	.....	.....
June 1	Above cross dam, Falls of the Ohio.	Louisville.....	Skiff, Louisville, Ky.....	.....	.....
June 2	Four miles northeast of station.	Oswego.....	Canoe Pawnee.....	.....	.....
June 3	One-half mile north of station.	Cleveland.....	Skiff, Cleveland, Ohio...	.....	.....
June 3	Falls of the Ohio.....	Louisville.....	Raft, Louisville, Ky.....	.....	.....
June 4	Above cross dam, Falls of the Ohio.	.....do.....	Skiff, Warsaw, Ky.....	.....	.....
June 7	One hundred yards northeast of station.	Charlotte.....	Sailboat No. 12, Charlotte, N. Y.	.....	.....
June 8	Falls of the Ohio.....	Louisville.....	Skiff, Louisville, Ky.....	.....	.....
June 9	One hundred yards southeast of station.	Erie.....	Sloop, Erie, Pa.....	.....	.....
June 13	Three-quarters of a mile west of station.	Cleveland.....	Sc. John Kilderhouse, Detroit, Mich.	Hargrove..	500

^a Disabled and drifting helplessly, requiring assistance.^b Disabled, requiring the assistance of the life-saving crew.

of 1900-1901.—Continued.

ERIE AND ONTARIO—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Charlotte to Oswego, N. Y.		\$10,000		\$10,000	\$9,975	\$25	7	7			
Port Huron, Mich., to Sandusky, Ohio.	Lumber	2,000	\$3,800	5,800	5,300	500	6	6			
Pleasure trip		125		125	125		1	1		1	1
Lakeside to Marblehead, Ohio.	Nets	1,200	80	1,280	1,280		3	3			
Lying at moorings		1,500		1,500	1,400	100	15	15			
Cleveland, Ohio, to Amherstburg, Ontario.	Coal	4,000	1,200	5,200		5,200	7	7			
In Ashtabula Harbor.		300		300	300		2	2			
Parted line and stranded.		5,000		5,000	5,000						
Dragged anchor		1,000		1,000	950	50					
Parted moorings and stranded.		1,200		1,200	900	300					
Port Huron, Mich., to Sandusky, Ohio.	Lumber	4,500	3,860	8,360	5,460	2,900	5	5			
do	do	2,500	3,200	5,700	2,850	2,850	7	7			
Adrift	Coal	350	70	420	420		2	2			
do		1,000		1,000	1,000						
Pleasure trip		5		5	5		5	5			
Cincinnati, Ohio, to New Orleans, La.		50		50	50		3	3			
Adrift		300		300	300		8	8			
Sistersville, W. Va., to Cairo, Ill.		50		50	50		2	2			
In Louisville Harbor.	Coal	250	70	320	320		6	6			
Kingston, Ontario, to Oswego, N. Y.		3,000		3,000	2,500	500	5	5			
Waterlogged at pier		1,200		1,200	1,200						
Pleasure trip		5		5	5		3	3			
Pittsburg, Pa., to Paducah, Ky.		25		25	25		1	1			
Pleasure trip		5		5	5		1	1			
Lying at dock	Stone	5,000	600	5,600	5,400	200	15	15			
Smiths Falls, Ontario, to Sodus, N. Y.		6,000		6,000	6,000		7	7			
Hamilton, Ontario, to Buffalo, N. Y.		400		400	400		2	2			
Louisville to Salt River, Ky.		5		5	5		1	1			
Pleasure trip		5		5	5		2	2		2	
Fishing trip		25		25	25		2	2		2	2
Employed in harbor		5		5	5		2	2			
Warsaw, Ky., to New Albany, Ind.		5		5	5		1	1			
Pleasure trip		55		55	55		1	1			
do		35		35	35		2	2			
Capsized		50		50	50		2	2			
Cleveland, Ohio, to Detour, Mich.	Coal	8,000	3,500	11,500	11,500		8	8			

Table of casualties, season

DISTRICT NO. 10.—EMBRACING LAKES

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1901.					
June 15	One hundred and seventy-five yards west of station.	Charlotte	Sailboat, Charlotte, N. Y.		
June 15	Two hundred yards west of station.	.....do	Sailboat, Charlotte, N. Y.		
June 16	Four miles east of station.	.....do	Sip. y. Romola, Charlotte, N. Y.		
June 19	One-third mile southwest of station.	Buffalo	Sip. y. Lotus, Buffalo, N. Y.		
June 23	Three-quarters of a mile northwest of station.	.....do	Rowboat, Buffalo, N. Y.		
June 23	One and three-quarters miles west-southwest of station.	.....do	Sip. y. Ariel, Buffalo, N. Y.		
June 26	Falls of the Ohio.....	Louisville	Flat, Louisville, Ky.		
June 29	.....do .....	.....do	Flat, Louisville, Ky.		
June 30	One mile east of station...	Charlotte	Sloop, Charlotte, N. Y.		
	Total .....	.....do .....	.....do		

DISTRICT No. 11—EMBRACING

1900.					
July 1	Two miles northwest of station.	Ship Canal	Small boat, Ship Canal, Mich.		
July 1	One and one-quarter miles southwest of station.	Duluth	Sloop, Duluth, Minn.		
July 2	Three-quarters of a mile south of station.	.....do	Canoe, Duluth, Minn. ...		
July 6	Four and one-half miles southeast of station.	Lake View Beach.	Str. Geo. W. Roby, Cleveland, Ohio.	Pringle	1,843
July 11	One-quarter mile northeast of station.	Sand Beach	Sloop		
July 14	One-half mile south of station.	Duluth	Lighter, Duluth, Minn. ...		
July 17	Eight miles north of station.	Sturgeon Point...	Sloop-yacht, Alpena, Mich.		
July 24	One-half mile south of station.	Sand Beach	Sloop, Harbor Beach, Mich.		
July 28	Two-thirds of a mile west of station.	Duluth	Racing shell, Duluth, Minn.		
July 30	Three-quarters of a mile south by east of station.	Lake View Beach.	Yht. Dodo, Port Huron, Mich.		
Aug. 4	One hundred and forty yards north-northeast of station.	Sand Beach	Sailboat, Harbor Beach, Mich.		
Aug. 11	One-sixth mile east of station.	.....do	Fishboat Ucansee, Harbor Beach, Mich.		
Aug. 11	Three-quarters of a mile north of station.	Ship Canal	Sc. Thomas Gawn, Port Huron, Mich.	Lawrence .	549
Aug. 12	One-sixth mile east of station.	Sand Beach	Sailboat, Harbor Beach, Mich.		
Aug. 14	Three and one-half miles northwest of station.	.....do	St. y. Florence E., Detroit, Mich.		
Aug. 14	One mile north by west of station.	Ottawa Point.....	Yht. Willie, Bay City, Mich.		
Aug. 16	One mile southeast of station.	Sand Beach	Skiff, Harbor Beach, Mich.		
Aug. 21	Three-quarters of a mile north of station.	Ship Canal	Str. Elfin-Mere, Port Huron, Mich.	Gonelan ...	1,054
Aug. 25	One-quarter mile north of station.	.....do	Sc. James Mowatt, Port Huron, Mich.	Titus	523
Aug. 28	One-quarter mile southeast of station.	Sand Beach	Yawl, Milwaukee, Wis.		
Sept. 2	Four miles south of station.	Bois Blanc.....	Yawl No. 62, Poe Reef, Mich.		
Sept. 8	One-quarter mile southwest of station.	Duluth	Launch Alice, Duluth, Minn.		

of 1900-1901.

ERIE AND ONTARIO—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Pleasure trip.....		\$60		\$60	\$60		2	2			
.....do		55		55	55		1	1			
.....do		300		300	300		3	3			
.....do		1,000		1,000	1,000		4	4			
Adrift.....		5		5	5		2	2			
Pleasure trip.....		400		400	370	\$30	4	4			
In Louisville Harbor..	Coal	250	\$45	295	295		7	7			
.....do		15		15	15		1	1			
Pleasure trip.....		60		60	60		1	1			
.....		163,755	31,090	194,845	153,040	\$41,805	303	300	3	10	10

LAKES HURON AND SUPERIOR.

Adrift.....		\$50		\$50	\$50		2	2			
Pleasure trip.....		20		20	20		1	1			
Capsized		25		25	25		2	2		2	2
Marquette, Mich., to Ashtabula, Ohio.	Iron ore	110,000	\$11,000	121,000	121,000		22	22			
Capsized		30		30	30		1	1			
Adrift.....		200		200	200		3	3			
Capsized		10		10		\$10	2	2			
Adrift.....		75		75	75						
Capsized		350		350	350		2	2			
Parted cable and stranded.		400		400	395	5					
Capsized		25		25	25		1	1			
Parted line and struck dock.		200		200	200						
Ashland, Wis., to Cleveland, Ohio.	Iron ore	13,000	5,000	18,000	18,000		7	7			
Lying at moorings...		35		35	35						
Detroit to Mackinac, Mich.		400		400	395	5	2	2		2	2
Bay City to Tawas Bay, Mich.		500		500	500		4	4			
Adrift.....		25		25	25						
Conneaut, Ohio, to Ashland, Wis.	Coal	40,000	6,400	46,400	46,400		13	13			
Ashland, Wis., to Cleveland, Ohio.	Iron ore	15,000	6,000	21,000	21,000		7	7			
Adrift.....		15		15	15						
.....do		60		60	60		1	1			
Pleasure trip.....		500		500	500		2	2			

Table of casualties, season

DISTRICT NO. 11.—EMBRACING LAKES

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Sept. 11	Three-quarters of a mile northeast of station.	Sand Beach	Small boat, Harbor Beach, Minn.		
Sept. 11	Two miles west-southwest of station.	Hammonds Bay..	Sc. Horace H. Badger, Toledo, Ohio.	Bonnah ..	263
Sept. 11	Forty-five yards west of station.	.....do	St. y. J. A. Valentine, Hammonds Bay, Mich.		
Sept. 16	One-half mile south of station.	Grand Marais.....	Sailboat, Grand Marais, Mich.		
Sept. 16	Two miles east of station.	Lake View Beach..	Sc. Mary E. Perew, Detroit, Mich.	Kelley.....	337
Sept. 20	One mile south-southwest of station.	Ottawa Point.....	Sc. Singapore, Kingston, Ontario.	Sutherland	186
Sept. 20	Five and one-half miles west of station.	Grindstone City..	Sc. Swallow, Bay City, Mich.		
Sept. 21	Two-sevenths of a mile northeast of station.	Sand Beach	Small boat, Harbor Beach, Mich.		
Sept. 25	One-half mile northeast of station.	Ottawa Point.....	Sc. Mary D., Port Huron, Mich.	Cleary	52
Oct. 6	One-quarter mile northwest of station.	Duluth	Sc. Nordkyn, Duluth, Minn.		23
Oct. 7	One-half mile northeast of station.	Sturgeon Point...	Pile driver, Alcona, Mich.		
Oct. 15	Two miles south-southwest of station.	Marquette	Launch, Marquette, Mich.		
Oct. 16	One mile southeast of station.	Sand Beach	Sc. I. L. Quinby, * Port Huron, Mich.	Campbell..	87
Oct. 16	Five miles northeast of station.	Ottawa Point.....	Sc. Canton, Detroit, Mich.	Jeffrey.....	320
Oct. 16	One half mile south of station.	Grand Marais.....	Sailboat, Grand Marais, Mich.		
Oct. 18	One and one-half miles southwest of station.	Ottawa Point.....	Str. R. C. Brittain, Wallaceburg, Ontario.	McDonald.	250
Oct. 21	.....do.....	.....do	Sc. Ellen, Port Huron, Mich.	Davis.....	37
Oct. 21	North Point Reef	Thunder Bay Island.	Str. C. Hickox, Toledo, Ohio.	Davis.....	208
Oct. 23	One-quarter mile northwest of station.	Duluth	Str. Lyric, Duluth, Minn.	Wett.....	11
Oct. 24	One-half mile north of station.	Ship Canal	Sc. James G. Blaine, Chicago, Ill.	Green	555
Nov. 7	Two and three-quarters miles east of station.	Vermillion Point..	Str. Arabian, Hamilton, Ontario.	Paternaude	700
Nov. 8	Sixteen miles northwest of station.	Middle Island....	Str. Nebraska, Milwaukee, Wis.	Anderson..	1,483
Nov. 8	Thirty miles east of station.	Ship Canal	Sc. Abyssinia, Duluth, Minn.	Colman....	2,037
Nov. 9	Eight miles north-northwest of station.	Bois Blanc	Sc. Gracie Belle, Grand Haven, Mich.	McRae	35
Nov. 9	.....do.....	.....do	Sc. Belle of Epoufette, Grand Haven, Mich.	Chapman..	19
Nov. 10	Two-thirds of a mile north of station.	Duluth	Scow No. 30, Duluth, Minn.		
Nov. 12	Three-quarters of a mile north of station.	Ship Canal	Sc. Harold, Port Huron, Mich.	Leisk	718
Nov. 13	Ottawa Point	Ottawa Point.....	Str. City of New York, Port Huron, Mich.	Rattery....	801
Nov. 13	.....do.....	.....do	Sc. William Grandy, Port Huron, Mich.	Purdy	464
Nov. 13	One-quarter mile northwest of station.	Duluth	Skiff, Duluth, Minn.		
Nov. 14	One-half mile west of station.	.....do	Launch P. V., Duluth, Minn.		
Nov. 18	Seven miles northeast of station.	Grand Marais.....	Lighter, Sault Ste. Marie, Mich.		

* Disabled, requiring assistance.

of 1900-1901—Continued.

HURON AND SUPERIOR—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Fishing trip.....		\$10		\$10	\$10		2	2			
Chicago, Ill., to Hammonds Bay, Mich.		3,000		3,000	3,000		7	7			
Parted moorings.....		900		900	900						
Parted cable and stranded.		80		80	75	\$5					
Midland, Ontario, to Detroit, Mich.	Lumber ..	3,500	\$8,000	11,500	11,300	200	5	5			
Thornberry to Windsor, Ontario.	.....do ..	2,000	1,800	3,800	3,600	200	8	8		3	3
Bay City to Harbor Beach, Mich.		225		225	210	15	3	3			
Adrift.....		10		10	10		1	1			
Sebawaing to East Tawas, Mich.		200		200	200		2	2			
Broke from moorings.		500		500	500						
Adrift.....		20		20	20						
Partridge Island to Marquette, Mich.		1,500		1,500	1,490	10	4	4			
Port Huron to Alpena, Mich.		600		600	590	10	4	4			
Cleveland, Ohio, to Algoma, Ontario.	Coal	3,000	2,000	5,000	4,000	1,000	7	7			
Dragged anchor and stranded.		175		175	175						
Alpena, Mich., to Chatham, Ontario.	Lumber ..	9,000	2,000	11,000	11,000		10	10			
Sebawaing to East Tawas, Mich.	Produce ..	500	300	800	800		2	2			
Cheboygan to Alpena, Mich.	Lumber ..	8,000	1,800	9,800	9,800		12	12			
West Superior, Wis., to Duluth, Minn.		1,000		1,000	1,000		2	2			
Duluth, Minn., to Chicago, Ill.	Lumber ..	15,000	8,000	23,000	22,900	100	8	8			
Fort William to Sarnia, Canada.		60,000		60,000	60,000		17	17		17	52
Buffalo, N. Y., to Gladstone, Mich.	Coal and merchandise.	20,000	10,000	30,000	27,000	3,000	17	17			
Duluth, Minn., to Buffalo, N. Y.	Wheat....	50,000	75,000	125,000	117,000	8,000	7	7			
Bois Blanc Island to Mackinac Island, Mich.		500		500	400	100	2	2			
Cheboygan to Bois Blanc Island, Mich.	General ..	1,100	500	1,600	1,350	250	2	2			
Parted towline and stranded.		8,000		8,000	7,500	500	2	2			
Ashland, Wis., to Tonawanda, N. Y.	Lumber ..	40,000	20,000	60,000	60,000		7	7			
Nepigon, Ontario, to Sandusky, Ohio.	Pulp wood	10,000	1,400	11,400	11,400		12	12			
.....do .....	.....do ..	15,000	2,600	17,600	17,600		7	7			
In Duluth Harbor	Wood.....	15	5	20	20		1	1			
Adrift.....		1,500		1,500	1,500		1	1			
Sault Ste. Marie to Sucker River, Mich.	Railroad cars and steel rails.	1,200	1,695	2,895	1,650	1,245	6	6	(b)	6	6

^b Five were swept overboard by heavy seas at night in Lake Superior. Six were rescued by the life-saving crew about 1 mile outside of harbor piers.

Table of casualties, season

DISTRICT NO. 11.—EMBRACING LAKES

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Nov. 19	North Point Reef	Thunder Bay Island,	Str. Zillah, Port Huron, Mich.	Canartney.	748
Nov. 19	.....do.....	.....do.....	Sc. Connelly Bros., Buffalo, N. Y.	Robertson.	751
Nov. 21	One and one-half miles south-southeast of station.	Sand Beach	Sc. Laney Sims, Detroit, Mich.	Burns	45
Nov. 21	Five miles northeast of station.	Sturgeon Point...	Sc. I. L. Quinby, Port Huron, Mich.	Campbell..	87
Nov. 22	Three-quarters of a mile east of station.	Sand Beach	Sc. E. T. Judd, Port Huron, Mich.	Jex	389
Nov. 23	Three miles southeast of station.	Sturgeon Point...	Sc. Alvina, Port Huron, Mich.	Connors ...	95
Nov. 24	Three and one-half miles west by south of station.	Grindstone City ..	Sailboat .....	.....	.....
Nov. 25	North Point Reef	Thunder Bay Island.	Str. Rube Richards, Cleveland, Ohio.	Savage	815
Dec. 8	One-quarter mile south of station.	Duluth	Yawl, Duluth, Minn .....	.....	.....
Dec. 11	Two-thirds of a mile north of station.	.....do.....	Skiff, Duluth, Minn .....	.....	.....
1901.					
Apr. 21	One hundred and ten yards northwest of station.	Sand Beach	Skiff, Harbor Beach, Mich.	.....	.....
May 12	Six and one-half miles south-southwest of station.	Bois Blanc	Str. City of Paris, Port Huron, Mich.	Balentine ..	2,062
May 13	Sixteen miles northwest of station.	Middle Island....	Sc. Homer, Port Huron, Mich.	McKimmiss	432
May 14	Three miles west-northwest from Charity Island Light.	Ottawa Point....	Str. Shenandoah, Duluth, Minn.	McVeay ...	2,251
May 17	Seven miles east of station.	Vermilion Point .	Str. Advance, Toronto, Ontario.	Kean	950
May 18	One and one-quarter miles north by east of station.	Grindstone City ..	Str. Wyoming, Port Huron, Mich.	Garry.....	350
May 18	One mile south of station.	Duluth	Skiff, Duluth, Minn .....	.....	.....
May 18	One-quarter mile northwest of station.	.....do.....	Launch Alice S., Duluth, Minn.	.....	.....
May 21	Sixteen miles northwest of station.	Hammonds Bay..	Str. Boston, Buffalo, N. Y.	Doris	1,829
May 23	Ten miles northwest of station.	Bois Blanc	Str. Pewaukee, Milwaukee, Wis.	.....	310
May 24	.....do.....	.....do.....	Steam Elevator, Cheboygan, Mich.	.....	.....
May 25	Two and one-half miles west of station.	Hammonds Bay..	Sc. Storm,* Port Huron, Mich.	Cook	21
May 28	One-quarter mile east of station.	Sand Beach	Sc. Light Guard, Port Huron, Mich.	Hanson....	310
May 28	One mile south-southwest of station.	Marquette.....	Launch, Marquette, Mich.	.....	.....
May 31	Two-thirds of a mile south of station.	Duluth	Skiff, Duluth, Minn .....	.....	.....
June 4	One-mile northwest of station.	Two Heart River.	Launch, Grand Marais, Mich.	.....	.....
June 11	One-half mile southeast of station.	Thunder Bay Island.	Str. Fisherman, Port Huron, Mich	Turgensen	18
June 30	Two miles south-southeast of station.	Duluth	Slp. Mistletoe, Duluth, Minn.	.....	.....
	Total.....	.....	.....	.....	.....

* Disabled, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

HURON AND SUPERIOR—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Buffalo, N. Y., to Duluth, Minn.		\$65,000		\$65,000	\$65,000		15	15			
Cleveland, Ohio, to Duluth, Minn.		35,000		35,000	34,800	\$200	7	7			
Harbor Beach to Detroit, Mich.	Potatoes..	500	\$350	850	850		4	4		4	4
Black River to Detroit, Mich.	Lumber ..	2,000	1,400	3,400	3,100	300	4	4		4	4
Cleveland, Ohio, to Algoma Mills, Ontario.	Coal	6,000	1,400	7,400	7,300	100	7	7			
Alpena to Harbor Beach, Mich.	Lumber ..	400	1,000	1,400	300	1,100	4				
Broke from moorings.		75		75	65	10					
Marquette, Mich., to Buffalo, N. Y.	Pig iron ..	30,000	20,000	50,000	48,000	7,000	12	12			
Caught in the ice		50		50	50		1	1			
Adrift		10		10	10		1	1			
do		15		15	15						
Buffalo, N. Y., to Chicago, Ill.	Coal	100,000	14,000	114,000	114,000		17	17			
Cleveland, Ohio, to Jackfish Bay, Canada.	do	5,000	1,500	6,500	5,800	700	7	7			
Cleveland, Ohio, to Duluth, Minn.	do	125,000	9,000	134,000	133,800	200	16	16			
Fort William to Goderich, Ontario.	Wheat....	60,000	36,000	96,000	96,000		16	16			
Greenbush, Mich., to Toledo, Ohio.	Poles and ties.	7,000	3,000	10,000	10,000		11	11			
Pleasure trip		5		5	5		5	5			
do		500		500	495	5	2	2			
Buffalo, N. Y., to Chicago, Ill.	General ..	105,000	150,000	255,000	239,000	16,000	21	21			
Lying in port	Cedar ties	12,000	1,000	13,000	13,000		12	12			
Cheyboygan to Bois Blanc Island, Mich.		1,000		1,000	700	300	1	1			
Bay City to Bell, Mich.		700		700	700		5	5		5	28
Alpena, Mich., to Buffalo, N. Y.	Cedar ties.	1,500	2,500	4,000	3,200	800	6	6			
Marquette to Pine River, Mich.	Lumber and provisions.	2,000	500	2,500	2,500		8	8			
Duluth to Minnesota Point, Minn.	Household furniture.	40	200	240	240						
Grand Marais to Little Two Heart River, Mich.		700		700	700		2	2			
Fishing trip		2,500		2,500	2,500		7	7			
Capsized		35		35	35		4	4			
.....		999,485	405,350	1,404,835	1,363,465	41,370	425	425		43	96

Table of casualties, season

DISTRICT NO. 12—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Ton-nage.
1900.					
July 1	One-sixth mile southeast of station.	Kenosha	Sloop, Kenosha, Wis.....		
July 2	One and one-half miles northeast of station.	Holland	Slp. Zephyr, Macatawa Bay, Mich.		
July 3	One-half mile southeast of station.	.....do	Slp. Ariel, Macatawa Bay, Mich.		
July 3	Two and one-half miles east-southeast of station.	Milwaukee	Yht. Nellye, Milwaukee, Wis.		
July 4	Five miles east-southeast of station.	Old Chicago	Slp. Satyr, Chicago, Ill ..		
July 5	Off Ludington	Ludington	Str. York State,* Grand Haven, Mich.	Ludwig ..	89
July 6	One-quarter mile west of station.	Beaver Island	Skiff		
July 6	One-half mile east of station.	North Manitou Island.	Sloop, ^b North Manitou Island, Mich.		
July 6	Two miles northeast of station.	Chicago	Rowboat, Chicago, Ill ..		
July 7	Three and one-half miles south of station.	Grand Haven.....	Launch Mabel, Grand Rapids, Mich.		
July 11	Four miles north of station.	Old Chicago	Str. Sailor Boy, Port Huron, Mich.	Nelson ..	162
July 11	Three and one-quarter miles south of station.	Racine	St. y. White Foam, Waukegan, Ill.		
July 15	One and one-half miles south-southeast of station.	Beaver Island	Sc. York State, Chicago, Ill.	Baker ..	277
July 15	One-quarter mile east-southeast of station.	St. Joseph	Sloop, Benton Harbor, Mich.		
July 16	Seven miles north of station.	Milwaukee	Str. Thomas Maytham, Buffalo, N. Y.	Cummings	2,329
Aug. 4	Four miles north of station.	Manistee	Launch Edna T., Manistee, Mich.		
Aug. 4	One-half mile south of station.	White River	Launch Francis F., White Lake, Mich.		
Aug. 6	One-half mile west-southwest of station.	Holland	Slp. y. Elizabeth, Grand Rapids, Mich.		
Aug. 8	One-quarter mile south-southeast of station.	Beaver Island	Fishboat, St. James, Mich.		
Aug. 11	One mile southeast of station.	Old Chicago	Slp. y. Alfonso, Chicago, Ill.		
Aug. 11	One-half mile south of station.	.....do	Slp. y. Leo, Chicago, Ill..		
Aug. 11	One-fifth mile north of station.	Evanston	Slp. y. Indian, Evansville, Ind.		
Aug. 11	One-quarter mile southeast of station.	Sturgeon Bay Canal.	Sc. Little Georgy, Milwaukee, Wis.	Knapp ..	52
Aug. 12	Four and one-half miles south of station.	Milwaukee	Sc. Henry Cowles, Milwaukee, Wis.	Matson ..	94
Aug. 13	One-half mile west of station.	South Chicago....	St. y. Lilly, Chicago, Ill ..		
Aug. 20	One-sixth mile west-northwest of station.	St. Joseph	Slp. Gloria, St. Joseph, Mich.		
Aug. 21	One and one-half miles south of station.	South Chicago....	Slp. y. Berdie H., South Chicago, Ill.		
Aug. 22	One and one-half miles north of station.	Plum Island.....	Slp. Emma, Sturgeon Bay, Wis.		
Aug. 25	One-half mile south of station.	Baileys Harbor...	Yawl belonging to Sc. George A. Marsh, Chicago, Ill.		
Sept. 2	Four miles southeast of station.	Muskegon	Launch T. and J., No. 3, Muskegon, Mich.		
Sept. 2	One-sixth mile southeast of station.	South haven	Sc. Winnie Weaver, Milwaukee, Mich.	Kirwin ..	17
Sept. 2	One-half mile south of station.	Evanston	Yht. Otis, Evanston, Ill ..		
Sept. 6	Eight miles south of station.	Baileys Harbor...	Sc. Stampede, Chicago, Ill.	Coulson ..	288

* In distress, requiring assistance.

^b Disabled, requiring assistance.

of 1900-1901—Continued.

LAKE MICHIGAN.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Capsized		\$10		\$10	\$10		3	3			
Pleasure trip		200		200	200		2	2			
.....do		300		300	300		1	1			
.....do		55		55	45	\$10	4	4		4	4
.....do		100		100	100		4	4			
South Haven to Lud- ington, Mich.		2,500		2,500	2,500		5	5			
Capsized		35		35	35		2	2			
Manitou Island, Mich.	Salt.....	60	\$15	75	70	5	2	2			
Adrift.....		10		10	10		3	3			
Grand Rapids to Hol- land, Mich.		1,200		1,200	1,200		2	2			
Pleasure trip.....		5,000		5,000	5,000		6	6			
.....do		300		300	300		(^e)				
Cheboygan, Mich., to Chicago, Ill.	Cedar ties	2,500	2,100	4,600	4,600		7	7			
Pleasure trip.....		75		75	75		2	2			
Erie, Pa., to Milwau- kee, Wis.	Coal.....	200,000	12,000	212,000	203,640	8,360	19	19			
Manistee, to Oneka- ma, Mich.		550		550	550		1	1			
Lying at wharf.....		600		600	400	200					
Pleasure trip.....		800		800	800		6	6			
Fishing trip.....	Fish.....	50	40	90	60	30	2	2			
Capsized		150		150	150		2	2			
.....do		200		200	200		3	3			
Pleasure trip.....		50		50	50		2	2			
Empire Pier, Mich., to Sheboygan, Wis.	Lumber..	1,000	750	1,750	1,750		2	2			
Manistee, Mich., to Milwaukee, Wis.	Bark.....	500	800	1,300	675	625	3	3			
Lying at moorings....		400		400	400		1	1			
St. Joseph to South Haven, Mich.		50		50	50		2	2			
Dragged anchor and stranded.		200		200	200						
Sturgeon Bay to Det- roit Harbor, Wis.		300		300	300		7	7			
From vessel in harbor.		75		75	75		1	1			
Lake Harbor Pier to Muskegon, Mich.		3,500		3,500	2,700	800	19	19			
South Haven, Mich., to Kenosha, Wis.	Fruit.....	200	20	220	190	30	2	2			
Pleasure trip.....		100		100	100		2	2			
Manistique, Mich., to Chicago, Ill.	Slabs.....	2,000	1,500	3,500	3,500		7	7			

^eLanded without assistance.

Table of casualties, season

DISTRICT NO. 12.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Sept. 9	One-eighth mile east of station.	Chicago	Slp. y. Virginia, Chicago Ill.	.....
Sept. 10	One-half mile southeast of station.	Old Chicago	Rowboat, Chicago, Ill.	.....
Sept. 11	Off station	Ludington	Sc. Belle W. Culbert, Chicago, Ill.	Speiden	31
Sept. 11	One hundred yards southeast of station.	Muskegon	Mayo lifeboat, Muskegon, Mich.	.....
Sept. 11	One-sixth mile east of station.	Holland	Slp. y. Elizabeth, Grand Rapids, Mich.	.....
Sept. 11	Two hundred yards east of station.	South Chicago	Rowboat, South Chicago, Ill.	.....
Sept. 11	One half-mile southeast of station.	Old Chicago	Slp. y. Argo, Chicago, Ill.	.....
Sept. 11	.....do.....	.....do.....	Slp. y. Dione, Chicago, Ill.	.....
Sept. 11	One-half mile northwest of station.	Plum Island.....	Small boat, U. S. Government.	.....
Sept. 12	Ten miles southeast of station.	Kenosha.....	Sc. Penobscot, Chicago, Ill.	Warwig	254
Sept. 12	Sheboygan Harbor.....	Sheboygan	Sc. York State, Chicago, Ill.	Parker.....	277
Sept. 15	One-half mile east of station.	South Chicago.....	Sc. Clara, Muskegon, Mich.	.....
Sept. 15	One mile southeast of station.	Kenosha	Sc. Winnie Weaver, Milwaukee, Wis.	Kirwin	17
Sept. 15	Ten miles south of station	Sturgeon Bay Canal.	Sc. Massasoit,* Chicago, Ill.	Fitzgerald.	842
Sept. 18	Ten and three-quarters miles north of station.	Plum Island.....	Str. C. F. Belman, Detroit, Mich.	Stewart.....	2,056
Sept. 19	One-fifth mile west of station.	Holland	Sc. Birdie, Milwaukee, Wis.	Mason	11
Sept. 20	One-eighth mile west of station.	Manistee	Sc. L. M. Mason, Chicago, Ill.	Peterson...	249
Sept. 24	One-third mile south of station.	Evanston.....	Slp. y. Nymph, Chicago, Ill.	.....
Sept. 24	One mile west of station.	Baileys Harbor...	Sloop, Bay City, Mich.	.....
Sept. 29	One mile northwest of station.	.....do.....	Sc. Cora, Grand Haven, Mich.	Lackland..	44
Oct. 1	One-sixth mile south of station.	Beaver Island...	Str. Onekama, Grand Haven, Mich.	Emery.....	33
Oct. 2	Sixty-five yards south of station.	Ludington.....	Pile driver, Ludington, Mich.	.....
Oct. 8	Muskegon Harbor	Muskegon	Sc. Cape Horn, Grand Haven, Mich.	Ludwick ..	202
Oct. 10	Two miles southwest of station.	Baileys Harbor ..	Sc. Little Georgy, Milwaukee, Wis.	Knapp	52
Oct. 16	Fifty yards north-northeast of station.	Plum Island.....	Sc. Lillian C., Washington Harbor, Wis.	.....
Oct. 23	Two miles west of station.	Baileys Harbor ..	Sc. Mary L., Grand Haven, Mich.	Finch	30
Oct. 25	One and one-half miles from station.	.....do.....	Sc. Little Georgy, Milwaukee, Wis.	Knapp	52
Oct. 28	One-half mile east of station.	Racine	St. y. Dewey, ^b Racine, Wis.	.....
Oct. 31	One-eighth mile west of station.	Manistee	Skiff, Manistee, Mich.	.....
Nov. 3	One and one-half miles from station.	Baileys Harbor...	Sc. Little Georgy, Milwaukee, Wis.	Knapp	52
Nov. 4	Two hundred yards northwest of station.	Charlevoix	Yawl, Charlevoix, Mich.	.....
Nov. 10	Seven miles from station.	Baileys Harbor...	Sc. E. R. Blake,* Chicago, Ill.	Thompson.	201
Nov. 13	Three-eighths of a mile south of station.	Muskegon	Sc. Samuel H. Foster, Chicago, Ill.	Curran	672
Nov. 13	One hundred yards east of station.	St. Joseph	Sc. Pride, Milwaukee, Wis.	Klengen-berg.	83
Nov. 15	One-half mile east of station.	Frankfort	Slp. Harmony, Manistique, Mich.	.....

* In peril, requiring assistance.

^b Disabled, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

LAKE MICHIGAN—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Pleasure trip.....		\$60		\$60	\$60		3	3			
Capsized.....		20		20	20		2	2			
Ludington, Mich., to Milwaukee, Wis. Exhibiting in harbor.....	Lumber..	800	\$120	920	870	\$50	3	3			
Dragged anchor.....		800		800	800						
Adrift.....		15		15	15		1	1			
Dragged anchor.....		2,500		2,500	2,500						
.....do.....		500		500	500						
Detroit Harbor to Plum Island, Wis. Chicago, Ill., to Manistique, Mich. Menominee, Mich., to Chicago, Ill. Muskegon, Mich., to South Chicago, Ill. South Haven, Mich., to Kenosha, Wis. Escanaba, Mich., to South Chicago, Ill. Buffalo, N. Y., to Milwaukee, Wis. Grand Haven to Holland, Mich. Chicago, Ill., to Cheboygan, Mich. Pleasure trip.....		250		250	250		2	2			
		3,000		3,000	2,000	1,000	7	7			
	Lumber..	2,000	3,000	5,000	5,000		6	6			
	Household goods.	500	100	600	570	30	2	2			
	Fruit.....	500	100	600	550	50	2	2			
	Iron ore..	8,500	4,870	13,370	13,170	200	8	8			
	Coal.....	115,000	5,000	120,000	108,000	12,000	18	18			
		400		400	400		1	1			
		2,500		2,500	2,500		6	6			
		100		100	100		2	2			
From Mackinaw Island, Mich. Sheboygan to Baileys Harbor, Mich. Northport to Manistique, Mich. Employed in harbor..		30		30	30		1	1		1	3
		800		800	800		2	2			
	Fruit.....	1,600	400	2,000	2,000		2	2			
		1,500		1,500	1,400	100	5	5			
Manistee, Mich., to Michigan City, Ind. Baileys Harbor to Sheboygan, Mich. Plum Island to Sturgeon Bay, Wis. Cedar Lake to Frankfort, Mich. Milwaukee to Sturgeon Bay, Wis. Pleasure trip.....	Lumber..	2,000	6,000	8,000	8,000		6	6			
	Wood.....	900	400	1,300	1,300		2	2			
	Household goods.	300	200	500	500		1	1		1	1
	Lumber..	600	400	1,000	1,000		2	2			
	Pease....	1,000	400	1,400	1,400		2	2			
		175		175	175		2	2			
Fishing trip.....		15		15	15		3	3			
North Bay to Milwaukee, Wis. Parted moorings and capsized. Washington Island, Wis., to Chicago, Ill. Chicago, Ill., to Manistee, Mich. Manistee to Benton Harbor, Mich. Frankfort to Manistique, Mich.	Wood.....	1,000	500	1,500	1,500		2	2			
		35		35	35						
	Potatoes..	3,000	2,000	5,000	5,000		12	12			
		15,000		15,000	15,000		7	7			
	Lumber..	2,000	1,600	3,600	3,520	80	4	4		4	4
	Apples....	275	200	475	395	80	2	2			

•In distress, requiring the assistance of the life-saving crew.

Table of casualties, season

DISTRICT NO. 12.—EMBRACING LAKE

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Nov. 18	Six and one-half miles southwest of station.	Two Rivers.....	Sc. J. A. Holmes, Milwaukee, Wis.	Gunderson	167
Nov. 18	Seven miles south of station.	Baileys Harbor...	Sc. Nancy Dell,* Milwaukee, Wis.	Jacobson ..	106
Nov. 20	Abreast of station.....	Sturgeon Bay Canal.	Scow No. 2, Sturgeon Bay, Wis.	.....	.....
Dec. 25	Three miles east-southeast of station.	Racine	Str. George Dunbar, Chicago, Ill.	Hudson ...	238
1901.					
Jan. 2	Three miles east of station.	Milwaukee	Launch Louisa K,* Milwaukee, Wis.	.....	.....
Jan. 18	Two-sevenths of a mile east of station.	Ludington	Rowboat, Ludington, Mich.	.....	.....
Mar. 31	Eighteen miles southwest of station.	Two Rivers.....	Steam yacht, Chicago, Ill.	.....	.....
Apr. 5	One and one-half miles west-northwest of station.	St. Joseph	Rowboat, St. Joseph, Mich.	.....	.....
Apr. 6	One-eighth mile west of station.	Charlevoix	Sailboat Marguerite, Charlevoix, Mich.	.....	.....
Apr. 11	One hundred feet from station.	Muskegon	Lighter, Muskegon, Mich.	.....	.....
Apr. 24	Two hundred yards east of station.	South Haven	Str. R. J. Gordon, ^b Chicago, Ill.	Spooner ...	187
Apr. 29	Four miles north of station.	Ludington	Str. Ottawa, Ottawa, Canada.	Birnie	1,374
Apr. 29	One and one-half miles north of station.	Racine	Scow, Racine, Wis .....	.....	.....
May 4	One hundred yards west of station.	South Chicago....	Rowboat, South Chicago, Ill.	.....	.....
May 10	One-half mile northeast of station.	Two Rivers.....	Str. Stewart Edward, Milwaukee, Wis.	Ellot	15
May 17	One-third mile west of station.	South Haven	Rowboat, South Haven, Mich.	.....	.....
May 18	One-half mile south by east of station.	Chicago	Rowboat Vivia, Chicago, Ill.	.....	.....
May 18	North Point.....	Milwaukee	Str. Nyack, Milwaukee, Wis.	Lyman ...	1,257
May 24	Seventeen miles north of station.	.....do	Sc. A. Bradley, Chicago, Ill.	Anderson .	157
May 24	One-third mile east of station.	Sheboygan	Sc. H. D. Moore, Milwaukee, Wis.	Johnson ...	143
May 26	Three-quarters of a mile northwest of station.	Muskegon	Launch Colonel J., Montague, Mich.	.....	.....
May 26	Seventy-five yards southeast of station.	.....do	Sc. Margaret Dall, Michigan City, Ind.	.....	149
May 26	Abreast of Two Rivers Point Light.	Kewaunee	Scow, Sturgeon Bay, Wis.	.....	.....
May 30	Four miles north by east of station.	Grande Pointe au Sable.	Sc. Cape Horn, Grand Haven, Mich.	Christie ...	202
May 30	One and three-quarters miles south of station.	North Manitou Island.	Sc. Emily B. Maxwell, Milwaukee, Wis.	Anderson .	345
June 5	One-quarter mile east of station.	Old Chicago	Launch Sport, Chicago, Ill.	.....	.....
June 6	One and one-half miles northeast of station.	South Chicago....	Fish boat, South Chicago, Ill.	.....	.....
June 8	One hundred and thirty-five yards west-southwest of station.	Michigan City....	Slp. y. Marie, Chicago, Ill.	.....	.....
June 8	Three-quarters of a mile southeast of station.	.....do	Sloop, Michigan City, Ind.	.....	.....
June 9	One and one-quarter miles north by east of station.	Chicago	Slp. y. Wistath, Chicago, Ill.	.....	.....
June 10	Two and three-quarters miles south of station.	Charlevoix	Str. York State, Grand Haven, Mich.	Patterson..	89
June 15	One and one-half miles southeast of station.	Chicago	Slp. y. Peeps the Second, Chicago, Ill.	.....	.....

*In distress, requiring the assistance of the life-saving crew.

of 1900-1901—Continued.

MICHIGAN—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Charlevoix, Mich., to Sheboygan, Wis.	Lumber ..	\$4,000	\$3,000	\$7,000	\$5,350	\$1,650	.....	.....	.....	.....	.....
Milwaukee to Baileys Harbor, Wis.	Merchandise.	2,000	3,000	5,000	5,000	.....	4	4	.....	.....	.....
Sturgeon Bay, Wis., to White Hall, Mich.	Stone	7,500	750	8,250	.....	8,250	3	3	.....	.....	.....
Empire, Mich., to Chicago, Ill.	Lumber ..	6,000	3,000	9,000	7,900	1,100	10	10	.....	.....	.....
Fishing trip.....	.....	800	.....	850	840	10	2	2	.....	.....	.....
Caught in the ice ....	.....	50	.....	50	50	.....	14	14	.....	.....	.....
Two Rivers, Wis., to Chicago, Ill.	.....	800	.....	800	800	.....	2	2	.....	.....	.....
Fishing trip.....	.....	50	.....	50	50	.....	1	1	.....	.....	.....
.....do.....	.....	150	.....	150	150	.....	3	3	.....	.....	.....
Adrift.....	.....	150	.....	150	150	.....	.....	.....	.....	.....	.....
On fire at dock.....	Stone, lime, and lumber.	17,000	600	17,600	15,900	1,700	8	8	.....	.....	.....
Chicago, Ill., to Georgian Bay.	Corn.....	160,000	50,000	210,000	210,000	.....	17	17	.....	.....	.....
Pleasure trip.....	.....	10	.....	10	10	.....	5	5	.....	.....	.....
In Chicago Harbor....	.....	20	.....	20	20	.....	4	4	.....	.....	.....
Fishing trip.....	.....	3,000	.....	3,000	2,990	10	7	7	.....	.....	.....
Fishing trip.....	.....	5	.....	5	5	.....	1	1	.....	.....	.....
Pleasure trip.....	.....	30	.....	30	30	.....	3	2	1	1	1
Grand Haven, Mich., to Milwaukee, Wis.	General ..	75,000	15,000	90,000	85,500	4,500	68	68	.....	.....	.....
Garden Bay, Mich., to Chicago, Ill.	Cedar posts.	1,200	1,500	2,700	1,800	900	6	6	.....	.....	.....
Empire, Mich., to Sheboygan, Wis.	Wood.....	2,000	500	2,500	2,200	300	5	5	.....	.....	.....
Montague to Muskegon, Mich.	.....	1,000	.....	1,000	1,000	.....	2	2	.....	.....	.....
Muskegon, Mich., to Chicago, Ill.	Slabs	500	150	650	650	.....	6	6	.....	.....	.....
Manistee, Mich., to Sturgeon Bay, Wis.	.....	400	.....	400	400	.....	.....	.....	.....	.....	.....
Manistee, Mich., to Chicago, Ill.	Lumber ..	2,000	2,500	4,500	4,500	.....	6	6	.....	.....	.....
East Jordan, Mich., to Chicago, Ill.	.....do.....	8,500	4,000	12,500	12,500	.....	5	5	.....	.....	.....
Pleasure trip.....	.....	500	.....	500	500	.....	1	1	.....	.....	.....
Fishing trip.....	.....	15	.....	15	10	5	1	1	.....	1	1
Chicago, Ill., to Michigan City, Ind.	.....	500	.....	500	500	.....	4	4	.....	.....	.....
Capsized .....	.....	10	.....	10	10	.....	1	1	.....	.....	.....
Pleasure trip.....	.....	1,800	.....	1,800	1,800	.....	6	6	.....	.....	.....
Ludington to Charlevoix, Mich.	Lumber ..	3,000	500	3,500	3,500	.....	4	4	.....	.....	.....
Capsized .....	.....	350	.....	350	350	.....	2	2	.....	.....	.....

^b Life-saving crew assisted to save the vessel from destruction by fire.

Table of casualties, season

DISTRICT NO. 12.—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1901.					
June 15	One mile south of station.	Evanston.....	Yht. Query, Evanston, Ill.	.....	.....
June 15	Three and one-half miles northeast of station.	Milwaukee.....	Sloop-yacht, Milwaukee, Wis.	.....	.....
June 18	Fox Island, 28 miles west-southwest of station.	Charlevoix.....	Sc. Nellie Mason, Port Huron, Mich.	Mitchell...	554
June 18	.....do.....	.....do.....	Str. Stephen C. Hall, Port Huron, Mich.	Foster.....	447
June 18	One-half mile south-southwest of station.	Grand Haven....	Sc. Swan, St. Joseph, Mich.	.....	23
June 18	Three-quarters of a mile east of station.	Holland.....	Slp. y. Ruth, Macatawa, Mich.	.....	.....
June 21	Two hundred yards north-northeast of station.	Frankfort.....	Rowboat, Frankfort, Mich.	.....	.....
June 22	Two and one-half miles east by north of station.	Chicago.....	Slp. y. Syndicate, Chicago, Ill.	.....	.....
June 22	Three-quarters of a mile north of station.	Evanston.....	Rowboat, Evanston, Ill.	.....	.....
June 22	Five miles east of station.	Kenosha.....	Sailboat Pastime, Kenosha, Wis.	.....	.....
June 23	Four hundred yards east of station.	St. Joseph.....	Rowboat.....	.....	.....
June 23	One-third mile northeast of station.	Milwaukee.....	Skiff, Milwaukee, Wis.	.....	.....
June 29	One-quarter mile west of station.	Holland.....	Sc. Conдор, Grand Haven, Mich.	Albrow....	30
June 30	Two-fifths of a mile west of station.	South Haven....	Slp. Spray, South Haven, Mich.	.....	.....
June 30	One-quarter mile north-west of station.	Michigan City...	Sloop, Michigan City, Ind.	.....	.....
June 30	One-quarter mile east of station.	Old Chicago.....	Rowboat, Chicago, Ill.	.....	.....
	Total.....	.....	.....	.....	.....

DISTRICT NO. 13.—EMBRACING

1900.					
July 12	One-sixth mile east of station.	Point Adams.....	Fish boat, Astoria, Oreg.	.....	.....
Aug. 10	Two miles south of station.	Southside.....	Sc. Neptune, San Francisco, Cal.	Johnson...	184
Aug. 12	Off station.....	Humboldt Bay...	Skiff.....	.....	.....
Aug. 26	Three-quarters of a mile south-west of station.	Coquille River...	Fish boat, Bandon, Oreg.	.....	.....
Sept. 6	Two and one-half miles south of station.	Ilwaco Beach....	Small boat.....	.....	.....
Oct. 6	Three-quarters of a mile west of station.	Coquille River...	Sc. Reliance, San Francisco, Cal.	Larson....	64
Oct. 6	.....do.....	.....do.....	Sc. Coquille, Coos Bay, Oreg.	Anderson..	103
Oct. 18	One-half mile southeast of station.	Humboldt Bay...	Canoe.....	.....	.....
Oct. 28	Two miles south of station.	Fort Point.....	Str. Gipsev,* San Francisco, Cal.	Leland....	293
Nov. 8	One and three-quarters miles south of station.	Golden Gate Park.	Str. Olga, Fiume, Austria.	Descovich	3,000
Nov. 26	Five miles west-southwest of Shoalwater Bay Station.	Shoalwater Bay and Petersons Point.	Bk. Poltallach, London, England.	Young....	2,254
Dec. 15	One-half mile southwest of station.	Coquille River...	Fish boat, Bandon, Oreg.	.....	.....
Dec. 16	One hundred yards north of station.	Humboldt Bay...	Sloop.....	.....	.....

* Disabled, requiring assistance.

of 1900-1901—Continued.

LAKE MICHIGAN—Continued.

Where from and where bound.	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Pleasure trip.....		\$75		\$75	\$75		2	2			
.....do.....		175		175	175		6	6			
Menominee, Mich., to Tonawanda, N. Y.	Lumber ..	15,000	\$25,000	40,000	40,000		7	7			
.....do.....	.....do.....	30,000	15,000	45,000	44,700	\$300	14	14			
St. Joseph to Grand Haven, Mich.	.....do.....	1,600	200	1,800	1,800		3	3			
Pleasure trip.....		500		500	500		3	3			
Capsized.....		5		5		5	2	2			
Pleasure trip.....		500		500	500		5	5			
.....do.....		10		10	10		6	6			
Racine to Kenosha, Wis.		10		10	10		1	1			
Pleasure trip.....		50		50	50		2		2		
.....do.....		10		10	10		5	5		5	5
Holland to Glen Piers, Mich.	Baskets...	300	800	1,100	1,020	80	2	2			
Pleasure trip.....		100		100	100		2	2			
Capsized.....		30		30	30		2	2			
Pleasure trip.....		25		25	25		3	3			
.....		741,025	168,015	909,040	866,480	42,560	508	505	3	17	19

PACIFIC COAST.

Fishing trip.....	Fish net..	\$50	\$200	\$250	\$245	\$5	2	2			
San Francisco to Huer Harbor, Cal.	Barley....	6,000	25	6,025	25	6,000	7	7			
Adrift.....		10		10	10		2	2		2	2
Fishing trip.....		10		10	10		2	2			
Adrift.....		15		15	15						
San Francisco, Cal., to Coquille River, Oreg.		4,000		4,000	3,800	200	5	5			
.....do.....	Merchandise.	5,000	600	5,600	5,450	150	6	6			
Capsized.....		15		15	10	5	1	1		1	1
Santa Cruz to San Francisco, Cal.	Lime.....	8,000	5,000	13,000	12,980	20	25	25			
Batavia, Java, to San Francisco, Cal.	Sugar.....	200,000	270,000	470,000	408,600	61,400	30	30			
Santa Rosalia, Mexico, to Portland, Oreg.		125,000		125,000	120,000	5,000	31	31		21	38
Adrift.....		60		60	60						
Parted line and capsized.		25		25	20	5					

Table of casualties, season

DISTRICT NO. 13—EMBRACING

Date.	Place.	Name of station.	Name of vessel and where owned.	Master.	Tonnage.
1900.					
Dec. 17	One hundred yards west of station.	Cape Disappointment.	Bge. W. J. Bryan, Vancouver, Wash.	.....
Dec. 26	One-quarter mile east of station.	Humboldt Bay ..	Skiff .....	.....
1901.					
Jan. 4	Duxbury Reef	Fort Point, Golden Gate, and Southside.	Str. Iaquia, San Francisco, Cal.	Bash	712
Jan. 21	Two and one-quarter miles south of station.	Cape Arago.....	Barge, Empire, Oreg .....	.....
Jan. 28	One and one-half miles southeast of station.	.....do	Fish boats (2), Kentuck Slough, Oreg.	.....
Feb. 23	.....do	Shoalwater Bay ..	Str. Flora Brown, South Bend, Wash.	Gamage ...	15
Mar. 13	Four miles west-southwest of station.	Cape Disappointment.	Str. Louis, San Francisco, Cal.	Jenberg ...	831
Apr. 7	Three-quarters of a mile southwest of station.	Coquille River....	Str. Mandalay, San Francisco, Cal.	Reed	438
Apr. 19	Two miles south by east of station.	Cape Arago.....	Str. Empire, San Francisco, Cal.	McGinn ...	732
May 22	One and one-half miles southeast of station.	Cape Disappointment.	Fish boat, Astoria, Oreg ..	.....
May 22	Peacock Spit.....	.....do	Fish boat, Astoria, Oreg ..	.....
May 24	Clatsop Spit.....	Point Adams	Fish boat, Astoria, Oreg ..	.....
June 2	One and one-half miles west-northwest of station.	Cape Disappointment.	Small boat.....	.....
June 8	Five miles west of station.	Point Adams	Fish boat, Astoria, Oreg ..	.....
	Total.....	.....	.....	.....

* In distress, requiring the assistance of the life-saving crew.

RECAPITU

Districts.	Total number of disasters.	Total value of vessels.	Total value of cargoes.
District No. 1.....	81	\$201, 205	\$46, 270
District No. 2.....	149	428, 730	115, 300
District No. 3.....	7	19, 180	3, 000
District No. 4.....	34	150, 155	85, 095
District No. 5.....	82	265, 110	144, 125
District No. 6.....	38	419, 925	38, 150
District No. 7.....	27	1, 065, 600	590, 165
District No. 8.....	15	311, 625	137, 600
District No. 9.....	25	148, 860	31, 560
District No. 10.....	87	163, 755	31, 090
District No. 11.....	82	999, 485	405, 350
District No. 12.....	116	741, 025	168, 015
District No. 13.....	27	555, 440	301, 725
Aggregate	770	5, 470, 095	2, 097, 445

of 1900-1901—Continued.

PACIFIC COAST—Continued.

Where from and where bound	Cargo.	Estimated value of vessel.	Estimated value of cargo.	Total.	Estimated amount saved.	Estimated amount lost.	Persons on board.	Persons saved.	Persons lost.	Persons succored at station.	Days' succor afforded.
Adrift.....	Wood.....	\$1,600	\$1,100	\$2,700	\$2,700	.....	2	2	.....	.....	.....
Fishing trip.....	.....	5	.....	5	5	.....	2	2	.....	.....	.....
San Francisco to San Diego, Cal.	Shingles..	90,000	10,000	100,000	65,000	\$35,000	23	23	(*)	.....	.....
Dragged anchor.....	.....	700	.....	700	700	.....	4	4	.....	.....	.....
Kentuck Slough to Empire City, Oreg.	.....	100	.....	100	100	.....	4	4	.....	.....	.....
South Bend to North Cove, Wash.	.....	3,000	.....	3,000	2,960	40	5	5	.....	.....	.....
Knappton, Wash., to San Francisco, Cal.	Lumber..	20,000	8,000	28,000	26,000	2,000	11	11	.....	.....	.....
San Francisco, Cal., to Coquille River, Oreg.	Merchandise.	60,000	1,800	61,800	61,800	.....	32	32	.....	.....	.....
San Francisco, Cal., to Marshfield, Oreg.	do.....	30,000	5,000	35,000	35,000	.....	17	17	.....	.....	.....
Fishing trip.....	.....	500	.....	500	500	.....	2	2	.....	2	2
do.....	.....	300	.....	500	500	.....	2	1	1	1	1
do.....	.....	425	.....	425	420	5	2	.....	.....	.....	.....
Adrift.....	.....	75	.....	75	75	.....	.....	.....	.....	.....	.....
Fishing trip.....	.....	350	.....	350	350	.....	2	2	.....	.....	.....
.....	.....	555,440	301,725	857,165	747,335	109,830	219	218	1	27	44

* Soon after the steamer struck, the ship's boat was ordered out by the captain, when it broke away from the vessel and capsized with three men on board, one of whom was lost. It was supposed he was struck by the boat and killed.

LATION.

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 to vessels.
\$247,475	\$185,420	\$62,055	302	299	3	50	119	8
544,080	394,925	149,105	813	812	1	119	187	8
22,180	16,305	5,875	44	44	.....	13	25	3
235,250	197,510	37,740	127	126	1	46	60	2
408,235	285,365	143,870	346	344	2	77	150	6
458,075	380,745	77,330	187	187	.....	67	124	9
1,655,765	1,409,770	245,995	241	238	3	69	242	4
448,225	430,220	19,005	145	145	.....	10	10	.....
180,420	154,695	25,725	115	115	.....	41	68	.....
194,845	153,040	41,805	303	300	3	14	14	2
1,404,835	1,368,465	41,370	425	425	.....	81	136	.....
909,040	866,480	42,560	508	505	3	28	30	.....
857,165	747,335	109,830	219	218	1	32	49	1
7,567,540	6,565,27 ⁵	1,002,265	3,775	3,758	17	* 647	* 1,214	43

* These figures include 193 persons to whom succor was given, who were not on the vessels embraced in the tables, and 260 days of such succor, as follows:

District No. 1,	12 persons	22 days.	District No. 9,	33 persons	61 days.
District No. 2,	42 persons	53 days.	District No. 10,	4 persons	4 days.
District No. 4,	12 persons	16 days.	District No. 11,	38 persons	40 days.
District No. 5,	7 persons	8 days.	District No. 12,	11 persons	11 days.
District No. 6,	6 persons	9 days.	District No. 13,	5 persons	5 days.
District No. 7,	20 persons	28 days.			
District No. 8,	3 persons	3 days.			
			Total....	193	260

APPROPRIATIONS AND EXPENDITURES.

STATEMENT SHOWING THE APPROPRIATIONS AND EXPENDITURES FOR THE MAINTENANCE OF THE LIFE-SAVING SERVICE FOR THE FISCAL YEAR ENDING JUNE 30, 1901.

APPROPRIATION—LIFE-SAVING SERVICE, 1901.

For salaries of superintendents of the life-saving and lifeboat stations and houses of refuge in the several districts on the sea and lake coasts of the United States, as follows:

Maine and New Hampshire, District No. 1.....	\$1, 600. 00	
Massachusetts, District No. 2.....	1, 600. 00	
Rhode Island and Fishers Island, District No. 3.....	1, 600. 00	
Long Island, District No. 4.....	1, 800. 00	
New Jersey, District No. 5.....	1, 800. 00	
Delaware, Maryland, and Virginia, District No. 6.....	1, 600. 00	
Virginia and North Carolina, District No. 7.....	1, 800. 00	
South Carolina, Georgia, and Florida, District No. 8....	1, 500. 00	
Gulf of Mexico, District No. 9.....	1, 600. 00	
Lakes Ontario and Erie, District No. 10.....	1, 800. 00	
Lakes Huron and Superior, District No. 11.....	1, 800. 00	
Lake Michigan, District No. 12.....	1, 800. 00	
Washington, Oregon, and California, District No. 13.....	1, 800. 00	
		\$22, 100. 00

For salaries of 277 keepers of life-saving and lifeboat stations and of houses of refuge..... 242, 400. 00

For pay of crews of surfmen employed at the life-saving and lifeboat stations, including the old Chicago station, at the uniform rate of \$65 per month each during the period of actual employment, and \$3 per day for each occasion of service at other times; compensation of volunteers at life-saving and lifeboat stations for actual and deserving service rendered upon any occasion of disaster, or in any effort to save persons from drowning, at such rate, not to exceed \$10 for each volunteer, as the Secretary of the Treasury may determine; pay of volunteer crews for drill and exercise; fuel for stations and houses of refuge; repairs and outfits for same; rebuilding and improvement of same, including use of additional land where necessary; supplies and provisions for houses of refuge and for shipwrecked persons succored at stations; traveling expenses of officers under orders from the Treasury Department; commutation of quarters for officers of the Revenue-Cutter Service detailed for duty in the Life-Saving Service; for carrying out the provisions of sections 7 and 8 of the act approved May 4, 1882; for draft animals and their maintenance; for telephone lines and care of same, and contingent expenses, including freight, storage, rent, repairs to apparatus, labor, medals, stationery, newspapers for statistical purposes, advertising, and all other necessary expenses not included under any other head of life-saving stations on the coasts of the United States. * * * "Authority is hereby granted the Secretary of the Treasury to pay, from the regular annual appropriation for the Life-Saving Service for the fiscal year 1901, the services of a keeper and surfmen detailed for duty at the Pan-American Exposition at Buffalo, N. Y., during the months of May and June, 1901, the sum of \$1,500, or so much thereof as may be required"

1, 396, 310. 00

Total

1, 660, 810. 00

EXPENDITURES.

For salaries of superintendents of life-saving and lifeboat stations and houses of refuge in the several districts, as follows:

District No. 1, July 1, 1900, to June 30, 1901.....	\$1,600.00
District No. 2, July 1, 1900, to June 30, 1901.....	1,600.00
District No. 3, July 1, 1900, to June 30, 1901.....	1,600.00
District No. 4, July 1, 1900, to June 30, 1901.....	1,800.00
District No. 5, July 1, 1900, to June 30, 1901.....	1,800.00
District No. 6, July 1, 1900, to May 31, 1901.....	1,468.10
District No. 7, July 1, 1900, to June 30, 1901.....	1,800.00
District No. 8, July 1, 1900, to June 30, 1901.....	1,500.00
District No. 9, July 1, 1900, to June 30, 1901.....	1,600.00
District No. 10, July 1, 1900, to June 30, 1901.....	1,800.00
District No. 11, July 1, 1900, to June 30, 1901.....	1,800.00
District No. 12, July 1, 1900, to June 30, 1901.....	1,800.00
District No. 13, July 1, 1900, to June 30, 1901.....	1,800.00
	<hr/>
	\$21,968.10

Salaries of 261 keepers, Districts Nos. 1 to 13, inclusive, quarter ending September 30, 1900.....	58,200.00
Salaries of 261 keepers, Districts Nos. 1 to 13, inclusive, quarter ending December 31, 1900.....	57,938.24
Salaries of 262 keepers, Districts Nos. 1 to 13, inclusive, quarter ending March 31, 1901.....	57,986.89
Salaries of 262 keepers, Districts Nos. 1 to 13, inclusive, quarter ending June 30, 1901.....	56,806.04
	<hr/>
	230,931.17

Pay of surfmen in District No. 1, from August 1, 1900, to May 31, 1901.....	59,150.00
Pay of surfmen in District No. 2, from July 1, 1900, to June 30, 1901.....	123,565.70
Pay of surfmen in District No. 3, from August 1, 1900, to May 31, 1901.....	33,800.00
Pay of surfmen in District No. 4, from August 1, 1900, to May 31, 1901.....	126,959.67
Pay of surfmen in District No. 5, from August 1, 1900, to May 31, 1901.....	174,197.90
Pay of surfmen in District No. 6, from August 1, 1900, to May 31, 1901.....	77,343.71
Pay of surfmen in District No. 7, from August 1, 1900, to May 31, 1901.....	136,921.86
Pay of surfmen in District No. 8, from August 1, 1900, to May 31, 1901.....	3,900.00
Pay of surfmen in District No. 9, from August 1, 1900, to May 31, 1901.....	31,832.13
Pay of surfmen in District No. 10, from July 1, 1900, to June 30, 1901.....	44,067.11
Pay of surfmen in District No. 11, from July 1 to December 13, 1900, and from April 16 to June 30, 1901.....	68,687.15
Pay of surfmen in District No. 12, from July 1 to December 5, 1900, and from April 1 to June 30, 1901.....	104,219.90
Pay of surfmen in District No. 13, from July 1, 1900, to June 30, 1901.....	83,866.40
Pay of volunteer surfmen for assistance to the keepers and crews of certain stations at wrecks which occurred during the active season:	
District No. 1.....	\$3.00
District No. 2.....	6.00
District No. 4.....	4.20
District No. 9.....	48.00
District No. 12.....	6.00
District No. 13.....	4.50
	<hr/>
	71.70

Pay of surfmen for services at wrecks which occurred at periods when crews were not required to reside at the stations:		
District No. 1	\$74.00	
District No. 5	53.00	
District No. 7	49.50	
District No. 9	48.00	
District No. 10	6.00	
District No. 12	47.00	
	<hr/>	\$277.50
		<hr/>
		\$1,068,860.73
Pay of disabled keepers under the provisions of section 7 of the act approved May 4, 1882	4,891.70	
Pay of disabled surfmen under the provisions of section 7 of the act approved May 4, 1882	23,663.13	
Pay of widows and others under the provisions of section 8 of the act approved May 4, 1882	7,135.98	
	<hr/>	35,690.81
Apparatus	23,700.91	
Books, charts, stationery, advertising, etc.	1,460.57	
Care of stations pending appointment of keepers	1,311.70	
Commutation of quarters for officers of the Revenue-Cutter Service detailed for duty in the Life-Saving Service.	6,184.83	
Compensation for special services, labor, etc	28,934.19	
Draft animals	9,097.90	
Equipments	14,260.13	
Freight, packing, storage, telegraphing, etc	3,834.96	
Fuel and water for stations	20,704.28	
Furniture	5,857.58	
Medals	990.50	
Protection of stations from encroachment of the sea	758.65	
Rebuilding, repair, and improvement of stations	36,628.15	
Rents	5,143.24	
Repairs to apparatus, equipments, and furniture	2,871.25	
Sites for stations	845.31	
Subsistence of persons rescued from wrecked vessels	197.40	
Supplies	15,763.81	
Telephones, telephone lines, and their maintenance	16,387.32	
Transporting apparatus to and from wrecks, at stations where horses are not kept	435.00	
Traveling expenses of officers	12,516.69	
	<hr/>	207,884.37
Pay of keeper and 10 surfmen at the station on the grounds of the Pan-American Exposition at Buffalo, N. Y., during the months of May and June, 1901		1,150.70
		<hr/>
Total expenditures from appropriation "Life-Saving Service, 1901"		1,566,485.88
Balance of available funds July 1, 1901		94,324.12
		<hr/>
		1,660,810.00

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

Unexpended balance, July 1, 1900	\$109,260.78
To which repayments have been made amounting to	1,225.18
	<hr/>
Total available funds	110,485.96

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

"Life-Saving Service, 1900," available as above.....		<u>\$110,485.96</u>
Pay of surfmen at Ship Canal Station, Tenth district, December 1 to 7, 1899.....	\$13.55	
Pay of volunteer surfmen for assistance to the keepers and crews of certain stations at wrecks which occurred during the active season:		
District No. 12.....	50.00	
Pay of surfmen for services at wrecks which occurred at periods when crews were not required to reside at stations:		
District No. 1.....	\$3.00	
District No. 2.....	12.00	
District No. 4.....	12.00	
District No. 6.....	94.00	
District No. 8.....	57.00	
	<u>178.00</u>	
		241.55
Pay of disabled keepers under the provisions of section 7 of the act approved May 4, 1882.....	1,424.14	
Pay of disabled surfmen under the provisions of section 7 of the act approved May 4, 1882.....	13,012.34	
Pay of widows and others under the provisions of section 8 of the act approved May 4, 1882.....	3,137.83	
		<u>17,574.31</u>
Apparatus.....	17,582.59	
Books, charts, stationery, advertising, etc.....	616.58	
Care of stations pending appointment of keepers.....	232.85	
Compensation for special services, labor, etc.....	977.80	
Draft animals.....	277.05	
Equipments.....	4,115.90	
Freight, packing, storage, telegraphing, etc.....	1,656.64	
Fuel and water for stations.....	623.62	
Furniture.....	869.45	
Protection of stations from encroachment of the sea.....	1,135.00	
Rebuilding, repair, and improvement of stations.....	17,519.69	
Removal of stations.....	275.00	
Rents.....	1,500.85	
Repairs to apparatus, equipments, and furniture.....	356.75	
Sites for stations.....	960.41	
Subsistence of persons rescued from wrecked vessels.....	31.40	
Supplies.....	3,164.89	
Telephones, telephone lines, and their maintenance.....	1,873.00	
Transporting apparatus to and from wrecks, at stations where horses are not kept.....	173.00	
Traveling expenses of officers.....	1,424.38	
		<u>55,366.85</u>
Total expenditures from appropriation "Life-Saving Service, 1900".....		73,182.71
Balance of available funds July 1, 1901.....		<u>37,303.25</u>
		110,485.96

There also remained unexpended at the beginning of the fiscal year, from appropriation of 1899, the following:

"Life-Saving Service, 1899"..... \$65,035.12

The expenditures from this balance during the year, made in payment of indebtedness standing over from the fiscal year ending June 30, 1899, were as follows:

"Life-Saving Service, 1899," available as above.....	\$65,035.12
Freight, packing, storage, telegraphing, etc.....	\$9.16
Rebuilding, repair, and improvement of stations.....	2,285.20
Sites for stations.....	1.00
Supplies.....	54.37

Total expenditures from appropriation "Life-Saving Service, 1899".....	<u>2,349.73</u>
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Balance unexpended June 30, 1901.....	62,685.39
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This unexpended balance of \$62,685.39 was carried to the surplus fund June 30, 1901.

Other appropriations for the maintenance of the Life-Saving Service were as follows:

"Life-Saving Service, Atlantic and Gulf coasts, June and July, 1898:"	
Balance available July 1, 1900.....	\$13,001.94

This unexpended balance of \$13,001.94 was carried to the surplus fund June 30, 1901.

"Site, Long Branch Life-Saving Station:"	
Balance available July 1, 1900.....	\$13,070.92

There were no expenditures during the year from this appropriation, and the balance on hand June 30, 1901, remained the same.

"Rebuilding and improving life-saving stations (proceeds of sales):"	
Balance available July 1, 1900.....	\$8,318.77

This sum has been increased by amounts realized from sales of public property belonging to the Life-Saving Service condemned and sold in conformity with provisions of law.....	<u>770.01</u>
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Total available funds June 30, 1901.....	9,088.78
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There have been no expenditures during the year from the latter appropriation.

The total net expenditures for the maintenance of the Life-Saving Service during the fiscal year ending June 30, 1901, were therefore as follows:

"Life-Saving Service, 1901".....	\$1,566,485.88
"Life-Saving Service, 1900".....	73,182.71
"Life-Saving Service, 1899".....	<u>2,349.73</u>
	1,642,018.32

Less the following:

Repayments to appropriations:	
"Life-Saving Service, 1900".....	\$1,225.18
"Life-Saving Service, 1898" and prior years.....	9.39
Excess of deposits, appropriation "Rebuilding and improving life-saving stations (proceeds of sales)".....	<u>770.01</u>
	2,004.58

Total net expenditures of the Service.....	<u>1,640,013.74</u>
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There remained standing to the credit of the respective appropriations at the close of the fiscal year ending June 30, 1901, available as heretofore stated, the following balances :

"Life-Saving Service, 1901"	\$94,324.12
"Life-Saving Service, 1900"	37,303.25
"Life-Saving Service, 1899"	62,685.39
"Life-Saving Service, 1898" and prior years	9.39
"Life-Saving Service, Atlantic and Gulf coasts, June and July, 1898"	13,001.94
"Site, Long Branch Life-Saving Station"	13,070.92
"Rebuilding and improving life-saving stations (proceeds of sales)"	9,088.78

The foregoing statement of the net expenditures for the maintenance of the Life-Saving Service for the fiscal year ending June 30, 1901, differs from the expenditures by warrants in the following particulars:

Net expenditures by warrants	\$1,632,921.07
To which should be added the following amounts, as shown on page 300 of the report for 1900 :	
In hands of George A. Bartlett, disbursing clerk, June 30, 1900 :	
"Life-Saving Service, 1900"	\$7,713.55
"Life-Saving Service, 1899"	44.63
Payment from "Life-Saving Service, 1901," not entered on books of Division of Bookkeeping and Warrants until after June 30, 1901	5,743.25
	<u>13,501.43</u>
	1,646,422.50

Less the following amounts :	
In the hands of the disbursing clerk June 30, 1901 :	
"Life-Saving Service, 1901"	4,823.21
In hands of B. S. Rich, disbursing agent, June 21, 1901, the date of his death	1,527.50
Amounts reappropriated and expended by warrants, not included in the foregoing statement	58.05
	<u>6,408.76</u>

Net expenditures from appropriations for the year

1,640,013.74

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

APPROPRIATION.

"Salaries, office Life-Saving Service, 1901"

\$42,780.00

EXPENDITURES.

Compensation of officers and employees in office of Life-Saving Service	\$42,645.18
Amount unexpended	134.82
	<u>42,780.00</u>

INSTRUCTIONS TO MARINERS IN CASE
OF SHIPWRECK.

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INSTRUCTIONS TO MARINERS IN CASE OF SHIPWRECK, WITH INFORMATION CONCERNING THE LIFE-SAVING STATIONS UPON THE COASTS OF THE UNITED STATES.

Prepared by Lieutenant C. H. McLELLAN, U. S. R. C. S., Assistant Inspector Life-Saving Stations, under the Direction of the General Superintendent.

GENERAL INFORMATION.

Life-saving stations and houses of refuge are located upon the Atlantic and Pacific seaboard of the United States, the Gulf of Mexico, and the lake coasts, as shown in the list in the latter part of this book, the latitude and longitude being given as far as determined.

Houses of refuge are located exclusively upon the Florida coast, where the requirements of relief are widely different from those of any other portion of the seaboard.

All life-saving stations on the Atlantic and Gulf coasts are manned annually by crews of experienced surfmen from the 1st of August to the 31st of May following, inclusive.

Upon the lake coasts the stations are manned from the opening until the close of navigation, and upon the Pacific coast they are manned the year round.

All life-saving stations are fully supplied with boats, wreck guns, beach apparatus, restoratives, etc.

Houses of refuge are supplied with boats, provisions, and restoratives, but not manned by crews. A keeper, however, resides in each throughout the year, who, after every storm, is required to make extended excursions along the coast, with a view of ascertaining whether any shipwreck has occurred and finding and succoring any persons that may have been cast ashore.

All stations are provided with the International Code of Signals, and vessels can, by opening communication, be reported; obtain the latitude and longitude of the station, where determined; information as to the weather probabilities in most cases; or, if crippled or disabled, a steam tug or revenue cutter will, if requested, be telegraphed for to the nearest port, where facilities for telegraphing exist.

All services are performed by the life-saving crews without other compensation than their wages from the Government, and *they are strictly forbidden to solicit or receive rewards.*

Destitute seafarers are provided with food and lodgings at the nearest station by the Government as long as necessarily detained by the circumstances of shipwreck.

The station crews patrol the beach from two to four miles each side of their stations four times between sunset and sunrise, and if the weather is foggy the patrol is continued through the day.

Each patrolman carries Coston signals. Upon discovering a vessel standing into danger he ignites one of them, which emits a brilliant red flame of about two minutes' duration, to warn her off, or, should the vessel be ashore, to let the crew know that they are discovered and assistance is at hand.

If the vessel is not discovered by the patrol immediately after striking, rockets or flare-up lights should be burned on board, or, if the weather be foggy, guns should be fired to attract attention, as the patrolman may be some distance away on the other part of his beat.

Masters are particularly cautioned, if they should be driven ashore anywhere in the neighborhood of the stations, especially on any of the sandy coasts, where there is not much danger of vessels breaking up immediately, to remain on board until assistance arrives, and under no circumstances should they attempt to land through the surf in their own boats until the last hope of assistance from the shore has vanished. Often when comparatively smooth at sea a dangerous surf is running, which is not perceptible three or four hundred yards offshore, and the surf, when viewed from a vessel, never appears so dangerous as it is. Many lives have unnecessarily been lost by the crews of stranded vessels being thus deceived and attempting to land in the ships' boats.

The difficulties of rescue by operations from the shore are greatly increased when the anchors are let go *after entering the breakers*, as is frequently done, and the chances of saving life are correspondingly lessened.

INSTRUCTIONS.

RESCUE WITH THE LIFEBOAT OR SURFBOAT.

The patrolman, after discovering your vessel ashore and burning a Coston signal, hastens to his station for assistance. If the use of a boat is practicable, either the large lifeboat is launched from its ways in the station and proceeds to the wreck by water or the lighter surfboat is hauled overland to a point opposite the wreck and launched, as circumstances may require.

Upon the boat reaching your vessel the directions and orders of the keeper (who always commands and steers the boat) should be implicitly obeyed. Any headlong rushing and crowding should be prevented, and the captain of the vessel should remain on board to preserve order until every other person has left.

Women, children, helpless persons, and passengers should be passed into the boat first.

Goods or baggage will not be taken into the boat under any circumstances until all persons are landed. If any be passed in against the keeper's remonstrance he is fully authorized to throw it overboard.

RESCUE WITH THE BREECHES BUOY OR LIFE CAR.

Should it be inexpedient to use either the lifeboat or surfboat, recourse will be had to the wreck gun and beach apparatus for the rescue by the breeches buoy or the life car.

A shot with a small line attached will be fired across your vessel.

Get hold of the line as soon as possible and haul on board until you get a tail block with a whip or endless line rove through it. This tail block should be hauled on board as quickly as possible to prevent the whip drifting off with the set of the current or fouling with wreckage, etc. Therefore, if you have been driven into the rigging, where but one or two men can work to advantage, cut the shot line and run it through some available block, such as the throat or peak halyard block, or any block which will afford a clear lead, or even between the ratlines, that as many as possible may assist in hauling.

Attached to the tail block will be a tally board, with the following directions in English on one side and French on the other:

“Make the tail of the block fast to the lower mast, well up. If the masts are gone, then to the best place you can find. Cast off shot line, see that the rope in the block runs free, and show signal to the shore.”

The above instructions being complied with, the result will be as shown in fig. 1.

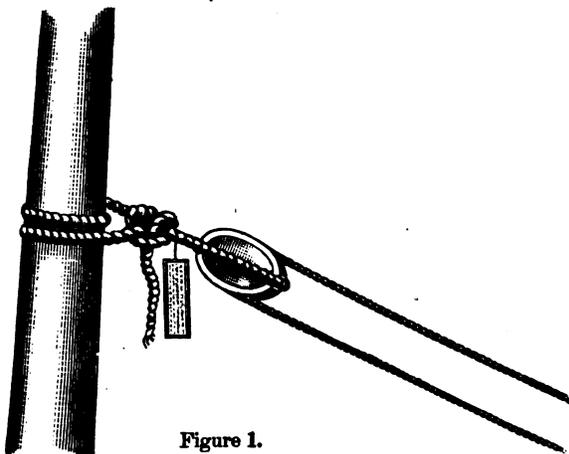


Figure 1.

As soon as your signal is seen a three-inch hawser will be bent on to the whip and hauled off to your ship by the life-saving crew.

If circumstances will admit you can assist the life-saving crew by manning that part of the whip to which the hawser is bent and hauling with them.

When the end of the hawser is got on board a tally-board will be found attached, bearing the following directions in English on one side and French on the other:

“Make this hawser fast about two feet above the tail block; see all clear, and that the rope in the block runs free, and show signal to the shore.”

These instructions having been obeyed, the result will be as shown in fig. 2.

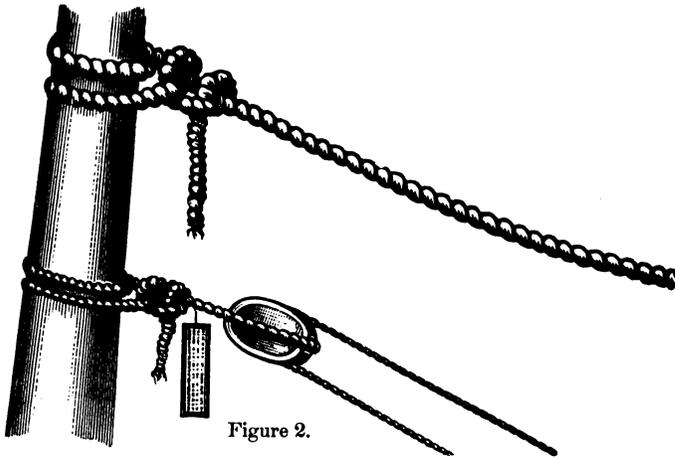


Figure 2.

Take particular care that there are no turns of the whip line round the hawser; to prevent this, take the end of the hawser UP BETWEEN the parts of the whip before making it fast.

When the hawser is made fast, the whip cast off from the hawser, and your signal seen by the life-saving crew, they will haul the hawser taut and by means of the whip will send off to your ship a breeches buoy suspended from a traveler block, or a life car from rings, running on the hawser.

Fig. 3 represents the apparatus rigged, with the breeches buoy hauled off to the ship.

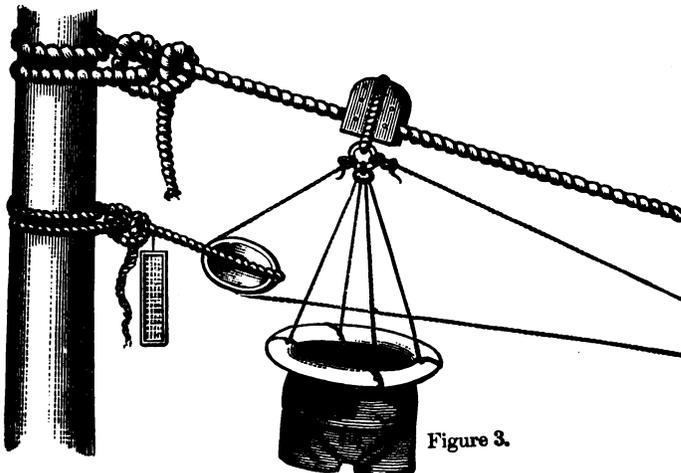


Figure 3.

If the breeches buoy be sent, let one man immediately get into it, thrusting his legs through the breeches. If the life car, remove the hatch, place as many persons in it as it will hold (four to six), and

secure the hatch on the outside by the hatch bar and hook, signal as before, and the buoy or car will be hauled ashore. This operation will be repeated until all are landed. On the last trip of the life car the hatch must be secured by the inside hatch bar.

In many instances two men can be landed in the breeches buoy at the same time, by each putting a leg through a leg of the breeches and holding on to the lifts of the buoy.

Children, when brought ashore by the buoy, should be in the arms of elder persons or securely lashed to the buoy. Women and children should be landed first.

In signaling, as directed in the foregoing instructions, if in the day-time, let one man separate himself from the rest and swing his hat, a handkerchief, or his hand; if at night the showing of a light, and concealing it once or twice, will be understood; and like signals will be made from the shore.

Circumstances may arise, owing to the strength or set of the long-shore current, or the danger of the wreck breaking up immediately, when it would be impossible to send off the hawser. In such a case a breeches buoy or life car will be hauled off by the whip, or sent off to you by the shot line, and you will be hauled ashore through the surf.

If your vessel is stranded through the night and discovered by the patrolman, which you will know by his burning a brilliant red light, keep a bright lookout for signs of the arrival of the life-saving crew abreast of your vessel.

From one to four hours may intervene between the burning of the light and their arrival, as the patrolman may have to return to his station, perhaps three or four miles distant, and the life-saving crew draw the apparatus or surfboat through the sand or over bad roads to the place where your vessel is stranded.

Lights on the beach will indicate their arrival, and the sound of cannon firing from the shore may be taken as evidence that a line has been fired across your vessel. Therefore, upon hearing the cannon, make strict search aloft, fore and aft, for the shot line, for it is almost certain to be there. Though the movements of the life-saving crew may not be perceptible to you, owing to the darkness, your ship will be a good mark for the men experienced in the use of the wreck gun, and the first shot seldom fails.

RECAPITULATION.

Remain by the wreck until assistance arrives from the shore, unless your vessel shows signs of immediately breaking up.

If not discovered immediately by the patrol, burn rockets, flare-up or other lights, or, if the weather be foggy, fire guns.

Take particular care that there are no turns of the whip line round the hawser before making the hawser fast.

Send the women, children, helpless persons, and passengers ashore first.

Make yourself thoroughly familiar with these instructions, and remember that on your coolness and strict attention to them will greatly depend the chances of bringing you and your people safely to land.

LIST OF LIFE-SAVING DISTRICTS AND
STATIONS IN THE UNITED STATES.

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LIFE-SAVING DISTRICTS AND STATIONS.

FIRST DISTRICT.—COASTS OF MAINE AND NEW HAMPSHIRE.

Name of station.	State.	Locality.	Approximate position.*	
			Latitude, north.	Longitude, west.
Quoddy Head.....	Me.....	Carrying Point Cove.....	44 48 40	66 58 50
Cross Island.....	Me.....	Off Machiasport.....	44 36 45	67 16 30
Crumple Island.....	Me.....	Off Jonesport.....	44 26 40	67 36 10
Cranberry Isles.....	Me.....	Little Cranberry Island, off Mount Desert.....	44 15 30	68 12 40
White Head.....	Me.....	On southwest end White Head Island.....	43 58 40	69 08 00
Burnt Island.....	Me.....	Off mouth St. Georges River.....	43 52 20	69 17 40
Damariscove Island.....	Me.....	On the west shore of Damariscove Harbor.....	43 45 20	69 37 00
Hunniwells Beach.....	Me.....	On west side mouth Kennebec River.....	43 45 00	69 46 55
Cape Elizabeth.....	Me.....	Near the Lights.....	43 33 58	70 12 00
Fletchers Neck.....	Me.....	Biddeford Pool, Fletchers Neck.....	43 26 30	70 20 30
Jerrys Point.....	N. H.....	Southeast point Great Island, Portsmouth Harbor.....	43 08 30	70 42 45
Wallis Sands.....	N. H.....	One and three-fourths miles south of Odiornes Point.....	43 01 15	70 44 00
Rye Beach.....	N. H.....	North end of Rye Beach.....	42 59 30	70 45 20
Great Boars Head.....	N. H.....	One and one-half miles north of Great Boars Head.....	42 56 20	70 47 40

SECOND DISTRICT.—COAST OF MASSACHUSETTS.

Salisbury Beach.....	Mass.....	Two-thirds of a mile south of State line.....	42 51 40	70 49 00
Plum Island.....	Mass.....	North end of Plum Island, mouth of Merrimac River.....	42 48 30	70 49 00
Knobbs Beach.....	Mass.....	On Plum Island, 2½ miles from south end.....	42 44 00	70 47 15
Gap Cove ^b	Mass.....	One-half of a mile west of Straitsmouth light.....	42 39 30	70 36 00
Gloucester.....	Mass.....	Old House Cove, westerly side of harbor, 1¼ miles from town.....	43 35 30	70 41 10
Nahant.....	Mass.....	On the neck, close to Nahant.....	42 25 45	70 56 00
City Point.....	Mass.....	Floating station in Dorchester Bay, Boston Harbor.....	.....	.....
Point Allerton.....	Mass.....	One mile west of Point Allerton.....	42 18 20	70 54 00
North Scituate.....	Mass.....	Two and one-half miles south of Minots Ledge light.....	42 14 00	70 45 30
Fourth Cliff.....	Mass.....	South end of Fourth Cliff, Scituate.....	42 09 30	70 42 10
Brant Rock.....	Mass.....	On Green Harbor Point.....	42 05 30	70 38 40
Gurnet.....	Mass.....	Four and one-half miles northeast of Plymouth.....	42 00 10	70 36 10
Manomet Point.....	Mass.....	Six and one-half miles southeast of Plymouth.....	41 55 30	70 32 40
Wood End.....	Mass.....	One-eighth of a mile east of light.....	42 01 15	70 11 30
Race Point.....	Mass.....	One and five-eighths miles northeast of Race Point light.....	42 04 45	70 13 15
Peaked Hill Bars.....	Mass.....	Two and one-half miles northeast of Provincetown.....	42 04 40	70 09 50
High Head.....	Mass.....	Three and one-half miles northwest of Cape Cod light.....	42 03 55	70 06 50
Highland.....	Mass.....	Seven-eighths of a mile northwest of Cape Cod light.....	42 02 55	70 04 20
Pamet River.....	Mass.....	Three and one-half miles south of Cape Cod light.....	42 00 00	70 01 15
Cahoons Hollow.....	Mass.....	Two and one-half miles east of Wellfleet.....	41 56 45	69 59 05
Nauset.....	Mass.....	One and one-fourth miles south of Nauset lights.....	41 50 40	69 56 45
Orleans.....	Mass.....	Abreast of Ponchet Island.....	41 45 55	69 55 55
Old Harbor.....	Mass.....	One-half of a mile north of Chatham Inlet.....	41 41 45	69 56 00
Chatham.....	Mass.....	One and one-fourth miles south-southwest of Chatham lights.....	41 39 10	69 57 10
Monomoy.....	Mass.....	Two and one-fourth miles north of Monomoy light.....	41 35 25	69 59 10
Coskata.....	Mass.....	Two and one-fourth miles south of Nantucket (Great Point) light.....	41 22 00	70 01 15
Surfside.....	Mass.....	Two and one-half miles south of the town of Nantucket.....	41 14 30	70 06 00
Great Neck.....	Mass.....	Six miles west of Surfside.....	41 16 05	70 12 30
Muskeget.....	Mass.....	Near west end of Muskeget Island.....	41 20 20	70 18 50
Gay Head.....	Mass.....	Near light.....	41 21 04	70 50 08
Cuttyhunk.....	Mass.....	Near east end Cuttyhunk Island.....	41 25 25	70 54 45

* Obtained from latest Coast Survey charts.

^b Formerly Davis Neck.

THIRD DISTRICT.—COASTS OF RHODE ISLAND AND FISHERS ISLAND.

Name of station.	State.	Locality.	Approximate position.	
			Latitude, north.	Longitude, west.
Brenton Point	R. I.	On Prices Neck	41 26 58	71 20 10
Narragansett Pier.....	R. I.	Northern part of the town.....	41 25 45	71 27 20
Point Judith	R. I.	Near light.....	41 21 40	71 29 00
Quonochontaug	R. I.	Seven and one-half miles east of Watch Hill light.....	41 19 50	71 43 10
Watch Hill	R. I.	Near light.....	41 18 20	71 51 30
Sandy Point	R. I.	Block Island, north side, near light	41 13 40	71 34 40
New Shoreham	R. I.	Block Island, east side, near landing	41 10 20	71 33 30
Block Island	R. I.	Block Island, west side, near Dickens Point.....	41 09 40	71 36 40

FOURTH DISTRICT.—COAST OF LONG ISLAND.

Montauk Point*	N. Y.	At the light	41 04 00	71 51 30
Ditch Plain	N. Y.	Three and one-half miles southwest of Montauk light.....	41 02 10	71 54 30
Hither Plain	N. Y.	One-half of a mile southwest of Fort Pond	41 01 30	71 57 50
Napeague	N. Y.	Abreast of Napeague Harbor.....	40 59 45	72 02 40
Amagansett.....	N. Y.	Abreast of the village.....	40 58 00	72 06 20
Georgica	N. Y.	One mile south of village of East Hampton	40 56 40	72 11 40
Mecox	N. Y.	Two miles south of the village of Bridgehampton.....	40 54 10	72 18 00
Southampton	N. Y.	Three-fourths of a mile south of the village.....	40 52 10	72 23 40
Shinnecock	N. Y.	Two miles east-southeast of Shinnecock light	40 50 40	72 27 50
Tiana	N. Y.	Two miles southwest of Shinnecock light.....	40 49 40	72 31 30
Quogue	N. Y.	One-half of a mile south of the village.....	40 48 20	72 36 00
Potunk	N. Y.	One and one-half miles southwest of Potunk village.....	40 47 30	72 39 00
Moriches	N. Y.	Two and one-half miles southwest of Speonk village.....	40 46 30	72 43 10
Forge River.....	N. Y.	Three and one-half miles south of Moriches.....	40 44 30	72 49 00
Smiths Point	N. Y.	Abreast of the point.....	40 44 00	72 52 20
Bellport.....	N. Y.	Four miles south of the village.....	40 42 40	72 55 50
Blue Point	N. Y.	Four and one-half miles south of Patchogue.....	40 40 40	73 01 20
Lone Hill.....	N. Y.	Eight miles east of Fire Island light.....	40 39 40	73 04 20
Point of Woods.....	N. Y.	Four miles east of Fire Island light.....	40 38 50	73 06 10
Fire Island	N. Y.	One-half of a mile west of Fire Island light.....	40 37 40	73 13 20
Oak Island	N. Y.	East end of Oak Island.....	40 38 10	73 17 40
Gilgo	N. Y.	West end of Oak Island.....	40 37 20	73 22 20
Jones Beach	N. Y.	East end of Jones Beach.....	40 36 40	73 26 20
Zachs Inlet	N. Y.	West end of Jones Beach.....	40 36 10	73 28 50
Short Beach	N. Y.	One-half of a mile east of Jones Inlet.....	40 35 90	73 31 20
Point Lookout	N. Y.	Two miles west of New Inlet	40 35 10	73 35 40
Long Beach	N. Y.	Near west end Long Beach	40 35 10	73 40 45
Far Rockaway ^b	N. Y. ....	.....	.....	.....
Rockaway	N. Y.	Near the village of Rockaway.....	40 35 30	73 47 30
Rockaway Point.....	N. Y.	West end of Rockaway Beach.....	40 34 10	73 51 50
Coney Island ^c	N. Y.	Manhattan Beach.....	40 34 20	73 55 30
Eatons Neck	N. Y.	East side entrance to Huntington Bay, Long Island Sound.....	40 57 10	73 24 00
Rocky Point	N. Y.	Near Rocky Point, Long Island Sound, about 4 miles northerly from Greenport.....	41 08 20	72 21 10

FIFTH DISTRICT.—COAST OF NEW JERSEY.

Sandy Hook	N. J.	On Bay side, one-half of a mile south of point of Hook.....	40 27 51	74 00 27
Spermaceti Cove.....	N. J.	Two and one-half miles south of Sandy Hook light.....	40 25 40	73 59 00
Seabright	N. J.	About a mile south of Navesink light.....	40 22 50	73 56 30
Monmouth Beach.....	N. J.	About a mile south of Seabright.....	40 20 30	73 58 30
Long Branch	N. J.	Greens Pond	40 16 40	73 59 00
Deal	N. J.	Asbury Park	40 13 50	73 59 50
Shark River.....	N. J.	Near the mouth of Shark River.....	40 11 30	74 00 40
Spring Lake	N. J.	Two and one-half miles south of Shark River.....	40 09 20	74 01 20
Squan Beach	N. J.	One mile southeast of Squan village.....	40 07 00	74 02 00
Bayhead	N. J.	At the head of Barnegat Bay.....	40 04 00	74 02 40
Mantoloking.....	N. J.	Two and one-half miles south of head of Barnegat Bay.....	40 01 40	74 03 10

* In charge of keeper of Ditch Plain Station. No crew employed.

^b Station destroyed by sudden gale while being moved across the water to new site.

^c Not in operation.

FIFTH DISTRICT.—COAST OF NEW JERSEY—Continued.

Name of station.	State.	Locality.	Approximate position.	
			Latitude, north.	Longitude, west.
Chadwick	N. J.	Five miles south of head of Barnegat Bay.....	39 59 10	74 04 00
Toms River	N. J.	On the Beach abreast mouth Toms River.....	39 56 10	74 04 30
Island Beach	N. J.	One and one-fourth miles south of Seaside Park	39 53 40	74 05 00
Cedar Creek	N. J.	Five and three-eighths miles north of Barne- gat Inlet.	39 51 10	74 05 10
Forked River	N. J.	Two miles north of Barnegat Inlet.....	39 48 10	74 05 40
Barnegat	N. J.	South side of Barnegat Inlet.....	39 45 30	74 06 10
Loveladies Island	N. J.	Two and one-half miles south of Barnegat Inlet.	39 43 50	74 07 20
Harvey Cedars	N. J.	Five and one-half miles south of Barnegat Inlet.	39 41 20	74 08 30
Ship Bottom	N. J.	Midway of Long Beach.....	39 38 10	74 11 00
Long Beach	N. J.	One and five-eighths miles north of Beach Haven.	39 35 00	74 13 20
Bonds	N. J.	Two and one-fourth miles south of Beach Haven.	39 32 00	74 15 20
Little Egg	N. J.	Near the light north of inlet.....	39 30 10	74 17 30
Little Beach	N. J.	South side of Little Egg Inlet	39 27 30	74 19 30
Brigantine	N. J.	Five and one-half miles north of Absecon light.	39 25 30	74 20 30
South Brigantine	N. J.	Three and one-eighth miles north of Absecon light.	39 24 00	74 22 30
Atlantic City	N. J.	At Absecon light	39 22 00	74 24 50
Absecon	N. J.	Two and three-fourths miles south of Absecon light.	39 20 50	74 27 40
Great Egg	N. J.	Six and three-fourths miles south of Absecon light.	39 19 00	74 31 10
Ocean City	N. J.	South side of Egg Harbor Inlet	39 17 00	74 34 00
Pecks Beach	N. J.	Three and one-half miles north of Corsons Inlet	39 14 50	74 36 50
Corson Inlet	N. J.	Near the Inlet, north side.....	39 13 10	74 38 20
Sea Isle City	N. J.	Three and one-fourth miles north of Townsend Inlet.	39 09 40	74 41 05
Townsend Inlet	N. J.	Near the Inlet, north side.....	39 07 30	74 42 45
Avalon	N. J.	Three and three-fourths miles southwest from Ludlam Beach light.	39 05 50	74 43 10
Tathams	N. J.	Two and one-half miles northeast from Here- ford Inlet light.	39 02 30	74 45 50
Hereford Inlet	N. J.	Near Hereford light.....	39 00 20	74 47 20
Holly Beach	N. J.	Six miles northeast of Cape May City.....	38 58 40	74 49 50
Turtle Gut	N. J.	Four miles northeast of Cape May City.....	38 57 10	74 51 10
Cold Spring	N. J.	One-half of a mile east of Cape May City.....	38 56 00	74 54 30
Cape May	N. J.	Near the light	38 55 40	74 57 30
Bay Shore *	N. J.	Two and one-half miles west of Cape May City.	38 56 40	74 58 10

SIXTH DISTRICT.—COAST BETWEEN DELAWARE AND CHESAPEAKE BAYS.

Lewes	Del	Two miles west from Cape Henlopen light.....	38 46 50	75 07 10
Cape Henlopen	Del	Seventh-eighths of a mile southerly of Cape Henlopen light.	38 45 50	75 04 50
Rehoboth Beach	Del	Opposite north end of Rehoboth Bay	38 41 30	75 04 20
Indian River Inlet	Del	North of Inlet	38 37 50	75 03 40
Fenwick Island	Del	One and one-half miles north of light.....	38 28 20	75 03 00
Isle of Wight	Md	Three miles south of Fenwick light.....	38 24 10	75 03 30
Ocean City	Md	At village	38 20 00	75 05 00
North Beach	Md	Ten miles south of Ocean City	38 11 30	75 09 20
Green Run Inlet	Md	Thirteen and one-half miles northeast of As- sateague light.	38 04 30	75 12 50
Popes Island	Va.	Ten miles northeast of Assateague light	38 00 20	75 15 40
Assateague Beach	Va.	One and one-eighth miles south of Assateague light.	37 53 40	75 21 40
Wallops Beach	Va.	One and one-half miles south of Chincoteague Inlet.	37 52 00	75 26 50
Metomkin Inlet	Va.	On Metomkin Beach, near the Inlet	37 40 45	75 34 50
Wachapreague	Va.	South end of Cedar Island	37 35 20	75 36 40
Parramore Beach	Va.	Midway of beach	37 32 20	75 37 20
Hog Island	Va.	South end of Hog Island	37 22 20	75 42 45
Cobb Island	Va.	South end of Cobb Island	37 17 30	75 47 00
Smith Island	Va.	At Cape Charles light	37 07 00	75 53 40

* In charge of keeper of Cape May Station. No crew employed.

SEVENTH DISTRICT.—COAST BETWEEN CHESAPEAKE BAY AND CAPE FEAR RIVER.

Name of station.	State.	Locality.	Approximate position.	
			Latitude, north.	Longitude, west.
Cape Henry.....	Va.....	Three-fourths of a mile southeast of Cape Henry light.	36 55 10	75 59 50
Seatack.....	Va.....	Five and one-half miles south of Cape Henry light.	36 51 10	75 58 40
Dam Neck Mills.....	Va.....	Ten miles south of Cape Henry light.....	36 47 10	75 57 30
Little Island.....	Va.....	On beach abreast of North Bay.....	36 41 30	75 55 20
False Cape.....	Va.....	On beach abreast of Back Bay.....	36 36 00	75 52 50
Wash Woods.....	N. C.....	On beach abreast of Knotts Island.....	36 32 00	75 52 10
Currituck Inlet.....	N. C.....	Five and three-fourths miles north of Currituck Beach light.	36 27 30	75 50 40
Whales Head.....	N. C.....	Seven-eighths of a mile north of Currituck Beach light.	36 23 20	75 49 40
Poyners Hill.....	N. C.....	Six and one-half miles south of Currituck Beach light.	36 17 10	75 48 00
Caffey's Inlet.....	N. C.....	Ten and three-fourths miles south of Currituck Beach light.	36 13 40	75 46 20
Paul Gamiels Hill.....	N. C.....	Five miles north of Kitty Hawk.....	36 08 00	75 43 50
Kitty Hawk.....	N. C.....	On the beach abreast of north end of Kitty Hawk Bay.	36 03 50	75 41 30
Kill Devil Hills.....	N. C.....	Four and one-half miles south of Kitty Hawk..	36 00 10	75 39 40
Nags Head.....	N. C.....	Nine miles north of Oregon Inlet.....	35 56 00	75 36 40
Bodie Island.....	N. C.....	Seven-eighths of a mile northeast of Bodie Island light.	35 49 40	75 33 20
Oregon Inlet.....	N. C.....	One-half of a mile south of Oregon Inlet.....	35 47 30	75 32 10
Pea Island.....	N. C.....	Two miles north of New Inlet.....	35 43 15	75 29 30
New Inlet.....	N. C.....	One-half of a mile south of New Inlet.....	35 40 40	75 29 00
Chicamacomico.....	N. C.....	Five miles south of New Inlet.....	35 36 40	75 27 50
Gull Shoal.....	N. C.....	Eleven and three-fourths miles south of New Inlet.	35 29 50	75 28 40
Little Kinnakeet.....	N. C.....	Eleven and one-half miles north of Cape Hatteras light.	35 25 00	75 29 10
Big Kinnakeet.....	N. C.....	Five and one-half miles north of Cape Hatteras light.	35 20 00	75 30 20
Cape Hatteras.....	N. C.....	One mile south of Cape Hatteras light.....	35 14 20	75 31 20
Creeds Hill.....	N. C.....	Four miles west of Cape Hatteras light.....	35 14 30	75 35 15
Durans.....	N. C.....	Three miles east of Hatteras Inlet.....	35 12 35	75 41 10
Ocracoke.....	N. C.....	One and one-half miles west of Hatteras Inlet..	35 11 00	75 46 10
Portsmouth.....	N. C.....	Northeast end of Portsmouth Island.....	35 04 00	76 03 05
Core Bank.....	N. C.....	On Core Bank, opposite Hunting Quarters, about halfway between Ocracoke Inlet and Cape Lookout.	34 51 30	76 18 30
Cape Lookout.....	N. C.....	One and one-half miles south of Cape Lookout light.	34 36 30	76 32 20
Cape Fear.....	N. C.....	On Smiths Island, Cape Fear.....	33 50 30	77 57 20
Oak Island.....	N. C.....	West side mouth Cape Fear River.....	33 53 20	78 01 20

EIGHTH DISTRICT.—COASTS OF SOUTH CAROLINA, GEORGIA, AND EASTERN FLORIDA.

Sullivans Island.....	S. C.....	At Moultrieville, Sullivans Island, at north end of harbor jetty.	32 45 30	79 51 05
Smiths Creek ^a	Fla.....	Twenty miles south of Matanzas Inlet.....	29 26 10	81 06 25
Mosquito Lagoon ^a	Fla.....	On beach outside the lagoon.....	28 51 30	80 46 20
Chester Shoal ^a	Fla.....	Eleven miles north of Cape Canaveral.....	28 36 40	80 35 50
Cape Malabar ^b.....	.....	.....	.....	.....
Bethel Creek ^a	Fla.....	Sixteen miles north of Indian River Inlet.....	27 40 00	80 21 20
Indian River Inlet ^a	Fla.....	South side of inlet.....	27 29 45	80 17 50
Gilberts Bar ^a	Fla.....	At St. Lucie Rocks, 2 miles north of Gilberts Bar Inlet.	27 12 00	80 09 50
Jupiter Inlet ^c	Fla.....	One mile south of inlet.....	26 55 40	80 04 00
Orange Grove ^d	Fla.....	Five and one-half miles south of Lake Worth, 27 miles south of Lake Worth Inlet, and 37 miles south of Jupiter.	26 27 30	80 03 20
Fort Lauderdale ^a	Fla.....	Four miles north of New River Inlet.....	26 08 00	80 06 00
Biscayne Bay ^a	Fla.....	Six miles north of Norris Cut.....	25 54 10	80 08 00

^a House of refuge. No crew employed.^b Discontinued March 30, 1891.^c Discontinued January 21, 1899.^d Discontinued October 1, 1896.

NINTH DISTRICT.—GULF COAST OF UNITED STATES.

Name of station.	State.	Locality.	Approximate position.	
			Latitude, north.	Longitude, west.
Santa Rosa.....	Fla.....	Santa Rosa Island, 3 miles east of Fort Pickens..	30 19 00	87 14 30
Sabine Pass.....	Tex.....	West side of pass.....	29 43 55	93 52 15
Galveston.....	Tex.....	East end Galveston Island.....	29 20 10	94 46 10
San Luis.....	Tex.....	West end Galveston Island.....	29 07 00	95 04 00
Velasco.....	Tex.....	Two and one-fourth miles northeast of mouth of Brazos River.	28 57 45	96 16 30
Saluria.....	Tex.....	Northeast end Matagorda Island.....	28 23 00	96 24 00
Aranzas.....	Tex.....	Northeast end Mustang Island.....	27 51 00	97 03 00
Brazos.....	Tex.....	North end Brazos Island, entrance to Brazos Santiago.	26 04 00	97 08 00

TENTH DISTRICT.—LAKES ERIE AND ONTARIO.

Big Sandy.....	N. Y.....	North side mouth of Big Sandy Creek, Lake Ontario.		
Salmon Creek*.....				
Oswego.....	N. Y.....	East side entrance of Oswego Harbor, Lake Ontario.		
Charlotte.....	N. Y.....	East side entrance of Charlotte Harbor, Lake Ontario.		
Fort Niagara.....	N. Y.....	East side entrance of Niagara River, Lake Ontario.		
Buffalo.....	N. Y.....	South side entrance of Buffalo Harbor, Lake Erie.		
Erie.....	Pa.....	North side entrance of Erie Harbor, Lake Erie..		
Ashtabula.....	Ohio.....	West side of Ashtabula Harbor, Lake Erie.....		
Fairport.....	Ohio.....	West side entrance of Fairport Harbor, Lake Erie.		
Cleveland.....	Ohio.....	West side entrance of Cleveland Harbor, Lake Erie.		
Point Marblehead.....	Ohio.....	Point Marblehead, near Quarry Docks, Lake Erie.		
Louisville.....	Ky.....	Falls of the Ohio River, Louisville, Ky.....		

ELEVENTH DISTRICT.—LAKES HURON AND SUPERIOR.

Lake View Beach.....	Mich.....	Five miles north of Fort Gratiot light.....		
Sand Beach.....	Mich.....	Inside Harbor Beach Harbor, Lake Huron.....		
Pointe aux Barques...	Mich.....	Near light, Lake Huron.....		
Grindstone City.....	Mich.....	About 2 miles northeast of Port Austin, and about 2 miles southeast of Port Austin Reef light, Lake Huron.		
Ottawa Point.....	Mich.....	Near light, Lake Huron.....		
Sturgeon Point.....	Mich.....	Near light, Lake Huron.....		
Thunder Bay Island..	Mich.....	West side of island, Lake Huron.....		
Middle Island.....	Mich.....	North end of Middle Island, Lake Huron.....		
Hammonds Bay.....	Mich.....	Hammonds Bay, Lake Huron.....		
Bois Blanc.....	Mich.....	About midway, east side of island, Lake Huron.		
Vermilion Point.....	Mich.....	Ten miles west of Whitefish Point, Lake Superior.		
Crisps.....	Mich.....	Eighteen miles west of Whitefish Point, Lake Superior.		
Two Heart River.....	Mich.....	Near mouth of Two Heart River, Lake Superior.		
Muskallonge Lake....	Mich.....	Near mouth of Sucker River, Lake Superior..		
Grand Marais.....	Mich.....	West of harbor entrance.....		
Marquette.....	Mich.....	Near light, Lake Superior.....		
Ship Canal.....	Mich.....	Old Portage Lake Ship Canal, three-fourths of a mile from north end, on east bank.		
Duluth.....	Mich.....	On Minnesota Point, Upper Duluth.....		

* Destroyed by fire.

TWELFTH DISTRICT.—LAKE MICHIGAN.

Name of station.	State.	Locality.	Approximate position.	
			Latitude, north.	Longitude, west.
			° ' "	° ' "
Beaver Island ^a	Mich	Near light.....		
Charlevoix.....	Mich	South side of harbor entrance.....		
North Manitou Island.....	Mich	Near Pickard's wharf.....		
Point Betsie.....	Mich	Near light.....		
Frankfort.....	Mich	South side entrance of harbor.....		
Manistee.....	Mich	North side entrance of harbor.....		
Grande Pointe au Sable.....	Mich	One mile south of light.....		
Ludington.....	Mich	North side entrance of harbor.....		
Pentwater.....	Mich	North side entrance of harbor.....		
White River.....	Mich	North side entrance of White Lake.....		
Muskegon.....	Mich	North side entrance of harbor, Port Sherman.....		
Grand Haven.....	Mich	North side entrance of harbor.....		
Holland.....	Mich	In the harbor, south side.....		
South Haven.....	Mich	North side entrance of harbor.....		
Saint Joseph.....	Mich	In the harbor, north side.....		
Michigan City.....	Ind	East side entrance of harbor.....		
South Chicago.....	Ill	North side entrance of Calumet Harbor.....		
Chicago.....	Ill	About 7 miles S. by E. of Chicago River light.....		
Old Chicago.....	Ill	In the harbor.....		
Evanston.....	Ill	On the Northwestern University grounds.....		
Kenosha.....	Wis	In the harbor, on Washington Island.....		
Racine.....	Wis	In the harbor.....		
Milwaukee.....	Wis	Near entrance of harbor, south side.....		
Sheboygan.....	Wis	Entrance to harbor, north side.....		
Two Rivers.....	Wis	North side entrance of harbor.....		
Kewaunee.....	Wis	North side entrance of harbor.....		
Sturgeon Bay Canal.....	Wis	Eastern entrance of canal, north side.....		
Baileys Harbor.....	Wis	On easterly side of harbor.....		
Plum Island.....	Wis	Near northeast point of island, 2 miles north-west of Pilot Island light.....		

THIRTEENTH DISTRICT.—COASTS OF CALIFORNIA, OREGON, AND WASHINGTON.

Neah Bay ^b	Wash	Just south of Grays Harbor light.....	46 53 15	124 07 15
Petersons Point.....	Wash	Near lighthouse boat landing.....	46 43 00	124 03 00
Shoalwater Bay.....	Wash	Thirteen miles north of Cape Disappointment.....	46 27 50	124 03 25
Ilwaco Beach.....	Wash	Bakers Bay, one-half mile northeast of light.....	46 16 40	124 03 00
Cape Disappointment.....	Wash	Bakers Bay, one-half mile northeast of light.....	46 16 40	124 03 00
Point Adams.....	Oreg	Three-fourths of a mile southeast of Fort Stevens.....	46 12 00	123 57 00
Yaquina Bay.....	Oreg	About 1 mile south of harbor entrance.....	44 35 30	124 03 54
Umpqua River.....	Oreg	Near entrance of river, north side.....	43 42 00	124 10 30
Cape Arago.....	Oreg	Coos Bay, north side.....	43 22 50	124 18 00
Coquille River.....	Oreg	In town of Bandon.....	43 07 00	124 25 00
Humboldt Bay.....	Cal	Near light.....	40 46 00	124 13 00
Point Reyes.....	Cal	Three and one-half miles north of light.....	38 02 20	122 59 30
Bolinas Bay ^c	Cal	.....	
Fort Point.....	Cal	Three-fourths of a mile east of light.....	37 48 10	122 27 50
Golden Gate Park.....	Cal	On beach in Golden Gate Park, San Francisco, three-fourths of a mile south of Point Lobos.....	37 46 10	122 30 30
Southside.....	Cal	Three and three-eighths miles south of Golden Gate Park Life-Saving Station.....	37 43 18	122 30 18

^a No crew employed.^b Discontinued December 17, 1890.^c Destroyed by fire.

DIRECTIONS FOR RESTORING THE
APPARENTLY DROWNED.

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DIRECTIONS FOR RESTORING THE APPARENTLY DROWNED.

NOTE.—These directions differ from those given prior to 1899 by the addition of means for securing deeper inspiration. The method theretofore published, known as the Howard, or Direct Method, has been productive of excellent results in the practice of the Service, and is retained here. It is, however, here arranged for practice in combination with the Sylvester method, the latter producing deeper inspiration than any other known method, while the former effects the most complete expiration. The combination, therefore, tends to produce the most rapid oxygenation of the blood—the real object to be gained. The combination is prepared primarily for the use of life-saving crews where assistants are at hand. A modification of Rule III, however, is published as a guide in cases where no assistants are at hand and one person is compelled to act alone. In preparing these



FIG. I.

directions the able and exhaustive report of Messrs. J. Collins Warren, M. D., and George B. Shattuck, M. D., committee of the Humane Society of Massachusetts, embraced in the annual report of the society for 1895–96, has been availed of, placing the Department under many obligations to these gentlemen for their valuable suggestions.

RULE I. AROUSE THE PATIENT.—Do not move the patient unless in danger of freezing; instantly expose the face to the air, toward the wind if there be any; wipe dry the mouth and nostrils; rip the clothing so as to expose the chest and waist; give two or three quick, smarting slaps on the chest with the open hand.

If the patient does not revive proceed immediately as follows:

RULE II. TO EXPEL WATER FROM THE STOMACH AND CHEST (See Fig. I).—Separate the jaws and keep them apart by placing between

the teeth a cork or small bit of wood; turn the patient on his face, a large bundle of tightly rolled clothing being placed beneath the stomach; press heavily on the back over it for half a minute, or as long as fluids flow freely from the mouth.

RULE III. TO PRODUCE BREATHING (See Figs. II and III).—Clear the mouth and throat of mucus by introducing into the throat the corner of a handkerchief wrapped closely around the forefinger; turn the patient on the back, the roll of clothing being so placed as to raise the pit of the stomach above the level of the rest of the body. Let an assistant with a handkerchief or piece of dry cloth draw the tip of the tongue out of one corner of the mouth (which prevents the tongue from falling back and choking the entrance to the windpipe), and keep it projecting a little beyond the lips. Let another assistant grasp the arms just below the elbows and draw them steadily upward by the sides of the patient's head to the ground, the hands nearly meeting

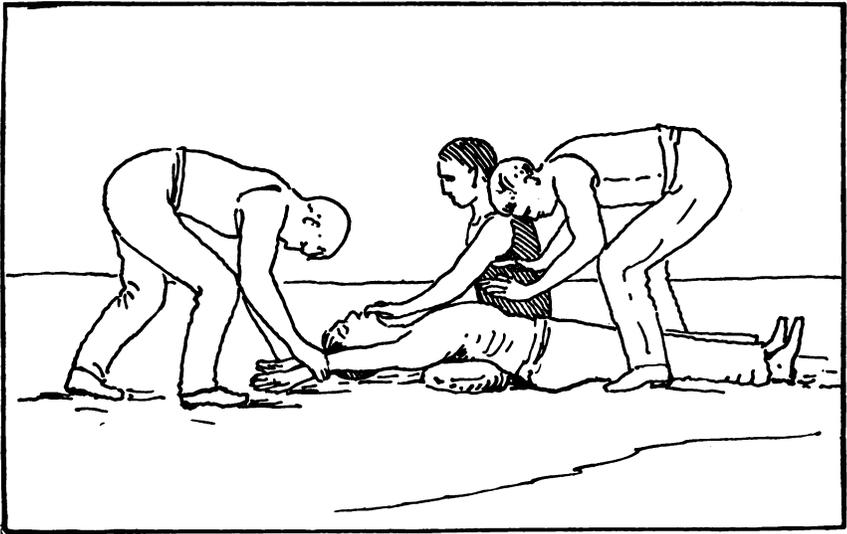


FIG. II.

(which enlarges the capacity of the chest and induces inspiration). (Fig. II.) While this is being done let a third assistant take position astride the patient's hips with his elbows resting upon his own knees, his hands extended ready for action. Next, let the assistant standing at the head turn down the patient's arms to the sides of the body, the assistant holding the tongue changing hands if necessary¹ to let the arms pass. Just before the patient's hands reach the ground the man astride the body will grasp the body with his hands, the balls of the thumb resting on either side of the pit of the stomach, the fingers falling into the grooves between the short ribs. Now, using his knees as a pivot, he will at the moment the patient's hands touch the ground throw (not too suddenly) all his weight forward on his hands, and at the same time squeeze the waist between them as if he wished to force anything in the chest upward out of the mouth; he will deepen the

¹ Changing hands will be found unnecessary after some practice; the tongue, however, must not be released.

pressure while he slowly counts one, two, three, four (about five seconds), then suddenly let go with a final push, which will spring him back to his first position.¹ This completes expiration. (Fig. III.)

At the instant of his letting go, the man at the patient's head will again draw the arms steadily upward to the sides of the patient's head as before (the assistant holding the tongue again changing hands to let the arms pass if necessary), holding them there while he slowly counts one, two, three, four (about five seconds).

Repeat these movements deliberately and perseveringly twelve to fifteen times in every minute—thus imitating the natural motions of breathing.

If natural breathing be not restored after a trial of the bellows movement for the space of about four minutes, then turn the patient a second time on the stomach, as directed in Rule II, rolling the body in the opposite direction from that in which it was first turned, for the pur-

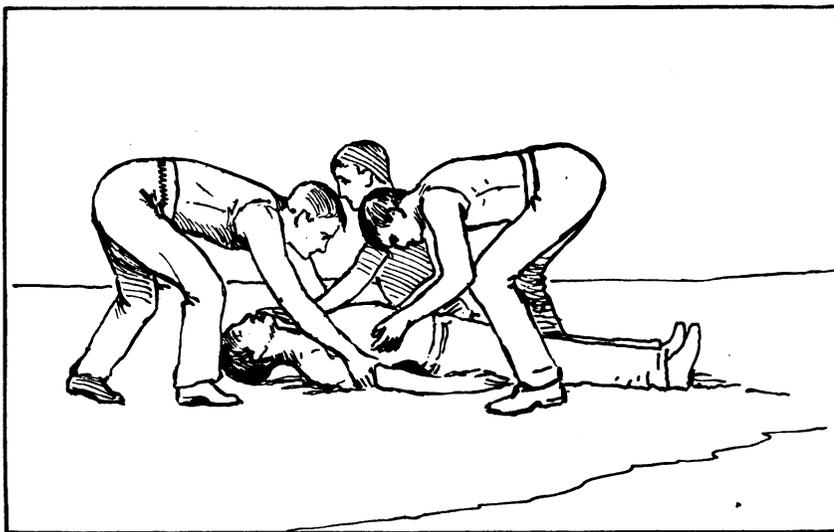


FIG. III.

pose of freeing the air passage from any remaining water. Continue the artificial respiration from one to four hours, or until the patient breathes, according to Rule III; and for a while after the appearance of returning life, carefully aid the first short gasps until deepened into full breaths. Continue the drying and rubbing, which should have been unceasingly practiced from the beginning by assistants, taking care not to interfere with the means employed to produce breathing. Thus the limbs of the patient should be rubbed, always in an upward direction toward the body, with firm-grasping pressure and energy, using the bare hands, dry flannels, or handkerchiefs, and continuing the friction under the blankets or over the dry clothing. The warmth of the body can also be promoted by the application of hot flannels to the stomach and armpits, bottles or bladders of hot water, heated bricks, etc., to the limbs and soles of the feet.

¹ A child or very delicate patient must, of course, be more gently handled.

RULE IV. AFTER-TREATMENT.—*Externally:* As soon as breathing is established let the patient be stripped of all wet clothing, wrapped in blankets only, put to bed comfortably warm, but with a free circulation of fresh air, and left to perfect rest. *Internally:* Give whisky or brandy and hot water in doses of a teaspoonful to a tablespoonful, according to the weight of the patient, or other stimulant at hand, every ten or fifteen minutes for the first hour, and as often thereafter as may seem expedient. *Later manifestations:* After reaction is fully established there is great danger of congestion of the lungs, and if perfect rest is not maintained for at least forty-eight hours, it sometimes occurs that the patient is siezed with great difficulty of breathing, and death is liable to follow unless immediate relief is afforded. In such cases apply a large mustard plaster over the breast. If the patient gasps for breath before the mustard takes effect assist the breathing by carefully repeating the artificial respiration.

MODIFICATION OF RULE III.

[To be used after Rules I and II in case no assistance is at hand.]

TO PRODUCE RESPIRATION.—If no assistance is at hand and one person must work alone, place the patient on his back with the shoulders

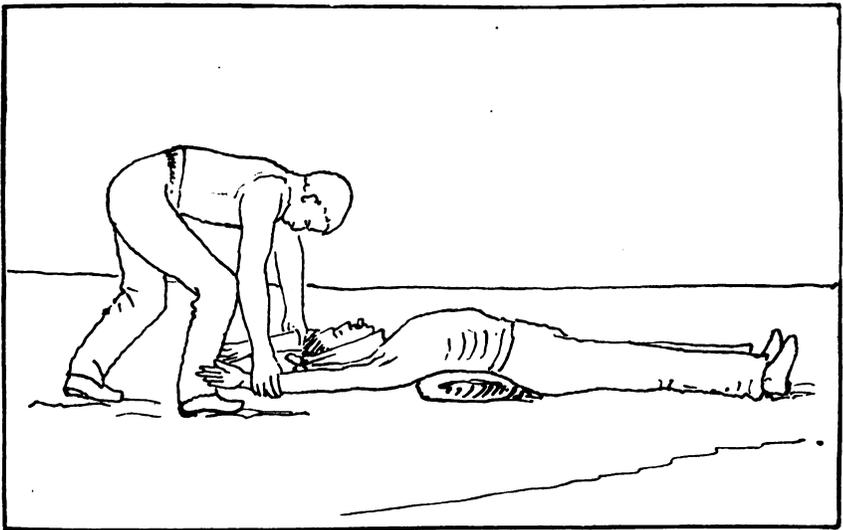


FIG. IV.

slightly raised on a folded article of clothing; draw forward the tongue and keep it projecting just beyond the lips; if the lower jaw be lifted the teeth may be made to hold the tongue in place; it may be necessary to retain the tongue by passing a handkerchief under the chin and tying it over the head.

Grasp the arms just below the elbows and draw them steadily upward by the sides of the patient's head to the ground, the hands nearly meeting. (See Fig. IV.)

Next lower the arms to the side and press firmly downward and inward on the sides and front of the chest over the lower ribs, drawing toward the patient's head. (See Fig. V.)

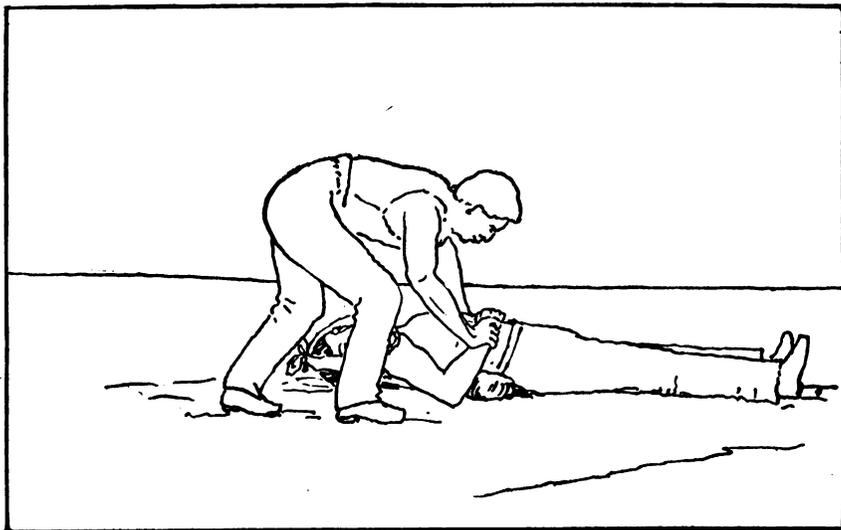


FIG. V.

Repeat these movements twelve to fifteen times every minute, etc.

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WRECKS AND OTHER CASUALTIES

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WRECKS, COLLISIONS, AND OTHER CASUALTIES AT HOME AND ABROAD.

ABSTRACT OF RETURNS OF WRECKS AND OTHER 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, 1901.

REMARKS EXPLANATORY OF THE WRECK STATISTICS FOR THE YEAR 1900-1901.

The following is the twenty-eighth 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 and 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, St. 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, etc., 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 and in foreign waters.

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

1. *Foundering*s—Embracing founderingings 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. *Strandings*—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:

Fire, irrespective of results; scuttling or any intentional damage to vessels; collisions with fields or quantities of ice, although vessels 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 vessels' equipments; capsizing, when vessels 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.

ADDITIONAL STATISTICS FOR THE FISCAL YEAR ENDING JUNE 30, 1900.

Since the publication of the annual statement for the fiscal year ending June 30, 1900, information has been received of the occurrence of disasters during the year to 40 American vessels, involving the loss of 166 lives; also the loss of 3 lives on 3 vessels suffering no other casualty.

Disasters to vessels, and divisions in which they occurred.

Nature of disasters, etc.	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea and in foreign waters.	Total.
Founderingings:						
Vessels.....			1			1
Tonnage.....			319			319
Passengers.....						
Crews.....						
Lives lost.....						
Strandings:						
Vessels.....		5			1	6
Tonnage.....		998			86	1,084
Passengers.....		41				41
Crews.....		81			6	87
Lives lost.....						
Collisions:						
Vessels.....	8			2		10
Tonnage.....	357			173		530
Passengers.....				35		35
Crews.....	24			50		74
Lives lost.....						
Other causes:						
Vessels.....	5		5	5	8	23
Tonnage.....	25,840		4,296	495	7,226	37,857
Passengers.....				57	3	60
Crews.....	603		55	50	91	799
Lives lost.....	142				24	166
Totals:						
Vessels.....	13	5	6	7	9	40
Tonnage.....	26,197	998	4,615	668	7,312	39,790
Passengers.....		41		92	3	136
Crews.....	627	81	55	100	97	960
Lives lost.....	142				24	166

Disasters to vessels, and divisions in which they occurred—Continued.

Nature of disasters, etc.	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea and in foreign waters.	Total.
Vessels totally lost:						
Vessels.....	2	5	2	2	3	14
Tonnage.....	153	998	339	215	2,189	3,894
Passengers.....		41			1	42
Crews.....	3	81		16	23	123
Lives lost.....					24	24
Vessels damaged:						
Vessels.....	11		4	5	6	26
Tonnage.....	26,044		4,276	453	5,123	35,896
Passengers.....				92	2	94
Crews.....	624		55	84	74	837
Lives lost.....	142					142
Vessels not damaged:						
Vessels.....	1			2		3
Tonnage.....	243			215		458
Passengers.....						
Crews.....	9			21		30
Lives lost.....	1			2		3
Aggregate:						
Vessels.....	14	5	6	9	9	43
Tonnage.....	26,440	998	4,615	883	7,312	40,248
Passengers.....		41		92	3	136
Crews.....	636	81	55	121	97	990
Lives lost.....	143			2	24	169

Of the lives lost, reported above, 7 were from the American schooner *Rattler*, of San Francisco, Cal., which cleared from Kodiak, Alaska, on October 9, 1899, for her home port, since which time she has not been heard from; 17 were lost from the American ship *Wachusett*, of San Francisco, Cal., which sailed from New Castle, New South Wales, on May 13, 1900, for Kahulin, Hawaii, since which time she has not been heard from; 142 were lost from the German steamships *Saale*, *Main*, and *Bremen*, which caught fire from burning piers while lying at Hoboken, N. J., on June 30, 1900, and 3 were lost from vessels sustaining no damage, as follows: Two fell overboard, and 1 was caught by machinery in engine room and killed.

As the foregoing could not properly be included in the report for the fiscal year just closed, the general summary table of the previous year, amended so as to include the particulars furnished by the wreck reports relative to the disasters mentioned above, is reprinted. The table will be convenient for comparison with the corresponding table in the statements of the present and other years.

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 year ending June 30, 1900.

Nature of disaster, etc.	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea and in foreign waters.	Total.
<i>Foundering.</i>						
Number of vessels.....	51	3	15	15	9	93
Tonnage of vessels totally lost.....	4,682	409	2,373	426	5,387	13,277
Tonnage of vessels damaged.....	1,460	91	626	366		2,543
Value of vessels.....dollars..	145,190	41,000	57,000	52,050	142,600	437,840
Value of cargoes.....do.....	35,885	15,200	11,725	9,300	31,745	103,855
Loss to vessels.....do.....	95,540	36,200	49,200	32,800	142,600	356,340
Loss to cargoes.....do.....	31,935	15,200	8,420	8,800	31,745	96,100
Insurance on vessels.....do.....	71,950	5,000		8,500	41,650	127,100
Insurance on cargoes.....do.....	8,735		3,100		17,700	29,535
Laden.....	30	3	8	3	8	52

Summary of disasters to vessels which occurred on and near the coasts, etc.—Continued.

Nature of disaster, etc.	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea and in foreign waters.	Total.
<i>Foundering—Continued.</i>						
In ballast	21		7	12	1	41
Wrecks involving total loss	35	2	12	7	9	65
Casualties involving partial and unknown damage	16	1	3	8		28
Number of passengers	10		3	19	1	33
Number in crews	210	13	72	107	71	473
Total on board	220	13	75	126	72	506
Number of lives lost	37		9	4	25	75
<i>Strandings.</i>						
Number of vessels	165	38	67	10	38	318
Tonnage of vessels totally lost	34,523	6,480	2,743	44	11,093	54,883
Tonnage of vessels damaged	45,157	9,962	88,581	5,986	11,365	161,051
Value of vessels.....dollars	4,764,675	785,300	4,782,100	397,600	1,290,700	12,020,375
Value of cargoes.....do	2,693,895	292,580	1,515,670	56,100	342,540	4,900,785
Loss to vessels.....do	1,594,020	363,900	313,975	36,990	573,300	2,882,185
Loss to cargoes.....do	1,988,070	196,185	53,890	580	72,880	2,311,605
Insurance on vessels.....do	1,592,325	283,125	2,816,000	341,800	689,400	5,722,650
Insurance on cargoes.....do	727,035	91,820	590,290	17,440	106,090	1,532,675
Laden	115	30	55	4	27	231
In ballast	50	8	12	6	11	87
Wrecks involving total loss	97	22	12	1	27	159
Casualties involving partial and unknown damage	68	16	55	9	11	159
Number of passengers	713	142	237	41	786	1,919
Number in crews	1,588	524	896	216	506	3,730
Total on board	2,301	666	1,133	257	1,292	5,649
Number of lives lost	44	2			1	47
<i>Collisions.</i>						
Number of vessels	246	25	100	28	28	427
Tonnage of vessels totally lost	5,754	35	1,573	267	4,542	12,171
Tonnage of vessels damaged	165,161	18,131	146,628	16,756	20,782	367,458
Value of vessels.....dollars	13,485,705	1,132,375	8,089,300	395,500	1,147,200	24,250,080
Value of cargoes.....do	2,979,225	63,400	1,082,870	86,050	384,850	4,596,395
Loss to vessels.....do	1,258,170	16,475	197,985	34,270	223,085	1,728,985
Loss to cargoes.....do	44,395	210	11,100	1,350	171,050	228,105
Insurance on vessels.....do	6,709,550	686,000	3,611,050	140,600	524,505	11,671,705
Insurance on cargoes.....do	1,632,410		680,865	54,600	166,990	2,534,865
Laden	97	12	48	7	20	184
In ballast	113	9	41	15	2	180
Unknown whether laden or not	36	4	11	6	6	63
Wrecks involving total loss	19	1	5	2	7	34
Casualties involving partial and unknown damage	227	24	95	26	21	393
Number of passengers	3,980	235	122	128	712	5,177
Number in crews	2,950	392	1,320	285	434	5,381
Total on board	6,930	627	1,442	413	1,146	10,558
Number of lives lost	14		6	4	2	26
<i>Other causes.</i>						
Number of vessels	120	24	79	97	116	436
Tonnage of vessels totally lost	7,059	1,564	1,466	4,886	17,475	32,450
Tonnage of vessels damaged	92,228	15,613	72,619	21,782	85,399	287,641
Value of vessels.....dollars	8,139,865	967,040	4,654,700	1,602,810	4,720,000	20,084,415
Value of cargoes.....do	1,332,680	659,950	495,760	1,084,890	2,017,545	5,590,825
Loss to vessels.....do	1,472,960	120,200	309,535	361,485	950,295	3,214,475
Loss to cargoes.....do	178,325	26,580	53,710	246,260	277,215	782,090
Insurance on vessels.....do	2,925,000	723,375	2,924,805	698,200	2,686,650	9,958,030
Insurance on cargoes.....do	616,880	22,000	350,380	672,400	875,710	2,537,370
Laden	70	14	36	44	98	262
In ballast	50	10	43	53	18	174
Wrecks involving total loss	28	5	11	33	25	102
Casualties involving partial and unknown damage	92	19	68	64	91	334
Number of passengers	1,937	591	342	718	719	4,307
Number in crews	2,146	425	872	1,497	2,114	7,054
Total on board	4,083	1,016	1,214	2,215	2,833	11,361
Number of lives lost	162	1		10	97	270
<i>Recapitulation.</i>						
Number of vessels	582	90	261	150	191	1,274
Tonnage of vessels totally lost	52,018	8,488	8,155	5,623	38,497	112,781
Tonnage of vessels damaged	304,006	43,797	308,454	44,890	117,546	818,693
Aggregate tonnage	356,024	52,285	316,609	50,513	156,043	931,474

Summary of disasters to vessels which occurred on and near the coasts, etc.—Continued.

Nature of disaster, etc.	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea and in foreign waters.	Total.
<i>Recapitulation—Continued.</i>						
Laden.....	312	59	147	58	153	729
In ballast.....	234	27	103	86	32	482
Unknown whether laden or not.....	36	4	11	6	6	63
Wrecks involving total loss.....	179	30	40	43	68	360
Casualties involving partial and unknown damage.....	403	60	221	107	123	914
Number of passengers.....	6,640	968	704	906	2,218	11,436
Number in crews.....	6,894	1,354	3,160	2,105	3,125	16,638
Total on board.....	13,534	2,322	3,864	3,011	5,343	28,074
Number of lives lost.....	257	3	15	18	125	^a 418
Total value of vessels.....dollars.	26,535,435	2,925,715	17,583,100	2,447,960	7,300,500	56,792,710
Total value of cargoes.....do.....	7,041,685	1,031,130	3,106,025	1,236,340	2,776,680	15,191,860
Aggregate.....do.....	33,577,120	3,956,845	20,689,125	3,684,300	10,077,180	71,984,570
Total losses to vessels.....do.....	4,420,690	536,775	870,695	465,545	1,889,280	8,182,985
Total losses to cargoes.....do.....	2,242,725	238,175	127,120	256,990	552,890	3,417,900
Aggregate.....do.....	6,663,415	774,950	997,815	722,535	2,442,170	11,600,885
Total insurance on vessels.....do.....	11,298,825	1,697,500	9,351,855	1,189,100	3,942,205	27,479,485
Total insurance on cargoes.....do.....	2,985,060	113,820	1,624,635	744,440	1,166,490	6,634,445
Aggregate.....do.....	14,283,885	1,811,320	10,976,490	1,933,540	5,108,695	34,113,930

^a In addition to the number of lives lost here reported, 219 lives were lost in cases where no other casualty occurred to the vessels, making the total number of lives lost 637.

COMPARATIVE STATEMENT.

The subjoined table shows, 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 1899-1900 and 1900-1901, with the percentage of increase or decrease of the latter compared with the former:

	1899-1900.	1900-1901.	Increase (+). Decrease (-).
Number of vessels involved:			
Atlantic and Gulf coasts.....	569	556	- 2.28
Pacific coast.....	85	104	+ 22.35
Great Lakes.....	255	277	+ 8.62
Rivers.....	143	140	- 2.10
At sea and in foreign waters.....	182	188	+ 3.30
Aggregate.....	1,234	1,265	+ 2.51
Value of vessels and cargoes:			
Atlantic and Gulf coasts.....	\$31,156,595	\$22,728,100	- 27.05
Pacific coast.....	3,858,345	5,702,825	+ 47.81
Great Lakes.....	20,342,125	20,799,385	+ 2.25
Rivers.....	3,622,750	3,896,150	+ 7.55
At sea and in foreign waters.....	9,694,730	17,671,610	+ 84.18
Aggregate.....	68,574,545	70,891,070	+ 3.38
Losses to vessels and cargoes:			
Atlantic and Gulf coasts.....	5,805,440	2,579,090	- 55.57
Pacific coast.....	678,450	2,130,780	+214.06
Great Lakes.....	985,065	1,727,565	+ 75.38
Rivers.....	685,815	611,910	- 10.78
At sea and in foreign waters.....	2,382,720	2,085,150	- 14.58
Aggregate.....	10,537,490	9,084,495	- 13.79

Comparative statement—Continued.

	1899-1900.	1900-1901.	Increase (+). Decrease (-).
Tonnage of vessels involved:			
Atlantic and Gulf coasts.....	329,827	327,883	- 0.59
Pacific coast.....	51,287	67,913	+ 32.42
Great Lakes.....	311,994	322,546	+ 3.38
Rivers.....	49,845	59,825	+ 20.02
At sea and in foreign waters.....	148,731	242,389	+ 62.97
Aggregate.....	891,684	1,020,556	+ 14.45
Tonnage of vessels totally lost:			
Atlantic and Gulf coasts.....	51,865	34,573	- 33.34
Pacific coast.....	7,490	20,222	+169.98
Great Lakes.....	7,816	18,533	+137.12
Rivers.....	5,408	5,106	- 5.58
At sea and in foreign waters.....	36,308	24,193	- 33.37
Aggregate.....	108,887	102,627	- 5.75

On the 30th of June, 1901, the total number of registered, enrolled, and licensed vessels belonging to the United States was 23,322, with a total tonnage of 5,441,150. Of this number 1,206 vessels, having a total tonnage of 872,278, met with casualties during the year, being 5.17 per cent of the total number.

The following exhibit shows the number of steam and sailing vessels and barges, registered, enrolled, and licensed, belonging to the United States on June 30, 1901, the number of each class which met with disasters during the year, and the ratio of casualties to the number of vessels:

Classification.	Number of vessels belonging to the United States.	Number of casualties to vessels.	Ratio of casualties to number of vessels.
Steam vessels.....	7,414	560	1 to 13.24
Sailing vessels.....	13,231	572	1 to 23.13
Barges.....	2,677	74	1 to 36.18
Total.....	23,322	1,206	1 to 19.34

During the year 406 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, etc.) the actual number of casualties of this nature was a little less than one-half that number.

Fifty foreign vessels, having an aggregate tonnage of 108,524, met with disasters in American waters during the year. The nationalities, values involved, etc., of these vessels are given in certain of the accompanying tables.

Besides the foreign vessels above reported, 10 others collided with American vessels at sea, involving a tonnage of 39,754.

In addition to the lives lost in the disasters to vessels which are embraced in the tables, 244 persons perished by drowning or by accident on board out of crews employed on 220 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 other purposes. In some instances lives were

lost by falling to the deck from aloft and by being struck by spars, tackling, etc., falling or swinging, owing to the giving way of rigging. These vessels are not included in any of the tables except 64 and 65.

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 twenty-six fiscal years:

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.....	1,553	18,184	878	1 to 20.65	1 to 1.77
1876-77.....	1,547	22,307	826	1 to 27.00	1 to 1.87
1877-78.....	1,483	21,531	644	1 to 33.43	1 to 2.30
1878-79.....	1,545	23,353	730	1 to 31.99	1 to 2.12
1879-80.....	1,624	26,491	469	1 to 56.48	1 to 3.46
1880-81.....	1,528	24,286	623	1 to 38.98	1 to 2.45
1881-82.....	1,514	25,712	502	1 to 51.22	1 to 3.02
1882-83.....	1,416	25,197	539	1 to 46.75	1 to 2.63
1883-84.....	1,647	26,561	807	1 to 32.91	1 to 2.04
1884-85.....	1,407	29,584	335	1 to 88.31	1 to 4.20
1885-86.....	1,650	25,690	576	1 to 44.58	1 to 2.86
1886-87.....	1,494	23,992	529	1 to 45.35	1 to 2.82
1887-88.....	1,461	22,717	538	1 to 42.22	1 to 2.72
1888-89.....	1,468	25,097	638	1 to 39.34	1 to 2.30
1889-90.....	1,419	28,331	548	1 to 51.70	1 to 2.59
1890-91.....	1,431	33,734	447	1 to 75.64	1 to 3.20
1891-92.....	1,496	23,924	646	1 to 37.03	1 to 2.32
1892-93.....	1,421	26,059	397	1 to 65.64	1 to 3.58
1893-94.....	1,551	31,687	664	1 to 47.72	1 to 2.33
1894-95.....	1,437	27,233	689	1 to 39.53	1 to 2.09
1895-96.....	1,311	25,454	322	1 to 79.05	1 to 4.07
1896-97.....	1,149	20,712	299	1 to 69.27	1 to 3.84
1897-98.....	1,191	28,562	743	1 to 38.44	1 to 1.60
1898-99.....	1,574	29,940	742	1 to 40.35	1 to 2.12
1899-1900.....	1,234	26,978	252	1 to 107.05	1 to 4.90
1900-1901.....	1,265	32,300	437	1 to 73.91	1 to 2.89

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

The following table is the same as the foregoing, except that it is confined to our own domain, the disasters occurring at sea and in foreign waters being excluded:

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.....	1,139	13,487	501	1 to 26.92	1 to 2.27
1876-77.....	1,023	15,977	278	1 to 57.47	1 to 3.68
1877-78.....	1,083	16,785	403	1 to 41.65	1 to 2.69
1878-79.....	1,044	16,245	222	1 to 73.18	1 to 4.70
1879-80.....	1,265	21,691	170	1 to 127.59	1 to 7.44
1880-81.....	1,171	19,713	272	1 to 72.47	1 to 4.31
1881-82.....	1,203	20,495	241	1 to 85.04	1 to 4.99
1882-83.....	1,090	20,623	328	1 to 62.88	1 to 3.32
1883-84.....	1,246	20,364	327	1 to 62.28	1 to 3.81
1884-85.....	1,066	24,302	107	1 to 227.12	1 to 9.96
1885-86.....	1,269	21,076	266	1 to 79.23	1 to 4.77
1886-87.....	1,196	20,538	302	1 to 68.00	1 to 3.96
1887-88.....	1,175	18,635	235	1 to 79.30	1 to 5.00
1888-89.....	1,158	19,792	253	1 to 78.23	1 to 4.58
1889-90.....	1,176	25,261	269	1 to 93.91	1 to 4.37
1890-91.....	1,205	30,181	343	1 to 88.25	1 to 3.51
1891-92.....	1,231	19,676	197	1 to 99.88	1 to 6.25
1892-93.....	1,177	21,653	203	1 to 106.67	1 to 5.80
1893-94.....	1,271	27,152	379	1 to 71.64	1 to 3.35
1894-95.....	1,150	21,787	197	1 to 110.59	1 to 6.84
1895-96.....	1,076	21,439	145	1 to 147.86	1 to 7.42
1896-97.....	943	17,005	120	1 to 141.71	1 to 7.86
1897-98.....	1,000	24,285	227	1 to 106.98	1 to 4.40
1898-99.....	1,365	25,323	472	1 to 53.65	1 to 2.89
1899-1900.....	1,052	21,735	151	1 to 143.94	1 to 6.96
1900-1901.....	1,077	25,419	274	1 to 92.77	1 to 3.83

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

STATISTICAL TABLES FOR THE FISCAL YEAR ENDING JUNE 30, 1901.

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, 1901, showing the number and value of vessels and cargoes, and amount of loss to same, where known.*

Months.	Number and value of vessels.		Vessels, value un-known.	Number and value of cargoes.		Cargoes, value un-known.	Un-known whether laden or not.
	Number.	Amount.		Number.	Amount.		
July	35	\$1,181,200	1	17	\$365,540	.....	1
August	24	1,355,840	3	11	123,380	.....	3
September	59	870,825	3	28	200,990	.....	3
October	56	1,349,230	4	31	413,110	3	4
November	43	471,900	3	24	64,610	2	3
December	64	2,939,080	3	41	582,100	2	3
January	53	2,658,900	5	29	283,110	4	5
February	27	916,000	3	13	67,230	2	3
March	51	1,723,325	7	25	513,780	1	7
April	52	2,830,850	7	33	544,800	3	7
May	23	775,900	1	13	185,560	.....	1
June	29	2,040,100	.....	12	352,740	.....	.....
Total	516	19,164,150	40	277	3,656,950	17	40

Months.	Loss to vessels.		Vessels totally lost, amount un-known.	Vessels damaged, amount un-known.*	Loss to cargoes.		Cargoes totally lost, amount un-known.	Cargoes not damaged, or damage un-known.
	Num-ber.	Amount.			Num-ber.	Amount.		
July	31	\$78,995	.....	5	10	\$52,985	.....	8
August	21	218,890	.....	6	5	23,600	.....	9
September	58	383,745	.....	5	21	53,505	.....	10
October	55	135,835	.....	5	20	42,690	.....	18
November	42	81,315	.....	4	16	11,280	.....	13
December	59	124,980	.....	8	18	26,150	.....	28
January	50	162,305	.....	8	13	28,450	.....	25
February	25	41,805	.....	5	4	4,795	.....	14
March	50	223,935	.....	8	13	148,065	.....	20
April	50	190,270	.....	9	12	48,340	.....	51
May	23	70,450	.....	1	9	16,360	.....	6
June	27	205,075	.....	2	6	205,870	.....	18
Total	491	1,917,000	.....	65	147	662,090	.....	187

* 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, 1901, showing the number of vessels totally lost, the number damaged and their tonnage, the number of persons on board, and number of lives lost.

Months.	Disasters resulting in total loss to vessels.	Disasters resulting in partial damage to vessels.	Total or partial loss unknown.	Casualties resulting in no damage to vessels.	Total.	Tonnage of vessels totally lost.	Tonnage of vessels damaged.	Number of passengers.	Number in crews, including master, etc.	Number of lives lost.
July.....	6	25	.....	5	36	570	16,155	2,391	344	3
August.....	8	13	3	3	27	3,243	15,250	617	270	.....
September.....	35	23	3	1	62	7,717	28,486	366	296	6
October.....	28	27	4	1	60	3,870	25,966	194	458	2
November.....	7	35	3	1	46	302	18,702	40	262	13
December.....	23	36	4	4	67	4,313	30,931	936	718	8
January.....	7	43	5	3	58	3,546	36,259	238	591	.....
February.....	6	19	3	2	30	507	15,174	287	210	.....
March.....	14	36	7	1	58	4,069	38,156	35	455	3
April.....	12	38	7	2	59	1,917	42,618	832	782	6
May.....	11	12	1	.....	24	1,799	7,684	426	340	3
June.....	5	22	.....	2	29	2,720	17,929	1,742	589	5
Total.....	162	329	40	25	556	34,573	293,310	8,104	5,318	49

TABLE 3.—Abstract of returns of disasters to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, showing the number of vessels and cargoes insured and uninsured, and the amount of insurance, where known.

Months.	Vessels reported insured.		Cargoes reported insured.		Total amount of insurance.	Reported not insured.		Unknown whether insured or not.		Vessels in ballast.
	Number.	Amount.	Number.	Amount.		Ves-sels.	Cargo-es.	Ves-sels.	Cargo-es.	
July.....	12	\$575,000	6	\$233,400	\$808,400	18	7	6	5	18
August.....	14	618,700	4	97,005	715,705	9	4	4	6	13
September.....	20	328,600	7	82,000	410,600	28	13	14	11	31
October.....	23	806,800	13	293,465	1,100,265	26	11	11	14	22
November.....	13	209,500	5	26,835	236,335	27	10	6	14	17
December.....	23	1,681,750	14	431,225	2,112,975	35	17	9	15	21
January.....	18	1,128,965	9	179,640	1,308,605	27	7	13	22	20
February.....	12	513,000	7	59,465	572,465	13	3	5	8	12
March.....	27	897,800	5	48,800	946,600	11	5	20	23	25
April.....	26	1,278,150	15	371,000	1,649,150	18	10	15	18	16
May.....	9	246,000	1	3,000	249,000	9	3	6	10	10
June.....	18	1,544,750	2	103,470	1,648,220	9	4	2	6	17
Total.....	215	9,829,015	88	1,929,305	11,758,320	230	94	111	152	222

TABLE 4.—Abstract of returns of disasters to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, distinguishing the nature of each casualty.

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered.....	3	2	23	3	2	6	1	1	1	3	4	2	51
Stranded.....	7	17	28	14	13	16	9	17	14	12	14	8	182
Collided.....	17	12	12	22	14	20	30	10	30	30	4	12	213
Abandoned.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Capsized.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	4
Damage to hull, masts, rigging, etc.....	.....	1	2	2	1	2	2	2	1	1	.....	.....	14
Damage to machinery.....	.....	1	1	.....	2	3	2	1	1	3	1	3	18
Explosion of boiler and bursting of steam pipes.....	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	4
Explosion of gases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	2
Fire.....	4	2	2	3	5	.....	4	6	2	5	1	2	35
Sprung aleak.....	.....	.....	.....	.....	3	.....	.....	.....	.....	1	.....	.....	4
Struck bridge, sunken wreck, wharf, etc.....	3	1	4	2	3	2	1	2	3	1	.....	1	23
Waterlogged.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Miscellaneous.....	.....	1	.....	.....	.....	.....	1	.....	1	.....	1	.....	4
Total.....	36	27	62	60	46	67	58	30	58	50	24	29	556

TABLE 5.—Abstract of returns of disasters (excluding collisions) to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, distinguishing the cause of each disaster.

Class and cause of disaster.	Found-ings.	Strand-ings.	Other causes.	Missing.	Total.
CLASS 1.—Causes connected with the weather:					
Calms, currents, and tides		6			6
Darkness		6			6
Fog		34			34
Gales, hurricanes, etc	29	76	25		130
Heavy sea	1	2	2		5
Snowstorms		6			6
Total of class 1	30	130	27		187
CLASS 2.—Causes connected with vessels, equipment, or stowage:					
Defective chart		1			1
Error in compass		2			2
Total of class 2		3			3
CLASS 3.—Causes connected with navigation and seamanship:					
Error of masters, officers, and crews		12			12
Error of pilots		1			1
Total of class 3		13			13
CLASS 4.—Causes connected with machinery or boilers:					
Damage to machinery			18		18
Explosion of boilers and bursting of steam pipes			4		4
Total of class 4			22		22
CLASS 5.—Other causes:					
Absence of lights or buoys		3			3
Explosion of gases			2		2
Fire			35		35
Ice		1			1
Missed stays		6			6
Sprung a leak	17	8	3		28
Struck bridge, rock, sunken wreck, wharf, etc		8	17		25
Waterlogged			1		1
Miscellaneous	3	8	3		14
Unknown	1	2			3
Total of class 5	21	36	61		118
Aggregate	51	182	110		343

TABLE 6.—Abstract of returns of disasters to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, 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		2			5	2	4	4	4		2	26
Bad management		1						1				2	4
Carelessness						1							1
Darkness	1					2				2			5
Error of officers, masters, and crews	1		1				1		1				4
"Fault of other vessel"	2	2	3	10	5		14	2	11	7		3	67
Fault of tug towing						2	2						2
Fog	2			3		2	2						17
High and baffling winds		2		2	6	4	4		2	5	2		24
Misunderstanding signals				1			1		2				4
Missed stays			1										1
Tides, currents, etc		2								2		2	6
Unavoidable							2						2
Miscellaneous	1												1
Unknown	1	5	5	6	3	2	6	3	10	7		1	49
Total	17	12	12	22	14	20	30	10	30	30	4	12	213

TABLE 7.—Abstract of returns of disasters to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, 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	16	3	2	4	5	4	4	5	3	.....	48
Barks.....	.....	1	2	.....	1	.....	2	.....	3	1	.....	.....	10
Barkentines.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ferryboats.....	1	2	2	.....	1	.....	3	1	1	1	.....	4	16
Schooners.....	13	8	24	34	27	45	30	13	28	27	11	11	271
Scows.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Sloops.....	.....	1	3	4	2	3	1	.....	1	1	2	.....	18
Steamers.....	19	12	14	18	12	13	17	12	21	25	7	12	182
Steam canal boats.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Steam yachts.....	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	3
Yachts.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	5
Total.....	36	27	62	60	46	67	58	30	58	59	24	29	556

TABLE 8.—Abstract of returns of disasters to Foreign vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, showing nationality and description and distinguishing those totally lost and those partially damaged.

Nationality and rig.	July.		August.		Septem-ber.		Octo-ber.		Novem-ber.		Decem-ber.		Janu-ary.	
	Total loss.	Partial loss.												
Austrian steamship.....
Belgian steamship.....	1
British barks.....	1
British schooners.....
British steamships.....	1	1	1	3	1
Danish bark.....	1	3
French steamships.....
German steamships.....	1
Italian barks.....
Norwegian barks.....	1
Norwegian steamships.....
Spanish steamships.....
Total.....	1	1	2	2	3	2	2	3	1	3
Aggregate.....	1	3	5	2	2	3	4

Nationality and rig.	Feb-ruary.		March.		April.		May.		June.		Total.		Aggre-gate.
	Total loss.	Partial loss.											
Austrian steamship.....	1	.....	.....	.....	.....	.....	.....	.....	1	1
Belgian steamship.....	1	1
British barks.....	1	1
British schooners.....	2	1	1	.....	.....	1	1	2	8	10
British steamships.....	2	.....	.....	.....	.....	1	.....	3	11	13
Danish bark.....	1	.....	.....	.....	.....	1	.....	1
French steamships.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
German steamships.....	1	.....	1	.....	.....	.....	.....	.....	3	3
Italian barks.....	1	.....	1	.....	.....	.....	1	.....	1	2
Norwegian barks.....	1	.....	.....	1
Norwegian steamships.....	2	.....	.....	.....	.....	.....	.....	.....	2	2
Spanish steamships.....	1	1
Total.....	1	.....	9	1	3	1	.....	1	1	7	30	37
Aggregate.....	1	.....	9	.....	4	.....	1	.....	2	.....	37	.....	.....

TABLE 9.—Abstract of returns of disasters to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, showing the tonnage and distinguishing the number of those totally lost and those partially damaged.

Burden of vessels.	July.		August.		Septem-ber.		Octo-ber.		Novem-ber.		Decem-ber.		Janu-ary.	
	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	6	4	2	11	3	10	1	4	5	12	3	1	7
Over 50 and not exceeding 100 tons.....	1	5	1	1	1	5	6	3	3	11	4	4	1	3
Over 100 and not exceeding 200 tons.....	.....	4	1	3	5	4	6	7	3	2	10	.....	.....	5
Over 200 and not exceeding 300 tons.....	.....	4	.....	.....	9	4	3	4	.....	3	4	.....	.....	9
Over 300 and not exceeding 400 tons.....	.....	.....	.....	.....	7	1	1	3	.....	3	1	3	1	5
Over 400 and not exceeding 500 tons.....	1	.....	1	.....	.....	1	1	.....	3	1	2	.....	.....	2
Over 500 and not exceeding 600 tons.....	.....	.....	1	.....	.....	1	1	1	.....	3	1	.....	.....	2
Over 600 and not exceeding 700 tons.....	.....	3	.....	.....	.....	1	.....	.....	3	.....	1	.....	.....	2
Over 700 and not exceeding 800 tons.....	.....	1	.....	2	.....	.....	1	.....	1	.....	1	.....	.....	2
Over 800 and not exceeding 900 tons.....	.....	1	.....	2	.....	1	.....	.....	.....	1	3	.....	.....	.....
Over 900 and not exceeding 1,000 tons.....	.....	.....	.....	.....	1	.....	.....	3	.....	.....	.....	.....	.....	4
Over 1,000 and not exceeding 1,100 tons.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Over 1,100 and not exceeding 1,200 tons.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Over 1,200 and not exceeding 1,300 tons.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Over 1,300 and not exceeding 1,400 tons.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Over 1,400 tons .....	.....	4	.....	2	.....	4	.....	6	.....	2	.....	8	.....	6
Unknown.....	.....	1	.....	1	.....	1	.....	1	.....	2	.....	2	.....	3
Total.....	6	30	8	19	35	27	28	32	7	39	23	44	7	51
Aggregate.....	36		27		62		60		46		67		58	

Burden of vessels.	Febru-ary.		March.		April.		May.		June.		Total.		Aggre-gate.
	Total loss.	Partial loss.											
Not exceeding 50 tons	4	3	4	4	2	4	4	2	2	2	62	42	104
Over 50 and not exceeding 100 tons.....	.....	3	1	2	4	5	2	2	1	6	25	50	75
Over 100 and not exceeding 200 tons.....	2	6	3	6	4	10	2	3	.....	3	23	67	90
Over 200 and not exceeding 300 tons.....	.....	1	1	6	1	4	.....	1	.....	2	17	38	55
Over 300 and not exceeding 400 tons.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	12	23	35
Over 400 and not exceeding 500 tons.....	.....	2	1	2	.....	1	1	1	.....	2	6	16	22
Over 500 and not exceeding 600 tons.....	.....	.....	2	2	.....	.....	.....	.....	1	.....	5	10	15
Over 600 and not exceeding 700 tons.....	.....	.....	.....	4	.....	2	.....	.....	.....	2	.....	18	18
Over 700 and not exceeding 800 tons.....	.....	1	1	2	1	1	.....	.....	.....	.....	4	11	15
Over 800 and not exceeding 900 tons.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	2	11	13
Over 900 and not exceeding 1,000 tons.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	8	9
Over 1,000 and not exceeding 1,100 tons.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	5	6
Over 1,100 and not exceeding 1,200 tons.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	5	5
Over 1,200 and not exceeding 1,300 tons.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	4
Over 1,300 and not exceeding 1,400 tons.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	4	5
Over 1,400 tons .....	.....	4	.....	10	.....	8	.....	3	1	4	3	61	64
Unknown.....	.....	2	.....	1	.....	5	.....	1	.....	1	.....	21	21
Total.....	6	24	14	44	12	47	11	13	5	24	162	394	556
Aggregate.....	30		58		59		24		29		556		

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, 1901, showing the number of vessels and distinguishing age.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 5 years.....	3	5	11	7	4	2	6	3	13	2	3	6	77
Over 5 and not exceeding 10 years.....	4	5	15	4	5	3	2	4	9	7	2	7	75
Over 10 and not exceeding 15 years.....	5	3	3	4	7	2	2	2	7	5	1	1	51
Over 15 and not exceeding 20 years.....	8	1	10	10	7	11	9	5	11	10	4	4	91
Over 20 and not exceeding 25 years.....	4	1	3	4	3	5	5	2	2	2	2	2	37
Over 25 and not exceeding 30 years.....	5	2	10	10	10	7	11	3	6	11	4	4	81
Over 30 and not exceeding 35 years.....	3	2	4	12	7	11	5	1	1	5	4	2	67
Over 35 and not exceeding 40 years.....	3	2	2	3	2	3	1	1	1	3	1	1	25
Over 40 and not exceeding 45 years.....	1	2	1	2	1	2	1	1	1	1	1	1	16
Over 45 and not exceeding 50 years.....	2	2	1	2	1	2	2	2	2	1	1	1	9
Over 50 years.....	2	2	1	1	2	3	3	2	2	4	1	1	21
Unknown.....	2	1	1	1	2	3	3	2	2	4	1	1	21
Total.....	36	27	62	60	46	67	58	30	58	59	24	29	556

TABLE 11.—Abstract of returns of disasters to vessels on the Atlantic and Gulf coasts during the year ending June 30, 1901, showing the number of vessels and distinguishing their cargoes.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ballast.....	18	13	31	22	17	21	20	12	25	16	10	17	222
Asphalt.....	3	2	7	5	4	11	8	6	8	9	3	3	69
Coal.....	1	1	5	1	1	1	1	1	1	1	1	1	11
Chemicals.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Cotton, cotton seed, etc.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Copper ore.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Fertilizers.....	2	1	1	1	3	3	2	1	1	5	3	2	25
Fish, oysters, etc.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Fruits.....	2	1	1	1	1	1	1	1	1	1	1	1	11
Grain.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Hides.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Ice.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Iron, iron ore, etc.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Lead ore.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Lime.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Logwood.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Lumber.....	2	1	5	7	12	10	12	3	6	4	1	1	64
Mahogany.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Merchandise (general).....	5	1	1	4	1	4	4	1	2	7	1	1	31
Naval stores.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Petroleum.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Provisions.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Sand, plaster, etc.....	1	1	1	5	1	1	1	1	1	2	1	1	10
Stone, brick, etc.....	1	1	1	4	1	3	1	1	1	1	1	1	10
Sugar, molasses, etc.....	1	1	1	1	1	1	1	1	1	1	1	1	11
Wood.....	1	1	1	1	1	2	1	1	1	1	1	1	11
Miscellaneous.....	1	3	5	3	4	3	3	2	3	4	2	4	33
Unknown.....	1	3	3	4	3	3	3	2	7	7	1	1	40
Total.....	36	27	62	60	46	67	58	30	58	59	24	29	556

TABLE 12.—Summary ATLANTIC and GULF coasts.

Nature of casualties.	Number of vessels.		Tonnage of vessels.		Aggregate tonnage.	Laden.	Ballast.	Unknown whether laden or not.	Wrecks involving total loss.	Casualties involving partial and unknown damage. ^a	Number of passengers.	Number in crews.	Total on board.	Number of lives lost.
	Totally lost.	Damaged.												
Foundering.....	51	6,765	1,453	8,218	34	17	.....	36	15	248	205	453	9
Strandings.....	182	20,673	46,133	66,806	114	68	.....	89	93	2,636	1,432	4,068	25
Vessels collided	213	3,102	199,965	203,067	99	74	40	15	198	4,091	2,496	6,587	9	
Other causes.....	110	4,033	45,759	49,792	47	63	.....	22	88	1,129	1,185	2,314	6
Total	556	34,573	298,310	327,883	294	222	40	162	394	8,104	5,318	13,422	49	

^aIn 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 and disasters to vessels on the Pacific Coast during the year ending June 30, 1901, showing the number and value of vessels and cargoes and amount of loss to same where known.

Months.	Number and value of vessels.		Vessels, value unknown.	Number and value of cargoes.		Cargoes, value unknown.	Unknown whether laden or not.
	Number.	Amount.		Number.	Amount.		
July	5	\$181,000	.....	4	\$57,920	.....	.....
August	4	19,500	.....	3	1,625	.....	.....
September.....	18	449,500	.....	8	384,015	.....	.....
October.....	15	564,850	1	8	84,290	1	1
November.....	10	475,350	.....	3	272,500	.....	1
December.....	13	514,200	.....	5	38,500	.....	.....
January.....	12	890,050	2	7	80,125	.....	2
February.....	4	594,800	.....	3	404,500	.....	.....
March.....	8	213,800	1	5	39,000	.....	1
April.....	5	146,000	.....	3	61,100	.....	.....
May.....	3	78,000	.....	1	20,000	.....	.....
June.....	3	86,000	.....	3	46,200	.....	.....
Total	100	4,213,050	4	53	1,489,775	1	5

Months.	Loss to vessels.		Vessels totally lost, amount unknown.	Vessels damaged, amount unknown.*	Loss to cargoes.		Cargoes totally lost, amount unknown.	Cargoes not damaged, or damage unknown.
	Number.	Amount.			Number.	Amount.		
July.....	5	\$43,900	.....	.....	2	\$19,000	.....	2
August.....	4	19,500	.....	.....	3	810	.....	.....
September.....	18	299,100	.....	.....	4	21,350	.....	4
October.....	15	141,850	.....	1	5	66,350	.....	5
November.....	10	112,150	.....	.....	2	6,900	.....	2
December.....	13	114,850	.....	.....	2	6,800	.....	3
January.....	11	65,650	.....	3	2	10,500	.....	7
February.....	4	549,800	.....	.....	3	403,000	.....	.....
March.....	8	25,870	.....	1	2	20,100	.....	4
April.....	5	46,700	.....	.....	3	9,900	.....	.....
May.....	3	15,500	.....	.....	.....	.....	.....	1
June.....	3	86,000	.....	.....	2	45,200	.....	1
Total.....	99	1,520,870	.....	5	30	609,910	.....	29

*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, 1901, showing the number of vessels totally lost, the number damaged and their tonnage, the number of persons on board, and number of lives lost.

Months.	Disasters resulting in total loss to vessels.	Disasters resulting in partial damage to vessels.	Total or partial loss unknown.	Casualties resulting in no damage to vessels.	Total.	Tonnage of vessels totally lost.	Tonnage of vessels damaged.	Number of passengers.	Number in crews, including master, etc.	Number of lives lost.
July.....	2	3			5	433	2,089	216	150	.....
August.....	4				4	1,402			17	.....
September.....	12	6			18	7,555	3,714	17	218	1
October.....	9	6	1		16	3,078	9,868	226	255	2
November.....	4	6			10	492	3,859	221	119	.....
December.....	6	7			13	1,002	3,862	48	223	.....
January.....	2	9	2	1	14	120	12,312	143	258	2
February.....	3	1			4	3,714	909	95	156	128
March.....	1	7	1		9	239	4,287	1	87	.....
April.....	3	2			5	1,172	1,171	400	92	.....
May.....	2	1			3	380	620	13	64	.....
June.....	3				3	635			53	.....
Total.....	51	48	4	1	104	20,222	47,691	1,380	1,692	133

TABLE 15.—Abstract of returns of disasters to vessels on the Pacific Coast during the year ending June 30, 1901, showing the number of vessels and cargoes insured and uninsured, and the amount of insurance, where known.

Months.	Vessels reported insured.		Cargoes reported insured.		Total amount of insurance.	Reported not insured.		Unknown whether insured or not.		Vessels in ballast.
	Num-ber.	Amount.	Num-ber.	Amount.		Ves-sels.	Car-goes.	Ves-sels.	Car-goes.	
July.....	3	\$94,800	2	\$47,000	\$141,800	2	2			1
August.....	1	2,000			2,000	3	3			1
September.....	6	89,000			89,000	7	4	5	4	10
October.....	5	95,500	3	18,700	114,200	6	3	5	4	6
November.....	4	23,800			23,800	3	2	3	2	6
December.....	9	182,000	2	31,000	213,000	2	2	2	1	8
January.....	6	512,500			512,500	4	6	4	3	5
February.....	3	205,000	1	2,500	207,500	1	1		1	1
March.....	4	55,000			55,000	2	4	3	2	3
April.....	4	97,000			97,000	1	2		1	2
May.....	2	62,000			62,000	1			1	2
June.....	1	60,000			60,000	2	3			2
Total.....	48	1,478,600	8	99,200	1,577,800	34	32	22	19	45

TABLE 16.—Abstract of returns of disasters to vessels on the Pacific coast during the year ending June 30, 1901, distinguishing the nature of each casualty.

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered.....			1	2								1	4
Stranded.....	4	4	12	8	7	8	5	3	4	3	3	2	63
Collided.....			2	4	2				4				20
Damage to hull, masts, rigging, etc.....						2	1		1				4
Damage to machinery.....				1		1							2
Fire.....			3	1		2		1		2			9
Struck hidden obstruction, wharf, etc.....	1				1								2
Total.....	5	4	18	16	10	13	14	4	9	5	3	3	104

TABLE 17.—Abstract of returns of disasters (excluding collisions) to vessels on the Pacific coast during the year ending June 30, 1901, distinguishing the cause of each disaster.

Class and cause of disaster.	Found- derings.	Strand- ings.	Other causes.	Missing.	Total.
Class 1.—Causes connected with the weather:					
Calms, currents, and tides.....		4			4
Darkness.....		1			1
Fog.....		10			10
Gales, hurricanes, etc.....	2	29	4		35
Heavy sea.....	1	4	1		6
Snow storms.....		1			1
Total of class 1.....	3	49	5		57
Class 3.—Causes connected with navigation and seamanship:					
Errors of masters, officers, and crews.....		2			2
Error of pilot.....		1			1
Total of class 3.....		3			3
Class 4.—Causes connected with machinery or boilers:					
Damage to machinery.....			2		2
Total of class 4.....			2		2
Class 5.—Other causes:					
Absence of buoys.....		1			1
Fire.....			9		9
Sprung aleak.....	1	1			2
Struck rock, hidden obstruction, etc.....		7	1		8
Miscellaneous.....		2			2
Total of class 5.....	1	11	10		22
Aggregate.....	4	63	17		84

NOTE.—Class 2 includes disasters arising from causes connected with vessels, equipments, or stowage. 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, 1901, 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
Fog.....							6						6
High and baffling winds.....				2			2						4
Tides and currents.....			2	2	2								6
Unknown.....									2				2
Total.....			2	4	2		8		4				20

TABLE 19.—Abstract of returns of disasters to vessels on the Pacific coast during the year ending June 30, 1901, 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			
Barks.....	1		2	2	1	1	2						10
Ferryboats.....				1								1	1
Schooners.....	1	2	4	5	4	3	3	1	5			2	31
Scows.....			1	1			1						3
Ships.....		1	1		1		1		1				5
Steamers.....	3	1	9	7		9	6	3	2	4		1	49
Yachts.....					1								1
Total.....	5	4	18	16	10	13	14	4	9	5	3	3	104

TABLE 20.—Abstract of returns of disasters to Foreign vessels on the Pacific coast during the year ending June 30, 1901, showing nationality and description, and distinguishing those totally lost and those partially damaged.

Nationality and rig.	August.		October.		November.		January.		Total.		Aggregate.
	Total loss.	Partial loss.									
Austrian steamships.....							1			1	1
British barks.....							1			1	2
British steamers.....	1								1		1
German barks.....				1						1	1
German ships.....								1		1	1
Total.....	1			1		2		2	1	5	6
Aggregate.....	1		1		2		2		6		

TABLE 21.—Abstract of returns of disasters to vessels on the Pacific coast during the year ending June 30, 1901, showing the tonnage, and distinguishing the number of those totally lost and those partially damaged.

Burden of vessels.	July.		August.		September.		October.		November.		December.		January.	
	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		4	1	2		1		2		1	
Over 50 and not exceeding 100 tons.....	1						3		1		1			
Over 100 and not exceeding 200 tons.....			1		3	1	1		1	2	2		1	2
Over 200 and not exceeding 300 tons.....		1			1		1				1	4		
Over 300 and not exceeding 400 tons.....	1				1			1						
Over 400 and not exceeding 500 tons.....		1									1			
Over 500 and not exceeding 600 tons.....						1	1							
Over 600 and not exceeding 700 tons.....						1	1							1
Over 700 and not exceeding 800 tons.....												1		2
Over 800 and not exceeding 900 tons.....														
Over 900 and not exceeding 1,000 tons.....					1		1							1
Over 1,000 and not exceeding 1,100 tons.....						1						2		
Over 1,100 and not exceeding 1,200 tons.....			1				1							
Over 1,200 and not exceeding 1,300 tons.....							1							1
Over 1,300 and not exceeding 1,400 tons.....		1				1				3				
Over 1,400 tons.....					2			3			1			4
Unknown.....										1				1
Total.....	2	3	4		12	6	9	7	4	6	6	7	2	12
Aggregate.....	5		4		18		16		10		13		14	

TABLE 21.—Abstract of returns of disasters to vessels on the Pacific coast, etc.—Cont'd.

Burden of vessels.	February.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.											
Not exceeding 50 tons.....	1		1						1		14	2	16
Over 50 and not exceeding 100 tons.....					2				1		8	5	13
Over 100 and not exceeding 200 tons.....	1						1				11	6	17
Over 200 and not exceeding 300 tons.....			1				1				6	5	11
Over 300 and not exceeding 400 tons.....				2							2	3	5
Over 400 and not exceeding 500 tons.....				2							2	3	5
Over 500 and not exceeding 600 tons.....					1			1			1	1	2
Over 600 and not exceeding 700 tons.....					1			1			1	1	2
Over 700 and not exceeding 800 tons.....												3	3
Over 800 and not exceeding 900 tons.....			1								1	1	2
Over 900 and not exceeding 1,000 tons.....	1				1						1	1	2
Over 1,000 and not exceeding 1,100 tons.....					1						1	1	2
Over 1,100 and not exceeding 1,200 tons.....											2	2	4
Over 1,200 and not exceeding 1,300 tons.....											1	1	2
Over 1,300 and not exceeding 1,400 tons.....				1							3	2	5
Over 1,400 tons.....	1			1							3	2	5
Unknown.....				1								2	2
Total.....	3	1	1	8	3	2	2	1	3	3	51	53	104
Aggregate.....	4		9		5		3		3		104		

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, 1901, showing the number of vessels and distinguishing age.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 5 years.....	2	2	9	6	2	3	3	2	2	3	1		35
Over 5 and not exceeding 10 years.....	1		2	2	2	3	2			1			15
Over 10 and not exceeding 15 years.....	1		1	1	1	4	5		2				16
Over 15 and not exceeding 20 years.....		1	3	3	3	1	1	1	1			2	15
Over 20 and not exceeding 25 years.....				1	2	1	1	1					6
Over 25 and not exceeding 30 years.....				2							1	1	4
Over 30 and not exceeding 35 years.....			1	1		1			1				4
Over 35 and not exceeding 40 years.....			2	1			1			1			4
Over 40 and not exceeding 45 years.....											1		1
Over 45 and not exceeding 50 years.....	1	1											3
Over 50 years.....							1		1				2
Unknown.....													2
Total.....	5	4	18	16	10	13	14	4	9	5	3	3	104

TABLE 23.—Abstract of returns of disasters to vessels on the Pacific coast during the year ending June 30, 1901, 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	1	10	6	6	8	5	1	3	2	2		45
Coal.....			2	2									4
Fertilizers.....												1	1
Fish.....		1		1					1				3
Grain.....		1											1
Lime.....								1					1
Lumber.....			3	2	1	1	3		4				14
Merchandise (general).....	2		3	3		3	2	2		2	1	1	16
Provisions.....	1			3									1
Sugar, molasses, etc.....					1	1							2
Wood.....							1						1
Miscellaneous.....	1	1	3	1	1		1			1		1	10
Unknown.....				1	1		2		1				5
Total.....	5	4	18	16	10	13	14	4	9	5	3	3	104

TABLE 24.—Summary—PACIFIC COAST.

Nature of casualties.	Vessels.	Tonnage of vessels—		Aggregate tonnage.	Laden.	Ballast.	Unknown whether laden or not.	Wrecks involving total loss.	Casualties involving partial and unknown damage. ^a	Number of passengers.	Number in crews.	Total on board.	Number of lives lost.
		Totally lost.	Damaged.										
Foundering	4	56	.....	56	1	3	.....	4	.....	.....	8	8	.....
Strandings	63	15,711	21,388	37,099	40	23	.....	39	24	443	1,186	1,629	133
Vessels collided	20	3,576	19,584	23,160	5	5	.....	1	19	505	294	799	.....
Other causes	17	879	6,719	7,598	5	11	.....	7	10	432	204	636	.....
Total	104	20,222	47,691	67,913	54	45	5	51	53	1,380	1,692	3,072	133

^aIn 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, 1901, showing the number and value of vessels and cargoes and amount of loss to same where known.

Months.	Number and value of vessels.		Vessels, value unknown.	Number and value of cargoes.		Cargoes, value unknown.	Unknown whether laden or not.
	Number.	Amount.		Number.	Amount.		
July	43	\$3,417,000	.....	22	\$566,715	1	.....
August	19	1,241,500	.....	12	103,060	.....	.....
September	47	3,014,825	2	32	524,780	1	2
October	24	1,421,000	.....	12	168,310	.....	.....
November	43	1,619,350	2	37	550,120	1	2
December	5	36,000	.....	2	8,300	.....	.....
January	1	75,000	.....	.....	.....	.....	.....
February	1	5,000	.....	.....	.....	.....	.....
March	3	140,000	.....	1	75,000	.....	.....
April	6	71,500	.....	5	36,790	.....	.....
May	43	3,065,400	1	31	922,445	3	1
June	36	2,891,300	1	26	845,990	.....	1
Total	271	16,997,875	6	180	3,801,510	6	6

Months.	Loss to vessels.		Vessels totally lost, amount unknown.	Vessels damaged, amount unknown. ^a	Loss to cargoes.		Cargoes totally lost, amount unknown.	Cargoes not damaged, or damage unknown.
	Number.	Amount.			Number.	Amount.		
July	38	\$132,245	.....	5	5	\$5,930	.....	18
August	17	160,900	.....	2	3	14,600	.....	9
September	44	213,840	.....	5	11	30,675	.....	24
October	22	172,800	.....	2	4	6,160	.....	8
November	42	300,550	.....	3	23	50,230	.....	17
December	5	30,200	.....	.....	2	6,200	.....	.....
January	1	65,000	.....	.....	.....	.....	.....	.....
February	1	3,000	.....	.....	.....	.....	.....	.....
March	3	14,500	.....	.....	.....	.....	.....	1
April	6	3,220	.....	.....	1	300	.....	4
May	41	159,000	.....	3	14	20,765	.....	21
June	36	275,850	.....	1	6	61,600	.....	21
Total	256	1,531,105	.....	21	69	196,460	.....	123

^aIn 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, 1901, showing the number of vessels totally lost, the number damaged and their tonnage, the number of persons on board, and the number of lives lost.

Months.	Disasters resulting in total loss to vessels.	Disasters resulting in partial damage to vessels.	Total or partial loss unknown.	Casualties resulting in no damage to vessels.	Total.	Tonnage of vessels totally lost.	Tonnage of vessels damaged.	Number of passengers.	Number in crews, including master, etc.	Number of lives lost.
July.....	1	37	1	4	43	38	63,472	48	554	7
August.....	3	14	.....	2	19	3,177	20,378	8	225	4
September.....	9	35	2	3	49	4,532	45,061	306	658	14
October.....	2	20	.....	2	24	297	28,897	.....	315	.....
November.....	13	29	2	1	45	5,736	31,982	59	457	11
December.....	4	1	.....	.....	5	1,431	238	1	33	8
January.....	1	.....	.....	.....	1	.....	554	.....	1	1
February.....	1	.....	.....	.....	1	.....	68	.....	3	.....
March.....	1	2	.....	.....	3	377	1,200	26	31	.....
April.....	.....	6	.....	.....	6	.....	1,744	.....	46	.....
May.....	8	33	1	2	44	2,726	50,957	89	540	23
June.....	3	33	1	.....	37	219	59,462	320	521	6
Total.....	44	212	7	14	277	18,533	304,013	857	3,384	74

TABLE 27.—Abstract of returns and disasters to vessels on the Great Lakes during the year ending June 30, 1901, showing the number of vessels and cargoes insured and uninsured, and the amount of insurance where known.

Months.	Vessels reported insured.		Cargoes reported insured.		Total amount of insurance.	Reported not insured.		Unknown whether insured or not.		Vessels in ballast.
	Number.	Amount.	Number.	Amount.		Vessels.	Cargoes.	Vessels.	Cargoes.	
July.....	22	\$1,814,945	15	\$283,945	\$2,098,890	19	2	2	6	20
August.....	12	815,500	5	25,260	840,760	6	3	1	4	7
September.....	20	1,464,000	16	170,405	1,634,405	24	9	5	10	14
October.....	11	501,500	4	91,700	593,200	10	4	3	4	12
November.....	18	1,204,835	13	160,900	1,365,735	23	9	4	18	5
December.....	3	12,220	1	5,300	17,520	2	1	.....	.....	3
January.....	1	35,000	.....	.....	35,000	.....	.....	.....	.....	1
February.....	1	3,000	.....	.....	3,000	.....	.....	.....	.....	1
March.....	2	70,000	.....	.....	70,000	1	1	.....	.....	2
April.....	2	9,700	1	8,340	18,040	3	3	1	1	1
May.....	21	2,043,700	17	349,600	2,393,300	20	10	3	8	9
June.....	17	1,463,500	11	325,815	1,789,315	13	7	7	9	10
Total.....	130	9,437,900	83	1,421,265	10,859,165	121	49	26	60	85

TABLE 28.—Abstract of returns of disasters to vessels on the Great Lakes during the year ending June 30, 1901, 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	4	7	2	1	2	1	19
Stranded.....	10	.....	10	8	18	1	.....	.....	.....	.....	19	14	80
Collided.....	24	13	16	8	8	.....	.....	.....	.....	4	12	14	99
Damage to hull, masts, rigging, etc.....	1	.....	5	2	3	.....	.....	.....	.....	.....	.....	1	12
Damage to machinery.....	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	2	6
Explosion of boiler.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Fire.....	4	1	5	3	5	2	1	1	1	1	3	5	32
Ice.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Sprung a leak.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Struck bridge, pier, wreck, etc.....	2	3	3	2	.....	.....	.....	1	1	4	.....	.....	16
Water-logged.....	.....	.....	1	1	1	.....	.....	.....	.....	2	.....	.....	4
Miscellaneous.....	.....	.....	1	1	2	.....	.....	.....	.....	.....	1	.....	5
Total.....	43	19	49	24	45	5	1	1	3	6	44	37	277

TABLE 29.—Abstract of returns of disasters (excluding collisions) to vessels on the Great Lakes during the year ending June 30, 1901, distinguishing the cause of each disaster.

Class and cause of disaster.	Found-ings.	Strand-ings.	Other causes.	Missing.	Total.
Class 1.—Causes connected with the weather:					
Calms, currents, and tides		4			4
Fog		20			20
Gales, hurricanes, etc	10	18	14		42
Heavy sea	2		5		7
Snowstorms		3			3
Total of class 1	12	45	19		76
Class 2.—Causes connected with vessels, equipments, or stowage:					
Error in compass		1			1
Total of class 2		1			1
Class 3.—Causes connected with navigation and seamanship:					
Errors of masters, officers, and crews		3			3
Errors of pilots		4			4
Total of class 3		7			7
Class 4.—Causes connected with machinery or boilers:					
Damage to machinery			6		6
Explosion of boiler			1		1
Total of class 4			7		7
Class 5.—Other causes:					
Absence of lights		1			1
Accidental		1			1
Fire			32		32
Ice			1		1
Sprung a leak	5	2	4		11
Struck bridge, pier, rock, etc		7	15		22
Miscellaneous	1	15	1		17
Unknown	1	1			2
Total of class 5	7	27	53		87
Aggregate	19	80	79		178

TABLE 30.—Abstract of returns of disasters to vessels on the Great Lakes during the year ending June 30, 1901, 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	12	8	9	6	4						8	5	52
Bad management	2	3											5
Darkness			2										4
"Fault of other vessel"	2	1			1								6
Fault of tug towing	2												2
Fog					2					2	2	2	8
Misunderstanding signals	4	1	1	2									8
Tides and currents	2		2							2			6
Unavoidable											2		2
Unknown			2		1							3	6
Total	24	13	16	8	8					4	12	14	99

TABLE 31.—Abstract of returns of disasters to vessels on the Great Lakes during the year ending June 30, 1901, 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				6						2	4	13
Barks.....					1								1
Ferryboats.....												1	1
Schooners.....	10	5	17	9	20	2				4	16	3	86
Scows.....			2										4
Steamers.....	32	13	29	15	17	3	1	1	3	2	26	27	169
Steam barges.....		1		1								1	3
Total.....	43	19	49	24	45	5	1	1	3	6	44	37	277

TABLE 32.—Abstract of returns of disasters to Foreign vessels on the Great Lakes during the year ending June 30, 1901, showing nationality and description, and distinguishing those totally lost and those partially damaged.

Nationality and rig.	September.		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.	
	British schooners.....	2		1						2		1	3
Total.....	2		1						2	1	3
Aggregate.....	2		1						3		

TABLE 33.—Abstract of returns of disasters to vessels on the Great Lakes during the year ending June 30, 1901, showing the tonnage and distinguishing the number of those totally lost and those partially damaged.

Burden of vessels.	July.		August.		September.		October.		November.		December.		January.	
	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.....	1	3			1	1	1	1	2	1	1			
Over 50 and not exceeding 100 tons.....		3		4	1	1			3	1				
Over 100 and not exceeding 200 tons.....		3		1	1	4				4	1			
Over 200 and not exceeding 300 tons.....		3	1		1	6	1		1	3	4	1	1	
Over 300 and not exceeding 400 tons.....		1			1	4			1	1	2			
Over 400 and not exceeding 500 tons.....		1			1			3	1					
Over 500 and not exceeding 600 tons.....				1		2			2		2			1
Over 600 and not exceeding 700 tons.....								1	1		1			
Over 700 and not exceeding 800 tons.....		1						2	1	2				
Over 800 and not exceeding 900 tons.....		1						1		4				
Over 900 and not exceeding 1,000 tons.....		1			1						1			
Over 1,000 and not exceeding 1,100 tons.....					1									
Over 1,100 and not exceeding 1,200 tons.....		2	1	2	1	2								
Over 1,200 and not exceeding 1,300 tons.....		1		1				1						
Over 1,300 and not exceeding 1,400 tons.....		1												
Over 1,400 tons.....		21	1	7	1	17		9	2	9				
Unknown.....						2				2				
Total.....	1	42	3	16	9	40	2	22	13	32	4	1		1
Aggregate.....	43		19		49		24		45		5		1	

TABLE 33.—Abstract of returns of disasters to vessels on the Great Lakes, etc.—Continued.

Burden of vessel.	February.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.											
Not exceeding 50 tons.....			1				1	1	2		9	8	17
Over 50 and not exceeding 100 tons.....		1					1	1		1	5	12	17
Over 100 and not exceeding 200 tons.....					2	1	3	1	3	4	20	24	24
Over 200 and not exceeding 300 tons.....					3	2	1	2	1	9	20	29	29
Over 300 and not exceeding 400 tons.....			1			1	3		1	4	12	16	16
Over 400 and not exceeding 500 tons.....						1	2		1	2	8	10	10
Over 500 and not exceeding 600 tons.....						1		1	2		11	11	11
Over 600 and not exceeding 700 tons.....						1			1		4	4	4
Over 700 and not exceeding 800 tons.....							1			1	6	7	7
Over 800 and not exceeding 900 tons.....							2				8	8	8
Over 900 and not exceeding 1,000 tons.....								1	2	2	4	4	4
Over 1,000 and not exceeding 1,100 tons.....							2		1	1	3	3	4
Over 1,100 and not exceeding 1,200 tons.....				1			1			3	8	11	11
Over 1,200 and not exceeding 1,300 tons.....							1	1	2		6	6	6
Over 1,300 and not exceeding 1,400 tons.....								4			5	5	5
Over 1,400 tons.....							16	16	4		95	99	99
Unknown.....							1				5	5	5
Total.....	1	1	2		6	8	36	3	34	44	233		277
Aggregate.....	1	3	6	44	37	277							

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, 1901, showing the number of vessels and distinguishing age.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 5 years.....	9	2	7	2	8						6	7	41
Over 5 and not exceeding 10 years.....	14	8	10	3	4						4	11	54
Over 10 and not exceeding 15 years.....	6	2	4	5	5		1		1		11	6	41
Over 15 and not exceeding 20 years.....	4	4	11	4	5					2	3	3	40
Over 20 and not exceeding 25 years.....	3	1	3		4			1			3	3	19
Over 25 and not exceeding 30 years.....	4	1	6	6	6				1		3	3	32
Over 30 and not exceeding 35 years.....	1	1	3	1	5				1	3	5		21
Over 35 and not exceeding 40 years.....	1		2	2	5						4		15
Over 40 and not exceeding 45 years.....	1		1	1	1					1	4		4
Over 45 and not exceeding 50 years.....													5
Over 50 years.....													5
Unknown.....			2		2						1		5
Total.....	43	19	49	24	45	5	1	1	3	6	44	37	277

TABLE 35.—Abstract of returns of disasters to vessels on the Great Lakes during the year ending June 30, 1901, showing the number of vessels and distinguishing their cargoes.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ballast.....	20	7	14	12	5	3	1	1	2	1	9	10	85
Coal.....	8	3	8		3						11	3	45
Copper ore.....				1									1
Grain.....	3	1		1	3					2	4	2	16
Iron ore.....	9	6	6	2	6	1					1	12	43
Lime.....										1			1
Lumber.....	2	1	8	3	12	1				1	7	5	40
Merchandise (general).....	1		5	1	1				1		5	3	17
Provisions.....											1		1
Sand, plaster, etc.....			2		3								5
Stone, brick, etc.....			1										1
Wood.....		1			3					1	3		9
Miscellaneous.....			2	1	1						2	1	7
Unknown.....			2		2						1	1	6
Total.....	43	19	49	24	45	5	1	1	3	6	44	37	277

TABLE 36.—Abstract of returns of disasters to vessels on the Great Lakes during the year ending June 30, 1901, 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	15	11	16	6	16	1	1	6	10	76
Lake Huron .....	.....	2	3	.....	8	.....	.....	.....	1	.....	8	3	31
Lake Michigan	11	.....	15	7	6	3	1	1	1	5	12	5	67
Lake Ontario .....	.....	.....	3	.....	1	.....	.....	.....	.....	1	.....	.....	4
Lake Superior	1	.....	3	4	4	.....	.....	.....	.....	.....	4	5	21
Lake St. Clair	3	.....	.....	.....	3	.....	.....	.....	.....	.....	7	.....	13
Detroit River	7	3	4	.....	2	1	.....	.....	.....	.....	3	4	24
St. Clair Flats Canal	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
St. Clair River	2	.....	4	4	2	.....	.....	.....	.....	.....	1	1	14
St. Marys River	3	3	2	3	3	.....	.....	.....	.....	.....	3	9	26
Total	43	19	49	24	45	5	1	1	3	6	44	37	277

TABLE 37.—Summary GREAT LAKES.

Nature of casualties.	Vessels.	Tonnage 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 in crews.	Total on board.	Number of lives lost.
		Totally lost.	Damaged.										
Foundering	19	8,227	1,381	9,608	15	4	.....	16	3	9	117	126	40
Strandings	80	4,435	100,677	105,112	61	19	.....	15	65	343	995	1,338	13
Vessels collided	99	4,370	147,777	152,147	64	29	6	5	94	157	1,341	1,498	9
Other causes	79	1,501	54,178	55,679	46	33	.....	8	71	348	931	1,279	12
Total	277	18,533	304,013	322,546	186	85	6	44	233	857	3,384	4,241	74

* 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, 1901, showing the number and value of vessels and cargoes and amount of loss to same where known.

Months.	Number and value of vessels.		Vessels, value unknown.	Number and value of cargoes.		Cargoes, value unknown.	Unknown whether laden or not.
	Number.	Amount.		Number.	Amount.		
July	10	\$156,750	.....	2	\$10,300	.....	.....
August	10	47,500	.....	5	6,420	.....	.....
September	15	629,550	1	7	191,950	2	1
October	15	233,400	1	4	7,800	2	1
November	8	101,600	.....	2	154,300	.....	.....
December	11	219,200	.....	4	80,300	.....	.....
January	10	262,000	.....	6	186,000	1	.....
February	8	113,600	.....	4	48,250	1	.....
March	18	591,600	4	8	78,550	2	4
April	9	143,550	.....	3	10,530	.....	.....
May	13	307,500	.....	4	27,800	1	.....
June	7	132,200	.....	2	155,000	.....	.....
Total	134	2,938,450	6	51	967,700	9	6

TABLE 38.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, etc.—Continued.

Months.	Loss to vessels.		Vessels totally lost, amount unknown.	Vessels damaged, amount unknown.*	Loss to cargoes.		Cargoes totally lost, amount unknown.	Cargoes not damaged, or damage unknown.
	Number.	Amount.			Number.	Amount.		
July.....	10	\$25,750	.....	.....	.....	.....	.....	2
August.....	10	17,325	.....	.....	4	\$1,620	.....	1
September.....	14	74,800	.....	2	3	6,450	.....	7
October.....	13	68,500	.....	3	3	5,250	.....	4
November.....	7	22,725	.....	1	1	25,000	.....	1
December.....	11	27,150	.....	.....	2	20,150	.....	2
January.....	10	42,100	.....	.....	4	52,875	.....	3
February.....	7	16,700	.....	1	4	26,050	.....	1
March.....	17	57,300	.....	5	2	13,100	.....	12
April.....	8	30,850	.....	1	1	80	.....	2
May.....	13	48,935	.....	.....	4	15,300	.....	1
June.....	7	13,950	.....	.....	.....	.....	.....	2
Total.....	127	446,085	.....	13	28	165,825	.....	38

*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, 1901, showing the number of vessels totally lost, the number damaged and their tonnage, the number of persons on board, and number of lives lost.

Months.	Disasters resulting in total loss to vessels.	Disasters resulting in partial damage to vessels.	Total or partial loss unknown.	Casualties resulting in no damage to vessels.	Total.	Tonnage of vessels totally lost.	Tonnage of vessels damaged.	Number of passengers.	Number in crews, including master, etc.	Number of lives lost.
July.....	1	9	.....	.....	10	141	2,046	703	134	4
August.....	3	7	.....	.....	10	151	1,270	27	89	.....
September.....	5	9	1	1	16	1,052	15,911	184	283	2
October.....	7	6	1	2	16	1,028	2,193	430	241	2
November.....	2	5	.....	1	8	166	2,147	30	137	1
December.....	2	9	.....	.....	11	442	3,748	232	317	.....
January.....	1	9	.....	.....	10	669	3,978	76	331	1
February.....	4	3	.....	1	8	405	1,102	7	108	1
March.....	4	13	4	.....	22	262	14,440	183	402	.....
April.....	1	7	.....	1	9	18	2,227	34	63	.....
May.....	6	7	.....	.....	13	653	3,606	118	240	6
June.....	2	5	.....	.....	7	119	2,051	150	165	2
Total.....	38	89	6	7	140	5,106	54,719	2,174	2,510	19

TABLE 40.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, showing the number of vessels and cargoes insured and uninsured, and the amount of insurance where known.

Months.	Vessels reported insured.		Cargoes reported insured.		Total amount of insurance.	Reported not insured.		Whether insured or not, unknown.		Vessels in ballast.
	Number.	Amount.	Number.	Amount.		Ves-sels.	Ves-sels.	Car-goes.	Car-goes.	
July.....	3	\$42,500	1	\$10,000	\$52,500	4	1	3	.....	8
August.....	5	10,000	2	6,000	16,000	5	3	.....	.....	5
September.....	7	367,000	2	5,000	372,000	7	2	2	6	6
October.....	4	70,500	1	2,000	72,500	8	2	4	4	9
November.....	5	28,500	1	4,800	33,300	3	.....	.....	1	6
December.....	8	111,900	1	20,000	131,900	2	.....	1	3	7
January.....	7	115,000	2	84,000	199,000	3	2	.....	3	3
February.....	5	30,500	3	48,000	78,500	3	1	.....	1	3
March.....	7	288,000	3	75,500	363,500	8	4	7	7	8
April.....	2	40,000	1	10,000	50,000	7	1	.....	1	6
May.....	6	212,000	1	7,940	219,940	7	1	.....	3	8
June.....	4	49,800	1	5,000	54,800	3	.....	.....	1	5
Total.....	63	1,365,700	19	278,240	1,643,940	60	17	17	30	74

TABLE 41.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, distinguishing the nature of each casualty.

Nature of casualty.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Foundered	1	2	1	1	1	1	1	1	2	1	1	1	8
Stranded	4	1	1	1	1	1	1	4	1	1	2	1	16
Collided	8	8	2	4	4	4	2	10	4	2	1	1	44
Capsized	1	1	1	1	1	1	1	1	1	1	1	1	1
Damage to machinery	1	1	1	1	1	1	1	1	1	1	1	1	2
Explosion of boilers	3	3	3	5	3	2	2	1	1	1	6	1	31
Fire	4	1	3	2	2	4	3	3	6	1	4	1	33
Struck bridge, snag, wharf, etc	4	1	3	2	2	4	3	1	1	1	4	1	33
Miscellaneous	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	10	10	16	16	8	11	10	8	22	9	13	7	140

TABLE 42.—Abstract of returns of disasters (excluding collisions) to vessels on the Rivers of the United States during the year ending June 30, 1901, distinguishing the cause of each disaster.

Class and cause of disaster.	Found-erings.	Strand-ings.	Other causes.	Missing.	Total.
Class 1.—Causes connected with the weather:					
Calms, currents, and tides	1	1	1	1	1
Darkness	1	1	1	1	1
Fog	2	2	2	2	2
Gales, hurricanes, etc	2	6	1	1	9
Total of class 1	2	10	1	1	13
Class 4.—Causes connected with machinery or boilers:					
Damage to machinery	2	2	2	2	2
Explosion of boiler	4	4	4	4	4
Total of class 4	6	6	6	6	6
Class 5.—Other causes:					
Absence of lights or buoys	1	1	1	1	1
Capsized	1	1	1	1	1
Fire	29	29	29	29	29
Spontaneous combustion	1	1	1	1	1
Sprung a leak	4	4	4	4	4
Struck bridge, snag, wharf, etc	33	33	33	33	33
Miscellaneous	1	5	2	2	8
Total of class 5	6	6	65	65	77
Aggregate	8	16	72	72	96

NOTE.—Class 2 includes disasters arising from causes connected with vessel, equipments, or stowage. No casualties are reported in this class. Class 3 includes disasters arising from causes connected with navigation and seamanship. No casualties are reported in this class.

TABLE 43.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, 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	2	2	2	2	2	2	2	4
Bad management	1	1	1	1	1	1	1	1	1	1	1	1	3
Darkness	2	2	2	2	2	2	2	2	2	2	2	2	2
"Fault of other vessel"	2	3	3	3	3	3	3	3	3	3	3	3	12
Fog	2	2	2	2	2	2	2	2	2	2	2	2	6
High and baffling winds	4	4	4	4	4	4	4	4	4	4	4	4	6
Misunderstanding signals	2	2	2	2	2	2	2	2	2	2	2	2	6
Unknown	1	1	1	1	1	1	1	1	1	1	1	1	5
Total	8	8	8	2	4	4	4	2	10	4	2	1	44

TABLE 44.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, 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.....			2	1					1			
Ferryboats.....						1	1		1				3
Schooners.....			3	1		1		1	1				8
Steamers.....	10	9	11	14	8	9	9	7	19	8	12	7	123
Steam launches.....		1									1		1
Yachts.....													1
Total.....	10	10	16	16	8	11	10	8	22	9	13	7	140

TABLE 45.—Abstract of returns of disasters to Foreign vessels on the Rivers of the United States during the year ending June 30, 1901, showing nationality and description, and distinguishing those totally lost and those partially damaged.

Nationality and rig.	Sep-tember.		March.		Total.		Aggre-gate.
	Total loss.	Partial loss.	Total loss.	Partial loss.	Total loss.	Partial loss.	
German steamships.....		1				1	1
Norwegian steamships.....				1		1	1
British steamships.....				2		2	2
Total.....	1		3		4		4
Aggregate.....	1		3		4		

TABLE 46.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, showing the tonnage, and distinguishing the number of those totally lost and those partially damaged.

Burden of vessels.	July.		August.		Septem-ber.		Octo-ber.		Novem-ber.		Decem-ber.		Janu-ary.	
	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	2	1	2	2		3	1		2		1		1
Over 50 and not exceeding 100 tons.....		4	1	2			1	1	2	2		1		1
Over 100 and not exceeding 200 tons.....	1			3	1		1	1			1	2		2
Over 200 and not exceeding 300 tons.....					1		1	2						
Over 300 and not exceeding 400 tons.....	1				1		1	1		1	1			1
Over 400 and not exceeding 500 tons.....	1				3		1	1			1			4
Over 500 and not exceeding 600 tons.....					1		1							
Over 600 and not exceeding 700 tons.....				1	1						1	1		
Over 700 and not exceeding 800 tons.....				1	1			1			1			
Over 800 and not exceeding 900 tons.....	1				1						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			
Over 1,200 and not exceeding 1,300 tons.....														
Over 1,300 and not exceeding 1,400 tons.....														
Over 1,400 tons.....					3				1					1
Unknown.....							1							
Total.....	1	9	3	7	5	11	7	9	2	6	2	9	1	9
Aggregate.....	10		10		16		16		8		11		10	

TABLE 46.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, etc.—Continued.

Burden of vessels.	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.	
Not exceeding 50 tons.....	1	...	2	1	1	3	3	2	1	...	15	13	28
Over 50 and not exceeding 100 tons.....	1	1	1	...	...	1	...	...	1	1	7	14	21
Over 100 and not exceeding 200 tons.....	2	...	1	2	...	2	1	2	...	2	9	14	23
Over 200 and not exceeding 300 tons.....	...	2	...	2	...	1	2	...	...	2	7	9	9
Over 300 and not exceeding 400 tons.....	...	2	...	1	...	...	1	...	...	2	2	9	11
Over 400 and not exceeding 500 tons.....	...	...	...	2	...	...	...	...	...	...	1	12	12
Over 500 and not exceeding 600 tons.....	...	...	...	1	...	...	...	...	...	...	1	2	3
Over 600 and not exceeding 700 tons.....	...	...	...	2	...	1	...	...	1	2	5	7	7
Over 700 and not exceeding 800 tons.....	...	...	...	...	...	1	...	...	...	...	5	5	5
Over 800 and not exceeding 900 tons.....	...	...	...	1	...	...	1	...	...	...	3	3	3
Over 900 and not exceeding 1,000 tons.....	...	1	...	...	...	1	...	...	1	...	4	4	4
Over 1,000 and not exceeding 1,100 tons.....	...	...	...	1	...	...	...	...	...	...	1	1	1
Over 1,100 and not exceeding 1,200 tons.....	...	...	...	1	...	...	...	...	...	...	2	2	2
Over 1,200 and not exceeding 1,300 tons.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Over 1,300 and not exceeding 1,400 tons.....	...	...	...	3	...	...	1	...	...	...	4	9	9
Over 1,400 tons.....	...	...	...	1	...	...	...	...	...	...	2	2	2
Unknown.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	4	4	4	18	1	8	6	7	2	5	38	102	140
Aggregate.....	8	...	22	...	9	13	7	...	140	...	...	...	...

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 coasts during the year ending June 30, 1901, showing the number of vessels and distinguishing age.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 5 years.....	5	3	7	6	4	2	4	3	3	2	3	3	55
Over 5 and not exceeding 10 years.....	1	...	2	4	2	4	...	2	5	3	2	1	27
Over 10 and not exceeding 15 years.....	...	3	2	1	1	1	1	2	5	...	2	...	17
Over 15 and not exceeding 20 years.....	1	3	2	1	1	3	3	...	...	2	...	3	19
Over 20 and not exceeding 25 years.....	2	...	...	2	...	...	...	1	...	...	1	...	6
Over 25 and not exceeding 30 years.....	...	...	...	1	1	1	2	1	...	1	...	...	7
Over 30 and not exceeding 35 years.....	...	...	3	...	...	...	...	...	1	...	...	...	3
Over 35 and not exceeding 40 years.....	...	...	...	...	...	...	...	...	1	...	...	...	1
Over 40 and not exceeding 45 years.....	1	...	...	...	...	...	...	...	...	...	...	...	1
Over 45 and not exceeding 50 years.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Over 50 years.....	...	1	...	...	...	...	...	...	...	...	...	...	1
Unknown.....	...	...	1	1	...	...	...	...	1	1	...	...	3
Total.....	10	10	16	16	8	11	10	8	22	9	13	7	140

TABLE 48.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, showing the number of vessels and distinguishing their cargoes.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ballast	8	5	6	9	6	7	3	3	8	6	8	5	74
Coal			3			1		1		1			6
Cotton, cotton seed, etc			1	2	1		3	3	1				11
Explosives											1		1
Grain	1	3	1								1		6
Lumber, timber, etc		1	1						1	1			4
Merchandise (general)	1		3	3	1	2	2		6	1	2	1	22
Provisions											1		1
Sugar, molasses, etc								1					1
Miscellaneous		1		1		1	2	1				1	8
Unknown			1	1					4				6
Total	10	10	16	16	8	11	10	8	22	9	13	7	140

TABLE 49.—Abstract of returns of disasters to vessels on the Rivers of the United States during the year ending June 30, 1901, distinguishing the rivers on which they occurred.

Rivers.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Atchafalaya, Louisiana				1			1						2
Apalachicola, Florida				1									1
Arkansas												1	1
Alleghany									1				1
Black, Arkansas											1		1
Black Warrior, Alabama								1					1
Cape Fear, North Carolina			2				1				1		4
Chattahoochee						1							1
Columbia, Oregon		1				1			2				4
Delaware		1	5	2	3	2	2		2	2			21
Green, Kentucky						1						1	2
Hudson	1		1	1					2	2			7
Illinois												1	1
James							1			1			2
Kanawha, Great, West Virginia											1		1
Kennebec			1								1		1
Mississippi	4	3	4	5	1	2	4	2	8	1	5	1	40
Missouri		1	1										2
Mobile											1		1
Monongahela													1
Ocklawaha, Florida									1				1
Osage									1				1
Onachita								1	3				1
Ohio	2	1		2		2					1	3	14
Pearl					1	1							2
Potomac				2				2					4
Red, Louisiana				1	1		1	1					4
Roanoke, Virginia						1							1
St. Croix													1
St. Johns, Florida		1											1
St. Lawrence											1		1
Snohomish		2			1								2
Thames													1
Tchefuneta, Louisiana				1									1
Tennessee	1									2			3
White	1											1	2
Willamette								1					1
Yukon, Alaska	1		2										3
Total	10	10	16	16	8	11	10	8	22	9	13	7	140

TABLE 50.—*Summary—RIVERS of the United States.*

Nature of casualties.	Vessels.	Tonnage of vessels—		Aggregate tonnage.	Laden.	Ballast.	Unknown whether laden or not.	Wrecks involving total loss.	Casualties involv- ing partial and unknown dam- age. ^a	Number of passen- gers.	Number in crews.	Total on board.	Number of lives lost.
		Totally lost.	Damaged.										
Foundering	8	142	472	614	5	3	.....	2	6	.....	57	57	.....
Strandings	16	276	6,298	6,574	8	8	.....	4	12	154	291	445	.....
Vessels collided	44	677	31,093	31,770	18	20	6	3	41	518	680	1,198	3
Other causes	72	4,011	16,856	20,867	29	43	.....	29	43	1,502	1,482	2,984	16
Total	140	5,106	54,719	59,825	60	74	6	38	102	2,174	2,510	4,684	19

^aIn 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 AND IN FOREIGN WATERS.

TABLE 51.—*Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, showing the number and value of vessels and cargoes and amount of loss to same where known.*

Months.	Number and value of vessels.		Vessels, value un- known.	Number and value of cargoes.		Cargoes, value un- known.	Un- known whether laden or not
	Number.	Amount.		Number.	Amount.		
July	14	\$1,190,500	2	9	\$113,080	1	2
August	7	829,500	.....	6	36,680	1	.....
September	14	1,383,615	1	9	515,215	2	1
October	22	2,130,100	3	16	465,700	2	3
November	12	397,500	1	9	71,850	.....	1
December	22	1,866,860	.....	19	484,555	.....	.....
January	23	1,746,500	.....	16	868,880	1	.....
February	34	1,114,300	.....	27	959,240	3	.....
March	9	1,281,500	.....	5	11,065	1	.....
April	10	1,260,500	2	4	203,600	3	2
May	5	563,500	.....	5	72,000	.....	.....
June	5	98,270	2	1	7,100	.....	3
Total	177	13,862,645	11	126	3,808,965	14	12

Months.	Loss to vessels.		Vessels totally lost, amount un- known.	Vessels dam- aged, amount un- known. ^a	Loss to cargoes.		Cargoes totally lost, amount un- known.	Cargoes not dam- aged, or damage un- known.
	Num- ber.	Amount.			Num- ber.	Amount.		
July	14	\$54,750	.....	2	6	\$15,080	.....	6
August	7	42,300	.....	.....	3	17,000	.....	4
September	14	91,415	.....	1	7	79,700	3	.....
October	22	122,695	.....	3	9	16,300	1	10
November	12	91,700	.....	.....	6	17,650	.....	4
December	20	110,785	.....	2	15	25,730	.....	4
January	23	447,435	.....	.....	8	185,385	1	8
February	34	199,470	.....	.....	13	45,040	.....	17
March	9	225,680	.....	.....	4	5,715	.....	2
April	10	116,600	.....	2	2	67,850	1	6
May	5	31,500	.....	.....	1	2,500	.....	4
June	5	16,770	.....	2	1	7,100	.....	4
Total	175	1,550,100	.....	13	75	485,050	6	71

^aIn 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 and in foreign waters during the year ending June 30, 1901, showing the number of vessels totally lost, the number damaged and their tonnage, the number of persons on board, and number of lives lost.

Months.	Disasters resulting in total loss to vessels.	Disasters resulting in partial damage to vessels.	Total or partial loss unknown.	Casualties resulting in no damage to vessels.	Total.	Tonnage of vessels totally lost.	Tonnage of vessels damaged.	Number of passengers.	Number in crews, including master, etc.	Number of lives lost.
July	5	9	2	.....	16	535	16,965	24	242	3
August	3	4	.....	.....	7	377	7,368	250	157	5
September	7	7	1	.....	15	2,414	19,160	284	581	43
October	9	13	3	.....	25	2,216	40,564	574	593	2
November	5	7	1	.....	13	1,053	13,446	86	155	14
December	5	15	.....	2	22	1,415	22,318	169	424	10
January	7	16	.....	.....	23	5,316	23,901	91	497	66
February	9	25	.....	.....	34	6,660	22,024	.....	327	7
March	3	6	.....	.....	9	1,643	15,115	374	439	10
April	1	9	2	.....	12	2,263	24,060	780	516	1
May	.....	5	.....	.....	5	.....	8,385	102	147	.....
June	2	3	2	.....	7	301	4,890	10	59	2
Total	56	119	11	2	188	24,193	218,196	2,744	4,187	163

TABLE 53.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, showing the number of vessels and cargoes insured and uninsured, and the amount of insurance, where known.

Months.	Vessels reported insured.		Cargoes reported insured.		Total amount of insurance.	Reported not insured.		Unknown, whether insured or not.		In Vessels ballast.
	Num-ber.	Amount.	Num-ber.	Amount.		Ves-sels.	Car-goes.	Ves-sels.	Car-goes.	
July	10	\$954,525	2	\$8,000	\$962,525	2	3	4	7	4
August	1	500,000	1	9,500	509,500	3	2	3	4	.....
September	8	1,316,015	2	10,500	1,326,515	4	3	3	7	3
October	12	1,489,050	6	45,400	1,534,450	9	5	4	10	4
November	5	219,500	5	151,500	371,000	4	1	4	4	3
December	11	504,710	7	78,770	583,480	7	4	4	8	3
January	15	1,157,100	5	403,300	1,560,400	6	2	2	10	6
February	18	632,700	13	746,865	1,379,565	10	5	6	12	4
March	7	1,221,810	1	675	1,222,485	2	3	.....	2	3
April	8	1,144,460	3	56,850	1,181,310	2	1	2	5	3
May	4	511,000	.....	10,000	521,000	1	.....	.....	3	.....
June	3	18,570	.....	.....	18,570	1	1	3	3	3
Total	102	9,669,440	47	1,501,360	11,170,800	51	30	35	75	36

TABLE 54.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, 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	1	2	1	1	.....	1	2	.....	.....	.....	12
Stranded	2	.....	5	2	3	4	.....	4	1	1	2	1	25
Collided	6	2	2	2	2	.....	2	.....	.....	4	.....	4	30
Abandoned	1	.....	1	1	1	.....	1	5	.....	.....	.....	1	11
Capsized	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	2
Damage to hull, masts, rigging, etc.	1	2	6	5	4	8	6	22	4	4	1	.....	63
Damage to machinery	2	1	1	1	.....	3	1	.....	1	1	1	.....	12
Explosion of boilers and bursting of steam pipes	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	2
Fire	.....	.....	1	.....	1	2	.....	.....	.....	1	.....	.....	5
Never heard from	.....	1	2	.....	1	1	4	.....	1	.....	.....	.....	10
Sprung aleak	1	.....	.....	2	.....	2	.....	.....	.....	.....	1	.....	6
Struck wreck, etc	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	3
Miscellaneous	.....	.....	1	.....	1	1	2	2	.....	.....	.....	.....	7
Total	16	7	15	25	13	22	23	34	9	12	5	7	188

TABLE 55.—Abstract of returns of disasters (excluding collisions) to American vessels at sea and in foreign waters during the year ending June 30, 1901, distinguishing the cause of each disaster.

Class and cause of disaster.	Found- derings.	Strand- ings.	Other causes.	Missing.	Total.
Class 1.—Causes connected with the weather:					
Calms, currents, and tides		7			7
Fog		3			3
Gales, hurricanes, etc	3	8	70		81
Heavy sea			8		8
Snowstorms		1			1
Total of class 1	3	19	78		100
Class 2.—Causes connected with vessels, equipments, or stowage:					
Defective charts		2			2
Total of class 2		2			2
Class 3.—Causes connected with navigation and seaman- ship:					
Errors of master, officers, and crew		1			1
Errors of pilots		2	2		4
Total of class 3		3	2		5
Class 4.—Causes connected with machinery or boilers:					
Damage to machinery			12		12
Explosion of boilers and bursting of steam pipes			2		2
Total of class 4			14		14
Class 5.—Other causes:					
Capsized	1				1
Fire			3		3
Incendiarism			1		1
Spontaneous combustion			1		1
Sprung aleak	8		1		9
Struck rock, wreck, etc		1	3		4
Waterlogged			7		7
Miscellaneous			1		1
Unknown				10	10
Total of class 5	9	1	17	10	37
Aggregate	12	25	111	10	158

TABLE 56.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, 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							1						1
Error in judgment										1			1
"Fault of other vessel"	2		1	1	1		1			1			7
Fog	2	2		6									14
Unknown	2		1	1	1					2			7
Total	6	2	2	8	2		2			4		4	30

TABLE 57.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, 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.....	2	1	1	1	1	2	1	2
Barks.....	.....	1	1	1	1	.....	.....	5	1	.....	.....	.....	13
Barkentines.....	1	.....	2	.....	.....	.....	1	3	1	1	.....	.....	9
Brigs.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1	4
Schooners.....	7	5	9	12	8	11	13	23	3	4	2	3	100
Ships.....	1	1	1	1	1	2	3	.....	.....	.....	.....	.....	11
Steamers.....	3	1	3	7	3	9	4	1	2	4	2	2	41
Steam yachts.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Yachts.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Unknown.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Total.....	16	7	15	25	13	22	23	34	9	12	5	7	188

TABLE 58.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, showing the tonnage and distinguishing the number of those totally lost and those partially damaged.

Burden of vessels.	July.		August.		September.		October.		November.		December.		January.	
	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.....	1	1	3	2
Over 50 and not exceeding 100 tons.....	3	1	.....	.....	2	.....	3	1	.....	.....	.....	.....	.....	.....
Over 100 and not exceeding 200 tons.....	2	.....	1	1	2	2	2	1	1	1	1	2	.....	2
Over 200 and not exceeding 300 tons.....	.....	.....	1	.....	.....	.....	.....	1	1	.....	1	1	1	1
Over 300 and not exceeding 400 tons.....	.....	1	.....	.....	1	1	.....	2	.....	.....	2	.....	.....	.....
Over 400 and not exceeding 500 tons.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....
Over 500 and not exceeding 600 tons.....	.....	1	.....	1	.....	.....	1	1	.....	.....	.....	.....	2	1
Over 600 and not exceeding 700 tons.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	1
Over 700 and not exceeding 800 tons.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	2
Over 800 and not exceeding 900 tons.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	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	.....	.....	.....
Over 1,200 and not exceeding 1,300 tons.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2
Over 1,300 and not exceeding 1,400 tons.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Over 1,400 tons.....	.....	5	.....	2	1	3	1	5	.....	3	.....	8	1	.....
Unknown.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Total.....	5	11	3	4	7	8	9	16	5	8	5	17	7	16
Aggregate.....	16	.....	7	.....	15	.....	25	.....	13	.....	22	.....	33	.....

TABLE 58.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, etc.—Continued.

Burden of vessels.	February.		March.		April.		May.		June.		Total.		Aggregate.
	Total loss.	Partial loss.											
Not exceeding 50 tons	1	...	...	...	...	...	...	...	...	...	8	...	8
Over 50 and not exceeding 100 tons.....	...	...	...	...	...	...	...	...	2	2	12	6	18
Over 100 and not exceeding 200 tons.....	1	1	1	1	1	...	...	2	...	...	12	6	24
Over 200 and not exceeding 300 tons.....	1	1	1	1	1	...	...	...	...	...	5	6	11
Over 300 and not exceeding 400 tons.....	1	2	1	...	1	...	1	...	...	...	3	10	13
Over 400 and not exceeding 500 tons.....	...	5	...	1	1	...	...	...	...	...	...	12	12
Over 500 and not exceeding 600 tons.....	...	3	...	...	...	...	...	...	...	3	7	...	10
Over 600 and not exceeding 700 tons.....	1	6	...	...	1	...	...	...	...	1	11	...	12
Over 700 and not exceeding 800 tons.....	...	1	...	...	...	...	...	...	...	1	4	...	5
Over 800 and not exceeding 900 tons.....	1	1	...	...	...	...	...	...	...	2	3	...	5
Over 900 and not exceeding 1,000 tons.....	...	1	...	...	1	...	...	1	...	...	4	...	4
Over 1,000 and not exceeding 1,100 tons.....	...	...	1	1	...	...	...	...	...	1	2	...	3
Over 1,100 and not exceeding 1,200 tons.....	...	2	...	...	...	...	...	...	...	...	4	...	4
Over 1,200 and not exceeding 1,300 tons.....	2	...	...	...	1	...	...	...	...	...	4	...	6
Over 1,300 and not exceeding 1,400 tons.....	...	...	...	...	...	...	...	...	...	1	1	...	2
Over 1,400 tons.....	1	3	...	2	1	4	...	3	...	2	5	40	45
Unknown.....	...	...	...	...	...	...	...	...	...	...	6	...	6
Total.....	9	25	3	6	1	11	...	5	2	5	56	132	188
Aggregate	34	...	9	...	12	...	5	7	...	188	...	...	...

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 and in foreign waters during the year ending June 30, 1901, showing the number of vessels and distinguishing age.

Age.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Not exceeding 5 years.....	6	1	3	5	1	7	3	3	...	3	...	1	33
Over 5 and not exceeding 10 years.....	2	2	1	3	3	4	1	4	1	2	...	...	22
Over 10 and not exceeding 15 years.....	1	1	3	4	...	3	3	7	3	3	...	2	37
Over 15 and not exceeding 20 years.....	2	2	3	6	3	1	4	11	2	4	...	1	41
Over 20 and not exceeding 25 years.....	2	...	3	2	2	2	3	3	1	...	...	...	19
Over 25 and not exceeding 30 years.....	1	1	1	1	2	2	3	3	...	...	...	1	15
Over 30 and not exceeding 35 years.....	...	...	1	3	1	...	1	1	1	1	...	1	10
Over 35 and not exceeding 40 years.....	1	...	...	...	1	1	3	1	...	...	...	...	8
Over 40 and not exceeding 45 years.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Over 45 and not exceeding 45 years.....	...	...	...	1	...	...	...	...	...	...	...	...	1
Over 50 years.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Unknown	1	...	...	...	...	...	...	...	...	...	...	1	2
Total.....	16	7	15	25	13	22	23	34	9	12	5	7	188

TABLE 60.—Abstract of returns of disasters to American vessels at sea and in foreign waters during the year ending June 30, 1901, showing the number of vessels and distinguishing their cargoes.

Cargoes.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Ballast	4	...	3	4	3	3	6	4	3	3	...	3	36
Asphalt .....	...	...	...	...	...	...	1	1	...	...	...	...	3
Coal	1	1	1	2	1	3	3	4	3	2	1	...	21
Cotton, cotton seed, etc.	...	...	...	...	...	1	3	3	...	...	...	...	3
Fertilizers .....	...	...	...	...	...	...	1	2	...	...	...	...	3
Fish, oysters, etc.	1	...	4	...	...	1	...	...	...	...	...	1	7
Fruit, coffee, nuts, etc.	1	...	1	4	...	1	1	...	...	...	...	...	8
Grain .....	...	1	1	...	...	...	...	...	...	...	...	...	3
Ice .....	...	1	1	...	...	...	...	...	...	...	...	...	1
Live stock .....	...	...	...	...	...	1	...	...	...	...	...	...	1
Lumber	3	...	1	3	2	3	5	15	1	1	...	...	40
Merchandise (general)	...	3	1	4	2	3	1	3	1	1	...	...	21
Petroleum	1	...	1	...	...	...	...	...	...	2	...	...	4
Provisions .....	...	...	...	...	1	...	...	...	...	...	...	...	1
Railroad iron	2	...	...	...	...	...	1	...	...	...	...	...	3
Salt .....	...	...	...	1	...	...	...	2	...	...	...	...	3
Sand, plaster, etc.	...	1	1	...	...	1	...	...	...	...	...	...	3
Stone, brick, etc.	...	...	...	...	1	...	...	...	...	...	...	...	1
Sugar, molasses, etc.	...	...	...	...	...	...	...	2	...	1	...	...	3
Miscellaneous	1	...	...	4	2	1	2	1	1	...	...	...	12
Unknown	2	...	1	3	1	...	...	...	...	2	...	3	12
Total	16	7	15	25	13	22	23	34	9	12	5	7	188

TABLE 61.—Summary—AT SEA and in FOREIGN WATERS.

Nature of casualties.	Number of vessels.	Tonnage 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 in crews.	Total on board.	Number of lives lost.
		Totally lost.	Damaged.										
Foundering	12	3,536	.....	3,536	11	1	.....	12	.....	.....	60	60	5
Strandings	25	5,235	24,196	29,431	20	5	.....	11	14	149	526	675	1
Vessels collided	30	694	53,459	54,153	12	7	11	6	24	.....	270	270	6
Other causes	121	14,728	140,541	155,269	97	23	1	27	94	2,595	3,281	5,876	151
Total	188	24,193	218,196	242,389	140	36	12	56	132	2,744	4,137	6,881	163

*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.—Summary of disasters which have occurred to FOREIGN vessels on and near the COASTS and on the RIVERS of the United States during the year ending June 30, 1901.

	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	Total.
Number of vessels.....	37	26	3	4	50
Tonnage of vessels totally lost.....	6,680	6	654		7,360
Tonnage of vessels damaged.....	77,705	9,658	300	13,501	101,164
Aggregate tonnage.....	84,385	9,684	954	13,501	108,524
Laden.....	16	3			19
In ballast.....	2	2	3		7
Unknown whether laden or not.....	19	1		4	24
Wrecks involving total loss.....	7	1	2		10
Casualties involving partial and unknown damage.....	30	5	1	4	40
Number of passengers.....	8				8
Number in crews.....	222	100	19		341
Total on board.....	230	100	19		349
Number of lives lost.....	3				3
Total value of vessels.....	\$692,000	\$470,000	\$13,000		\$1,175,000
Total value of cargoes.....	637,590	278,700			916,290
Aggregate.....	1,329,590	748,700	13,000		2,091,290
Total losses to vessels.....	467,700	82,000	7,500		557,200
Total losses to cargoes.....	379,630	7,000			386,630
Aggregate.....	847,330	89,000	7,500		943,830
Total insurance on vessels.....	131,000				131,000
Total insurance on cargoes.....	100,000				100,000
Aggregate.....	231,000				231,000

TABLE 63.—GENERAL SUMMARY.

Nature of casualties.	Number of vessels.	Tonnage of vessels totally lost.	Tonnage of vessels damaged.	Value of vessels.	Value of cargoes.	Losses to vessels.	Losses to cargoes.
Foundering:							
Atlantic and Gulf coasts.....	51	6,765	1,453	\$299,315	\$277,520	\$218,965	\$229,610
Pacific coast.....	4	56		17,350		17,350	200
Great Lakes.....	19	8,227	1,381	805,700	44,165	269,500	39,915
Rivers.....	8	142	472	29,000	1,730	15,050	555
At sea and in foreign waters.....	12	3,536		96,600	39,485	96,600	39,485
Total.....	94	18,726	3,306	747,965	363,100	617,465	309,765
Strandings:							
Atlantic and Gulf coasts.....	182	20,673	46,133	3,591,635	943,385	970,210	291,965
Pacific coast.....	63	15,711	21,388	2,641,900	1,352,135	1,246,300	592,610
Great Lakes.....	80	4,435	100,677	5,114,600	1,373,450	359,705	36,785
Rivers.....	16	276	6,298	406,250	175,750	42,125	14,450
At sea and in foreign waters.....	25	5,235	24,196	2,206,300	849,940	621,550	206,065
Total.....	366	46,330	198,692	13,960,685	4,694,660	3,239,890	1,141,875
Vessels collided:							
Atlantic and Gulf coasts.....	213	3,102	199,965	11,002,950	1,996,845	347,975	56,040
Pacific coast.....	20	3,576	19,584	976,800	99,500	109,370	14,500
Great Lakes.....	99	4,370	147,777	8,354,000	1,607,960	459,960	23,860
Rivers.....	40	677	31,093	1,080,300	104,300	51,160	5,050
At sea and in foreign waters.....	30	694	53,459	642,870	409,230	85,720	28,550
Total.....	406	12,419	451,878	22,056,920	4,217,835	1,054,185	128,000
Other causes:							
Atlantic and Gulf coasts.....	110	4,033	45,759	4,270,250	439,200	379,850	84,475
Pacific coast.....	17	879	6,719	577,000	37,940	147,850	2,600
Great Lakes.....	79	1,501	54,178	3,223,575	775,935	441,940	95,900
Rivers.....	72	4,011	16,856	1,422,900	675,920	337,750	145,770
At sea and in foreign waters.....	121	14,728	140,541	10,916,875	2,510,310	746,230	210,950
Total.....	399	25,152	264,053	20,410,600	4,439,305	2,053,620	539,695
Grand total.....	1,265	102,627	917,929	57,176,170	13,714,900	6,965,160	2,119,335

TABLE 63.—GENERAL SUMMARY—Continued.

Nature of casualties.	Insurance on vessels. ^a	Insurance on cargoes. ^a	Laden.	Ballast.	Unknown whether laden or not.	Wrecks involving total loss.	Casualties involving partial and unknown damage.	Number of passengers.	Number in crews.	Total on board.	Number of lives lost. ^b
Foundering:											
Atlantic and Gulf coasts	\$58,750	\$25,500	34	17	.....	36	15	248	205	453	9
Pacific coast			1	3	.....	4			8	8	
Great Lakes	111,220	25,135	15	4	.....	16	4	9	117	126	40
Rivers	2,300		5	3	.....	2	6		57	57	
At sea and in foreign waters.	33,310	23,375	11	1	.....	12			60	60	5
Total.....	205,580	74,010	66	28	.....	70	25	257	447	704	54
Strandings:											
Atlantic and Gulf coasts	1,111,850	307,335	114	68	.....	93		2,636	1,432	4,068	25
Pacific coast	965,300	66,700	40	23	.....	39	24	443	1,186	1,629	133
Great Lakes	3,677,995	543,025	61	19	.....	15	65	343	995	1,338	13
Rivers	293,500	7,500	8	8	.....	4	12	154	291	445	
At sea and in foreign waters.	1,582,675	637,050	20	5	.....	11	14	149	526	675	1
Total.....	7,631,320	1,561,610	243	123	.....	162	115	3,725	4,430	8,155	172
Vessels collided:											
Atlantic and Gulf coasts	5,948,065	1,263,620	99	74	40	15	198	4,091	2,496	6,587	9
Pacific coast	265,500		8	8	4	1	19	505	294	799	
Great Lakes	4,146,350	467,705	64	29	6	5	94	157	1,341	1,498	9
Rivers	419,900	14,000	18	20	6	3	41	518	680	1,198	3
At sea and in foreign waters.	151,030	20,000	12	7	11	6	24		270	270	6
Total.....	10,930,845	1,765,325	201	138	67	30	376	5,271	5,081	10,352	27
Other causes:											
Atlantic and Gulf coasts	2,710,350	332,850	47	63	.....	22	88	1,129	1,185	2,314	6
Pacific coast	247,800	32,500	5	11	1	7	10	432	204	636	
Great Lakes	1,502,335	385,400	46	33	.....	8	71	348	931	1,279	12
Rivers	650,000	256,740	29	43	.....	29	43	1,502	1,482	2,984	16
At sea and in foreign waters.	7,902,425	820,935	97	23	1	27	94	2,595	3,281	5,876	151
Total.....	13,012,910	1,828,425	224	173	2	93	306	6,006	7,083	13,089	185
Grand total.....	31,780,655	5,229,370	734	462	69	355	822	15,259	17,041	32,300	438

RECAPITULATION.—(GENERAL SUMMARY.)

	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea or in foreign waters.	Total.
Number of vessels	556	104	277	140	188	1,265
Tonnage of vessels totally lost	34,673	20,222	18,533	5,106	24,193	102,627
Tonnage of vessels damaged.	293,310	47,691	304,013	54,719	218,196	917,929
Aggregate tonnage	327,883	67,913	322,546	59,825	242,389	1,020,556
Laden	294	54	186	60	140	734
Ballast	222	45	85	74	36	462
Unknown whether laden or not.....	40	5	6	6	12	69
Wrecks involving total loss..	162	51	44	38	56	351
Casualties involving partial and unknown damage	394	53	233	102	132	914
Number of passengers	8,104	1,380	857	2,174	2,744	15,259
Number in crews	5,318	1,692	3,384	2,510	4,137	17,041
Total on board.....	13,422	3,072	4,241	4,684	6,881	32,300
Number of lives lost ^b	49	133	74	19	163	438
Total value vessels involved.	\$19,164,150	\$4,213,050	\$16,997,875	\$2,938,450	\$13,862,645	\$57,176,170
Total value cargoes involved.	3,656,950	1,489,775	3,801,510	957,700	3,808,965	13,714,900
Aggregate	22,821,100	5,702,825	20,799,385	3,896,150	17,671,610	70,891,070
Total losses to vessels.....	1,917,000	1,520,870	1,531,105	446,085	1,550,100	6,965,160
Total losses to cargoes	662,090	609,910	196,460	165,825	485,050	2,119,335
Aggregate	2,579,090	2,130,780	1,727,565	611,910	2,035,150	9,084,495
Total insurance on vessels*..	9,829,015	1,478,600	9,437,900	1,365,700	9,669,440	31,780,655
Total insurance on cargoes*..	1,929,305	99,200	1,421,265	278,240	1,501,360	5,229,370
Aggregate	11,758,320	1,577,800	10,859,165	1,643,940	11,170,800	37,010,025

*The amount of insurance is on 558 vessels and on 245 cargoes.

^bIn addition to the number of lives lost here reported 244 lives were lost in cases where no other casualty occurred to the vessels, making the total number of lives lost 682.

TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, and to American vessels at sea and in foreign waters, involving loss of life, during the year ending June 30, 1901, 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, etc.*

(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.	Passengers.	Crews.	Lives lost.	Place of disaster.
1900											
July 7	Idler	American schooner	84	Port Huron, Mich..	Cleveland, Ohio.....	Partial	Ballast	7	8	6	Lake Erie.
Sept. 8	Eclipse	Yacht.	20	Lying at moorings..	Galveston, Tex.....	Total	do .....	.....	1	2	Galveston Bay, Tex.
Sept. 8	Louise	American schooner.	105	Clinton, Tex.....	Galveston, Tex.....	Partial	do .....	.....	7	9	Do.
Sept. 12	John B. Lyon.....	American steamer..	1,710	Marquette, Mich...	Cleveland, Ohio.....	Total	Iron ore	16	16	2	Lake Erie.
Sept. 12	Dundee	American schooner.	1,048	Ashtabula, Ohio...	Ashtabula, Ohio.....	do	do	7	7	1	Do.
Nov. 14	Margaretta	American schooner.	52	New Haven, Conn..	Brooklyn, N. Y.....	Partial	Wire rods.....	3	3	1	Long Island Sound.
Nov. 25	Maumee Valley ..	do	213	Buffalo, N. Y.....	Toledo, Ohio.....	Total	Coal .....	.....	7	7	Pigeon Bay, Lake Erie.
Dec. 9	Charles Foster.....	do	997	Superior, Wis.....	Erle, Pa	do	Iron ore	1	7	8	Lake Erie.
1901											
Feb. 12	Alabama	do	1,427	Newport News, Va.	Providence, R. I.....	do	Coal .....	.....	5	5	At sea.
Mar. 29	Annie M. Bauer ..	American steamer..	25	St. George, N. Y...	Brooklyn, N. Y.....	Partial	Ballast .....	.....	4	2	New York Harbor.
May 21	Leonora	American schooner.	27	Charleston, S. C...	South Edisto, S. C...	Total	Barrels .....	.....	4	3	Near South Edisto Inlet, S. C.
May 24	H. Rand	American schooner.	124	Boyne City, Mich...	Milwaukee, Wis.....	do	Slabs	1	3	4	Lake Michigan.
June 28	Fern	American steamer..	48	Sault Ste. Marie, Mich.	Eagle River, Mich..	do	Ballast .....	.....	5	5	Lake Superior.

Total: Vessels, 13; tonnage, 5,875; total losses, 9; partial losses, 4; number of passengers, 9; number in crews, 77; number of lives lost, 54.

TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, and to American vessels at sea and in foreign waters, involving loss of life, during the year ending June 30, 1901, in four divisions, viz: (1) Foundering, (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, etc.*

(2) STRANDINGS.

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.	Passengers.	Crews.	Lives lost.	Place of disaster.
1900.											
Sept. 12	Prosper	American schooner.	24	San Francisco, Cal.	Nome, Alaska	Total	Ballast	7	16	1	Cape Nome, Alaska.
Oct. 6	Merom	American bark	1,204	do	Karluk, Alaska.	do	Cannon.	4	4	1	Karluk, Kadlak Island, Alaska.
Oct. 16	Millie Florence	American schooner.	16	Port Clyde, Me.	Fishing grounds.	do	Ballast	4	4	1	Monhegan, Me.
Oct. 17	Velma	do	96	Southwest Harbor, Me.	Calais, Me	do	Coal	4	4	1	Grand Manan, N. B.
Oct. 23	Cleveland	American steamer.	1,160	Nome, Alaska	do	do	do	29	4	1	Cape Rodney, Alaska.
Nov. 8	James J. Rees	American schooner.	70	Norfolk, Va.	Baltimore, Md	Partial	Lumber	4	4	4	Near Holland Island, Md.
Nov. 9	Myra B. Weaver	do	524	Fernandina, Fla.	Boston, Mass	do	do	2	8	6	Handkerchief Shoals, Mass.
Nov. 17	Agate	do	81	Bangor, Me.	do	do	do	3	1	1	Boothbay Harbor, Me.
Dec. 5	Mary A. Brown	do	15	Fishing trip	do	Total	Fish	5	5	5	Great Boars Head, N. H.
Dec. 21	Jennie Hall	do	412	Port of Spain, Trinidad.	Baltimore, Md	do	Asphalt	7	7	3	Virginia Beach, Va.
1901.											
Jan. 4	Iaqua	American steamer.	712	San Francisco, Cal.	San Diego, Cal.	Partial	Shingles	2	21	1	Duxbury Reef, Cal.
Jan. 24	Barbara Heinster	do	148	do	Point Arena, Cal.	do	Wood	9	9	1	Point Arena, Cal.
Feb. 22	City of Rio de Janeiro.	do	3,548	Honolulu, Hawaii.	San Francisco, Cal.	Total	General	95	114	128	Golden Gate, Cal.
Apr. 7	Hyena	American schooner.	114	South Amboy, N. J.	Calais, Me	do	Coal	4	4	2	Eastern Point, Cape Ann, Mass.
Apr. 7	Wendall Burpee	British schooner.	99	New York City	St. John, N. B	do	do	4	4	3	Broad Cove, Cape Elizabeth, Me.
Apr. 24	Baltimore	American steamer.	1,160	Lorain, Ohio	Washburn, Wis	do	do	15	15	13	Au Sable, Mich.

Total: Vessels, 16; tonnage, 9,983; total losses, 11; partial losses, 5; number of passengers, 99; number in crews, 284; number of lives lost, 172.

TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, and to American vessels at sea and in foreign waters, involving loss of life, during the year ending June 30, 1901, in four divisions, viz: (1) Foundering, (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, etc.*

(3) COLLISIONS.

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.	Passengers.	Crews.	Lives lost.	Place of disaster.
1900.											
July 8	Mary Story	American schooner.	64	Fishing trip		Total	Fish	15	3	3	At sea.
July 10	Eddie	American schooner.	17	Boston Harbor, Mass.		Partial	Ballast	.....	.....	1	Boston Harbor, Mass.
July 29	Henry W. Sage	American schooner.	848	Toledo, Ohio	Manitowoc, Wis.	do	Coal	.....	.....	7	St. Clair River.
Aug. 1	J. S. Richards	do	278	Elk Rapids	Buffalo, N. Y.	Total	Pig iron	.....	.....	2	Detroit River.
Aug. 3	Fontana	do	1,163	Presque Isle, Mich.	Cleveland, Ohio	do	Iron ore	.....	.....	8	Do.
Aug. 7	Mamie Ellen	American sloop.	10	Norfolk, Va.	Nansemond River, Va.	No damage.	Ballast	.....	.....	2	Hampton Roads.
Aug. 8	No name ^a .	Skiff		Petersburg, Va.	Newport News, Va.	No damage.	Lumber	.....	.....	3	Monongahela River.
Aug. 10	Geo. T. Wainwright.	American schooner.	52			do		.....	.....	1	James River.
Aug. 14	William D.	American steamer.	51	Ashtabula, Ohio	For a tow	Partial	Ballast	.....	.....	4	Lake Erie.
Sept. 5	No name ^b .	Rowboat				do		.....	.....	1	Algonac, Mich.
Sept. 14	Viola	Launch				do		.....	.....	3	San Francisco Bay, Cal.
Sept. 18	America	American steamer.	68	New York	Lake Erie	Partial	Ballast	.....	.....	6	New York Harbor.
Sept. 21	John Martin	American steamer.	937	Two Harbors, Minn.	Lake Erie	Total	Iron ore	.....	.....	8	St. Clair River.
Oct. 2	Fleetwing	American steamer.	17	Philadelphia, Pa.	Schuylkill River	do	Ballast	.....	.....	5	Delaware River.
Oct. 5	Uncle Abe.	do	72	Lying in port.		do	do	.....	.....	8	New York Harbor.
Oct. 27	Mary P. Mosquita	American schooner.	65	Fishing trip		Total	Fish	.....	.....	16	At sea.
Nov. 5	No name ^d .	Skiff		Honolulu, Hawaii	Port Townsend, Wash.	Partial	Ballast	.....	.....	2	New Orleans, La.
Nov. 6	Abby Palmer	American bark	1,767			do	do	.....	.....	17	At sea.
Nov. 28	John B. Patton	American steamer.	39	Employed in harbor		do	do	.....	.....	4	Philadelphia, Pa.
Dec. 7	No name ^e .	Yawl		Chesapeake Bay		do	do	.....	.....	3	Ohio River.
1901.											
Mar. 5	Mary J. Lewis	American schooner.	14		Baltimore, Md.	No damage.	Oysters	.....	.....	6	Chesapeake Bay.
Apr. 10	Croton	American steamer.	54	Brooklyn, N. Y.	Jersey City, N. J.	do	do	.....	.....	4	New York Harbor.
Apr. 23	Samuel Ricker	American schooner.	64	New Haven, Conn.	Providence, R. I.	Total	Oysters	.....	.....	2	Long Island Sound.
June 1	Northfield	Ferryboat	600	New York Harbor		do	Ballast	.....	.....	11	New York Harbor.
June 30	Winona	American schooner.	109	Cape Broyle, N. F.	Fishing banks.	do	Fish	.....	.....	6	At sea.

^a Collision with steamer Edger Cherry.^b Collision with steamer Idlewild.^c Collision with steamer Dauntless.^d Collision with steamer Dick Fulton.^e Collision with steamer Leo.

Total: Vessels, 25; tonnage, 6,284; total losses, 9; partial losses, 6; no damage, 10; number of passengers, 425; number in crews, 161; number of lives lost, 43.

TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, and to American vessels at sea and in foreign waters, involving loss of life, during the year ending June 30, 1901, in four divisions, viz: (1) Foundering, (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, etc.*

(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.	Passengers.	Crews.	Lives lost.	Place of disaster.	Nature of casualty.
1900. July 1	Hesper	Am. slip. y.	25	Woods Hole, Mass.	Boston, Mass.	No damage.	Ballast	3	5	2	Pollock Rip, Cape Cod.	While working on small boat hanging in davits, heavy sea carried away boat and occupant. The other was lost by the capsizing of small boat while going to rescue the former. Explosion of boiler. Lost overboard.
July 3	Peter Hontz	Am. str	100	Paducah, Ky.	Waterloo, Ala.	Partial.	. . . do . . . . .	. . . . .	80	4	Tennessee River.	Fell overboard.
July 4	Sabine. . . . .	. . . do	3,329	Key West, Fla.	Galveston, Tex.	No damage.	Unknown	23	56	1	At sea	Fell overboard while intoxicated.
July 5	Chas. C. Ryan. . . . .	. . . do	28	Traverse City, Mich.	St. James, Mich. . . . .	. . . do	Ballast	4	4	1	Lake Michigan.	Fell overboard.
July 8	Edgar Cherry. . . . .	. . . do	266	Pittsburg, Pa.	Morgantown, W. Va. . . . .	. . . do . . . . .	. . . do	55	35	1	Monongahela River	Fell overboard.
July 9	Capt. Sam. . . . .	. . . do	92	Greenville, Miss.	New Orleans, La. . . . .	. . . do	Unknown . . . . .	. . . . .	42	2	Mobile Bay, Ala.	Fell overboard.
July 10	Resolute. . . . .	. . . do	426	New York	Sandy Hook, N. J. . . . .	. . . do . . . . .	. . . do . . . . .	. . . . .	9	1	Mississippi River	Do.
July 10	Albert H. Ellis. . . . .	. . . do	117	New York	Lubec, Me. . . . .	. . . do	Ballast	1	9	1	New York Harbor	Do.
July 12	Maud Mallock.	Am. sc.	116	. . . do	Lubec, Me. . . . .	. . . do	Unknown	1	4	1	Lubec, Me.	Parting of rigging let boom drop, which knocked him overboard.
July 12	J. D. Peters	Am. str	880	San Francisco, Cal.	Stockton, Cal. . . . .	. . . do . . . . .	. . . do	80	50	1	Stockton, Cal.	Fell overboard from staging while scrubbing vessel.
July 13	Clara P. Sewell	Am. sc.	52	Pensacola, Fla.	Fishing banks. . . . .	. . . do	Ballast	7	7	1	At sea	Capsizing of small boat while fishing.
July 14	Sophia J. Luff. . . . .	. . . do	278	Detour, Mich.	Chicago, Ill. . . . .	. . . do	Unknown	8	8	1	Chicago, Ill.	Lost overboard.
July 15	Mary B. Curtis.	Am. str	78	. . . do	Chicago, Ill. . . . .	. . . do	Ballast . . . . .	. . . . .	. . . . .	. . . . .	Mobile Bay, Ala.	While sitting on rail, fell overboard.
July 15	John Craig . . . . .	. . . do	2,044	Ashtabula, Ohio.	Lake Linden, Mich. . . . .	. . . do	Coal	16	16	1	Lake Linden, Mich.	Fell into hold.
July 16	Wm. H. Gratiwick. . . . .	. . . do	20	Memphis, Tenn.	Ashpport, Tenn. . . . .	. . . do	Ballast	4	4	2	Tonawanda, N. Y.	Vessel capsized.
July 18	Eillen . . . . .	. . . do	35	Memphis, Tenn.	Ashpport, Tenn. . . . .	. . . do	Unknown	7	7	1	Mississippi River	Stumbled and fell overboard.

TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, etc.—Continued.*
 (4) OTHER CAUSES—Continued.

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.	Passengers.	Crews.	Lives lost.	Place of disaster.	Nature of casualty.
1900.												
July 18	L. McNiell.....	Am. str.....	145	Spring Creek, Fla. .	Jacksonville, Fla. .	No damage.	Naval stores	1	9	2	St. Johns River, Fla.	Lost overboard.
July 19	David Beard.....	Am. sc.....	665	Pensacola, Fla.	Boston, Mass.	do.	Lumber	.....	9	1	Off Block Island, R. I.	Fell overboard.
July 20	Ella Andrews.....	Am. str.....	64	New Orleans Harbor	.....	do.	Ballast	.....	1	1	New Orleans, La. . .	While attempting to pass from steamer to barge fell overboard.
July 25	Mikado.....	do.....	91	Lying in harbor.....	.....	do.	do	.....	5	1	New Haven, Conn. .	While walking outside of rail fell overboard.
July 26	May.....	Am. st. y.....	22	Middletown, Conn.	Saybrook Conn.	do.	do	.....	3	1	Connecticut River. .	Fell overboard.
July 28	J. C. Risher.....	Am. str.....	148	Pittsburg, Pa.	Cincinnati, Ohio. .	do.	do	.....	23	1	Ohio River	Fell overboard from barge in tow.
July 28	Silver Spray.....	do.....	38	Houghton, Mich.	Copper Harbor, Mich.	do.	do	.....	7	1	Lake Superior	Lost overboard.
July 29	Wm. Elliott.....	do.....	171	.....	.....	do.	Unknown	.....	.....	1	Pedee River, S. C.	Fell overboard while intoxicated.
July 30	Annie H.....	do.....	41	Jacksonville, Fla. .	Orange Park, Fla. .	do.	Ballast	.....	5	1	Orange Park, Fla. . .	Walked overboard from lighter in tow.
July 30	Templar.....	do.....	52	Alexandria, Va.	Baltimore, Md.	Total	do	.....	6	2	Baltimore Harbor, Md.	Explosion of boiler.
Aug. 1	Quickstep.....	do.....	66	Newport, Ark.	Augusta, Ark.	No damage.	Unknown	123	14	1	White River, Ark. . .	Fell overboard while intoxicated.
Aug. 2	Nyaek.....	do.....	1,257	Grand Haven, Mich.	Milwaukee Wis.	age.	do	.....	67	85	Lake Michigan.....	Do.
Aug. 2	Henry Plumb.....	Ferryboat	92	.....	Ordnance, N. Y. . .	do.	do	250	4	1	St. Lawrence River	Fell overboard.
Aug. 5	Lottie.....	Am. str.....	141	Charleston, S. C. . .	Kiewha Island	do.	do	104	8	2	Stone River Inlet, S. C.	Capizing of small boat.
Aug. 5	Wacouta.....	Am. st. y.....	803	Duluth, Minn.	Isle Royale, Mich. .	do.	do	.....	.....	2	Washington Harbor, Mich.	Fatally scalded by explosion of safety valve.
Aug. 6	Silver Spray.....	Am. str.....	38	Houghton, Mich.	Copper Harbor, Mich.	do.	do	.....	7	1	Lake Superior.....	Drawn overboard by lines.
Aug. 8	Elva.....	do.....	53	Lying at wharf.....	.....	do.	Ballast	.....	9	1	Louisville, Ky.	Fell overboard while intoxicated.
Aug. 10	Aryan.....	Am. shp.....	2,123	New York	San Francisco, Cal.	do.	Unknown	.....	20	2	At sea	One died from injuries received from being struck by a heavy sea; the other was lost overboard.

Aug. 10	Lizzie Prien	Am. sc.	95	Siuslaw River, Oreg.	.....do	.....do	6	2	Siuslaw River, Oreg.	.....do	.....do	6	2	Capsize of small boat.
Aug. 12	Hill City	Am. str	1,609	New Orleans, La.	.....do	.....do	56	4	Mississippi River	.....do	.....do	56	4	Thrown overboard by breaking of a plank while working on wheel.
Aug. 13	Red Bluff	.....do	246	Red Bluff, Cal.	.....do	.....do	35	1	Sacramento River, Cal.	.....do	.....do	35	1	Tripped over a line and fell overboard.
Aug. 15	R. Dunbar	.....do	252	Louisville, Ky.	.....do	.....do	40	1	Rosewood, Ind.	.....do	.....do	40	1	Fatally injured by being caught in line around capstan.
Aug. 15	John J. Driscoll	Am. sc.	17	Scranton, Miss.	.....do	.....do	4	1	Grants Pass, Ala.	.....do	.....do	4	1	Knocked overboard by foreboom.
Aug. 18	May Graham	Am. str	91	St. Joseph, Mich.	.....do	.....do	9	1	Reasors Landing, St. Joseph River, Mich.	.....do	.....do	9	1	Walked over board while going ashore.
Aug. 18	Anita	.....do	45	Lying at dock	.....do	.....do	6	1	Baltimore, Md.	.....do	.....do	6	1	While sitting on rail, fell overboard.
Aug. 20	Prosper	.....do	168	Seattle, Wash.	.....do	.....do	14	1	Puget Sound, Wash.	.....do	.....do	14	1	Fell overboard.
Aug. 21	Doner	.....do	244	Sacramento, Cal.	.....do	.....do	80	1	Sacramento River	.....do	.....do	80	1	Fell overboard while intoxicated.
Aug. 24	Seabright	.....do	33	Little River, S. C.	.....do	.....do	5	1	Wilmington, N. C.	.....do	.....do	5	1	Fell overboard.
Aug. 25	William Jones	Am. sc.	885	Au Sable, Mich.	.....do	.....do	7	1	Lake Erie	.....do	.....do	7	1	Do.
Aug. 26	Horatio Hall	Am. str	8,167	New York	.....do	.....do	75	1	At sea	.....do	.....do	75	1	Lost overboard.
Aug. 31	New York Central No. 16.	.....do	404	Lying at dock	.....do	.....do	11	1	New York Harbor	.....do	.....do	11	1	Fell overboard while jumping from vessel to dock.
Aug. —	Lizzie M. Bells	Am. sc.	109	Mobile, Ala.	.....do	Total	5	5	At sea	.....do	.....do	5	5	Never heard from.
Sept. 1	Joanna	Am. str	148	Newark, N. J.	.....do	No damage.	7	1	Newark Bay	.....do	.....do	7	1	Fell overboard.
Sept. 2	Nannie May	Am. sc.	14	Curtis Bay, Md.	.....do	.....do	2	1	Baltimore Harbor, Md.	.....do	.....do	2	1	Do.
Sept. 3	Fanny Cadwall	Am. str	336	Sassafras River, Md.	.....do	.....do	23	1	.....do	.....do	.....do	23	1	Fell overboard while skyarking.
Sept. 4	North Pacific	.....do	488	Vancouver, B. C.	.....do	.....do	25	1	Gulf of Georgia	.....do	.....do	25	1	Fell overboard.
Sept. 9	Jacob Richtman	.....do	469	Omaha, Nebr.	.....do	.....do	40	25	Omaha, Nebr.	.....do	.....do	40	25	Fell overboard while jumping from one vessel to another.
Sept. 10	Willie A. McKay	Am. sc.	175	On fishing trip	.....do	.....do	25	1	At sea	.....do	.....do	25	1	Lost in dory while attending trawls.
Sept. 10	Alverda S. Elzey	.....do	283	New York	.....do	.....do	6	1	.....do	.....do	.....do	6	1	Lost overboard.
Sept. 10	Levin J. Marvel	.....do	183	Baltimore, Md.	.....do	.....do	3	1	Rappahannock River.	.....do	.....do	3	1	Fell overboard.
Sept. 11	Emily Jane	.....do	17	Philadelphia, Pa.	.....do	.....do	5	1	Delaware River	.....do	.....do	5	1	Fell overboard while drawing water.
Sept. 12	Columbia	.....do	124	Louisburg, N. S.	.....do	.....do	18	1	At sea	.....do	.....do	18	1	Capsize of dory while attending trawls.
Sept. 12	Maud M. Story	.....do	75	Pubnico, N. S.	.....do	.....do	16	1	.....do	.....do	.....do	16	1	Washed overboard by heavy sea.
Sept. 13	Jacob Richtman	Am. str	469	Omaha, Nebr.	.....do	Partial	45	23	Florence, Nebr.	.....do	.....do	45	23	Explosion of boiler.

TABLE 64.—Wrecks and casualties on and near the coasts and on the rivers of the United States, etc.—Continued.

(4) OTHER CAUSES—Continued.

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.	Passengers.	Crews.	Lives lost.	Place of disaster.	Nature of casualty.
*1900.												
Sept. 16	John Barret	Am. str.	187	New Orleans, La.	Greenville, Miss.	Nodam- age	Ballast	.....	43	1	Port Hickory, La.	Fell overboard.
Sept. 16	Lydia E. Raesser	Am. sc.	131	East Jordan, Mich.	Sheboygan, Wis.	do	Unknown	.....	4	1	East Jordan, Mich.	Do. Backing overboard of team he was driving.
Sept. 17	Mineola	Ferryboat	620	New York	Brooklyn, N. Y.	do	do	.....	5	1	New York Harbor	Capizing of dories. Capizing of dory.
Sept. 18	Mary A. Whalen	Am. sc.	134	Boston, Mass.	Fishing grounds	do	Ballast	.....	23	4	At sea	Capizing of dories.
Sept. 18	Black Bird	Am. slip	449	Perth Amboy, N. J.	Boston, Mass.	Partial	Coal	.....	3	1	Wellfleet, Cape Cod	Fell overboard.
Sept. 21	Columbia	Am. str.	2, 721	Portland, Oreg.	San Francisco, Cal.	Nodam- age	General	.....	65	1	Near Shelter Cove, Cal.	Vessel on fire.
Sept. 21	War Eagle	do	747	Lying at wharf	.....	Partial	Ballast	.....	12	1	St. Louis, Mo.	Fell overboard from steep while scrub- bing vessel.
Sept. 24	Norseman	do	660	Alpena, Mich.	Chicago, Ill.	Nodam- age	Unknown	.....	14	1	Chicago, Ill.	Capizing of small boat while conveying passengers from shore to vessel.
Sept. 26	Albion	do	319	Golofnin Bay, Alaska.	San Francisco, Cal.	do	do	.....	35	3	Golofnin Bay, Alaska.	Fell overboard. Jumped overboard while delirious.
Sept. 27	Henry Harley	do	162	Louisville, Ky.	Evansville, Ind.	do	do	.....	1	1	Louisville, Ky.	Knocked overboard by lifting of boom.
Sept. 27	William H. Grat- wick	do	1, 687	Black River, Mich.	Toledo, Ohio	do	Lumber	.....	4	1	St. Clair River	Fell overboard from aloft while furling sail.
Sept. 27	A. J. McBrier	Am. sc.	111	Newcastle, N. S. W.	Honolulu, Hawaii	do	Unknown	.....	18	1	Lake Huron	Fell overboard. Never heard from.
Sept. 28	James Nesmith	Am. bk.	1, 735	Astoria, Oreg.	Deep River	do	Ballast	.....	14	2	Near Astoria, Oreg.	Do. Do. Fell overboard.
Sept. 29	Independence	Am. str.	13	Fishing trip	.....	Total	Fish	.....	13	13	At sea	Do. Do. Fell overboard.
Sept. —	Sigrid	Am. sc.	76	Jacksonville, Fla.	Sanford, Fla.	do	do	.....	30	30	do	Do. Do. Fell overboard.
Sept. —	Cora S. McKay	do	198	Lying in port	.....	Nodam- age	Unknown	.....	29	1	St. Johns River, Fla.	While attempting to board small boat, fell overboard.
Oct. 7	Fred'k de Bary	Am. str.	395	Baltimore, Md.	Fishing trip	do	Ballast	.....	60	1	New York Harbor	Fell overboard. Washed overboard in a gale.
Oct. 9	Corsair	Am. st. y.	1, 136	.....	.....	do	Unknown	.....	11	1	At sea	Do. Do. Fell overboard.
Oct. 10	Isabella Gill	Am. sc.	585	.....	.....	do	Ballast	.....	18	1	At sea	Do. Do. Fell overboard.
Oct. 11	Mystery	do	120	.....	.....	do	Unknown	.....	18	1	At sea	Do. Do. Fell overboard.

Oct. 11	M. V. B. Chase	Am. str	457	Bath, Me	Jacksonville, Fla.	do	do	do	8	1	Mouth of St. Johns River, Fla.	Fell overboard while clearing anchor.
Oct. 12	W. S. Cook	Am. str	724	Savannah, Ga	Augusta, Ga	Total	General	30	25	1	Savannah, Ga	Vessel struck snag and sank
Oct. 16	Capt. Lange	Am. bge	125	New York Harbor	New York Harbor	No damage	Steel rails	2	2	1	New York Harbor	Struck by a steel rail and went overboard
Oct. 17	Emma A. Chase, bro.	Am. sc	81	New York	Barnegat, N. J.	do	Unknown	8	8	1	Barnegat Inlet	Fell overboard from small boat
Oct. 21	Oakland	Am. bk	584	Cape Nome, Alaska	Port Townsend, Wash.	do	Ballast	10	10	1	At sea	Fell overboard from aloft
Oct. 22	Roswell P. Flower	Am. str	1,593	Cleveland, Ohio	Milwaukee, Wis	do	do	17	17	1	Milwaukee, Wis	Fell into hatch.
Oct. 24	May Fisher	do	2,152	Lying at wharf	Milwaukee, Wis	do	do	10	10	1	Natchez, Miss.	Fell overboard at night.
Oct. 26	City of Glasgow	do	2,002	do	do	do	Unknown	1	1	1	Duluth, Minn	Do.
Oct. 26	Gladstone	do	2,112	do	do	do	Ore	1	1	1	Mouth of Patuxent River, Md.	Capsizing of small boat.
Nov. 1	M. E. Chelton	Am. sc	23	Lying in harbor	do	do	Ballast	11	11	1	Mouth of Patuxent River, Md.	Suffocated by steam.
Nov. 2	Indian	Am. str	1,577	Lying at dock	Baltimore, Md.	do	do	26	26	1	Philadelphia, Pa	Jumped overboard
Nov. 3	Doris	Am. bkn	944	Baltimore, Md.	Rio de Janeiro, S.A.	do	General	13	13	1	Baltimore Harbor	while intoxicated.
Nov. 4	Gerry	Am. str	273	Lying at wharf	do	do	Ballast	1	1	1	Mobile, Ala.	Fell overboard from plank between vessel and wharf.
Nov. 6	Alex. Nimick	do	1,968	do	do	do	Coal	17	17	1	West Superior, Wis.	Bursting of steam pipe.
Nov. 7	Pitcairn	Am. bgn	171	Fort Bragg, Tex	Mazatlan, Mex	do	Unknown	7	7	1	At sea	Knocked overboard by boom.
Nov. 9	Sodonia Curley	Am. sc	79	Washington, D. C.	Potomac River Landings.	do	do	4	4	1	Potomac River	Lost overboard in squall.
Nov. 10	Varuna	do	90	Boston, Mass	do	do	Ballast	7	7	1	At sea	Washed overboard.
Nov. 13	Sugarland	Am. str	215	Lying at wharf	do	do	do	85	85	1	Morgan City, La.	Walked overboard at night.
Nov. 16	Monteagle	do	1,273	do	do	do	Iron ore	16	16	1	Escanaba, Mich	A laborer fell to the deck and was killed.
Nov. 17	Czar	Am. sc	144	San Blas, Mex.	San Francisco, Cal.	Total	Ballast	7	7	7	At sea	caused by the breaking of the winch.
Nov. 17	Minnie and Emma	do	77	Norfolk, Va.	Sturgeon Point, Va.	No damage	do	5	5	1	James River	Vessel capsized.
Nov. 17	Zenith City	Am. str	3,850	Cleveland, Ohio	Ashland, Wis.	do	Unknown	23	23	1	Marquette, Mich	Fell overboard from sling while painting vessel.
Nov. 19	Amos Cutter	Am. sc	60	Gloucester, Mass	Fishing trip	do	Ballast	12	12	1	At sea	While boarding vessel at night fell overboard.
Nov. 21	Ajax	Am. str	46	Norfolk, Va.	do	do	do	9	9	1	Hampton Roads, Va	Capsizing of dory while trawls.
Nov. 21	Marion Handy	Am. sc	10	do	James River, Va.	do	Oysters	1	3	1	James River, Va.	Washed overboard.
Nov. 22	Aima	Am. str	96	Shreveport, La	New Orleans, La	do	Unknown	24	24	2	Red River, La	Fell overboard.
Nov. 22	B. B. Buckhout	Am. sc	351	Marquette, Mich	Saginaw, Mich	do	Lumber	7	7	1	Lake Superior	Walked overboard.
Nov. 25	Reliance	do	64	San Francisco, Cal.	Rules Landing, Cal.	do	Unknown	4	4	1	Rules Landing, Cal.	Capsizing of small boat.

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TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, etc.—Continued.*
(4) OTHER CAUSES—Continued.

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.	Passengers.	Crews.	Lives lost.	Place of disaster.	Nature of casualty.
1900.												
Nov. 25	Josephine Ellicott	Am. sc....	391	Brunswick, Ga.....	Louisburg C. B.....	No dam- age.	Lumber.....		7	1	At sea.....	Washed overboard.
Nov. 25	Ratoon	Am. str....	52	Keystone, La.....	New Iberia, La.....	do.	Unknown.....		30	1	Bayou Teche, La.....	Walked overboard.
Nov. 25	John W. Harling	do.....	39	Elizabeth City, N. C.....	Beaufort, S. C.....	Total.....	Ballast.....		5	1	At sea.....	Washed overboard by heavy sea. Vessel waterlogged and abandoned.
Nov. 25	W. W. Stewart	Am. sc....	294	Sault Ste. Marie	Detroit, Mich.....	Partial	Iron ore.....		36	4	St. Marys River	Explosion of boiler.
Nov. 27	Daley	Am. str....	106	New Orleans, La.....	Vicksburg, Miss.....	No dam- age.	Unknown.....		10	1	Mississippi River.....	Fell overboard.
Nov. —	A. C. Lyon	Am. sc....	266	New York.....	Washington, D. C.....	Total	Brick.....		6	6	At sea.....	Never heard from.
Dec. 1	Morro Castle	Am. str....	6,004	Havana, Cuba.....	New York.....	No dam- age.	Unknown.....	35	125	1	do.....	Lost overboard.
Dec. 1	Bainbridge	Am. sc....	566	Seattle, Wash.....	Pisagua, Chile.....	do.	do.....		8	1	do.....	Fell overboard from jib boom.
Dec. 2	Harry	do.....	8	St. Joe Bay.....	Pensacola, Fla.....	do.	do.....	1	1	1	Abreast Choctaw-hatchee Bar, Fla.	Fell overboard in a ft.
Dec. 4	Susquehanna	Am. shp....	2,744	New York.....	Norfolk, Va.....	do.	Ballast.....	19			At sea.....	Fell into hold.
Dec. 5	Nannie C. Bohlin	Am. sc....	130	Halifax, N. S.....	Fishing trip.....	do.	do.....	18		1	do.....	Knocked overboard by fire stay wall.
Dec. 5	Maverick	Am. str....	1,516	Lying at dock.....		do.	Petroleum.....	21		1	Boston Harbor, Mass.	Fell through pit and died from injuries received.
Dec. 7	Pioneer	Am. sc....	43	Wilmington, Del.....	Crum Creek, Pa.....	do.	Unknown.....	4		1	Delaware River.....	Knocked overboard by jib boom.
Dec. 8	Relief	Am. str....	248	Lying at wharf.....		do.	Ballast.....	9		1	Cincinnati, Ohio.....	Fell overboard while sailing back.
Dec. 10	Dauntless	Am. sc....	111	Gloucester, Mass.....	Bay of Islands, N. F.....	do.	Unknown.....	9		1	At sea.....	Fell overboard.
Dec. 10	Thetis	Am. str....	61			do.	do.....			1	Suwanee River.....	Ignited by escaping steam and jumping overboard.
Dec. 12	Alma	do.....	98	Knox Point, La.....	New Orleans, La.....	do.	do.....	24		1	Red River, La.....	Fell overboard while sailing down.
Dec. 15	Calumet	Am. sc....	1,241	Philadelphia, Pa.....	Lisbon, Portugal.....	do.	Coal.....	10		1	At sea.....	While hauling in sail, fell overboard.

Dec. 25	Australia.....	Am. bge ..	3,745	Lying at dock	.....do	Ballast	.....	1	Buffalo, N. Y.....	Fell overboard from ladder.
Dec. 26	Gem.....	Am. str ..	97	Shreveport, La.	.....do	Unknown	.....	1	Red River, La.....	Fell overboard.
Dec. 28	Charles H. Hodgdon,	Am. sc ..	112	New Bedford, Mass.	.....do	Ballast	.....	22	At sea.....	Died from privation and exposure in small boat.
Dec. 29	Kansas City.....	Am. str ..	3,679	Savannah, Ga.	.....do	Unknown	17	65	Near Tybee Island, Ga.	Jumped overboard while insane.
Dec. 31	Judique.....	Am. sc ..	121	Shelburne, N. S.	.....do	Ballast	.....	20	Near Cape Cod, Mass.	Fell overboard.
Dec. 8	C. R. of N. J. No. 4.	Am. bge ..	685	Fort Johnson, N. J.	.....do	Unknown	.....	1	At sea.....	Fell overboard.
Dec. —	Joseph and Henry	Am. sc ..	95	San Francisco, Cal.	Total	General	.....	5	At sea.....	Vessel capsized.
Dec. —	Joseph Eaton, Jr.	.....do	191	Rockland, Me.	.....do	Coal	.....	5	.....do	Never heard from.
1901.										
Jan. 1	Augustus Hunt.....	.....do	1,200	Salem, Mass.	.....do	Ballast	.....	11	.....do	Fell overboard.
Jan. 2	E. C. Thomas.....	.....do	24	Baltimore, Md.	.....do	.....do	.....	10	Baltimore Harbor, Md.	Thrown overboard by sudden lurch of vessel.
Jan. 2	Nellie Burns.....	.....do	67	Portland, Me.	.....do	.....do	.....	10	At sea.....	Capazing of dory while attending washed overboard.
Jan. 3	Julia E. Whalen.....	.....do	101	Apia, Samoa.....	.....do	Lumber	1	8	.....do	Do.
Jan. 6	E. K. Wood.....	.....do	451	Port Townsend, Wash.	Partial	.....do	.....	9	.....do	Do.
Jan. 7	Bertha Dean.....	.....do	750	.....do	No dam- age.	Unknown	.....	1	.....do	Lost overboard.
Jan. 9	Richard Smith.....	.....do	10	Baltimore, Md.	.....do	Ballast	.....	7	Chesapeake Bay.....	Fell overboard and died from effects.
Jan. 12	Josephine Lincoln	Am. str ..	18	Philadelphia, Pa.	.....do	.....do	.....	4	Delaware River.....	Fell overboard.
Jan. 13	City of Idaho.....	.....do	117	Lying at wharf.	.....do	Unknown	30	15	Mississippi River.....	Jumped or fell overboard.
Jan. 15	Electra.....	.....do	372	Shreveport, La.	.....do	.....do	.....	1	Red River, La.....	Fell overboard from stage.
Jan. 15	J. N. Harbin.....	.....do	341	Pine Bluff, Ark.	.....do	.....do	.....	43	Mississippi River.....	Lost overboard.
Jan. 18	A. G. Ropes.....	Am. shp ..	2,460	New York	.....do	.....do	.....	30	At sea.....	Fell overboard while furling sail.
Jan. 18	Buckeye State.....	Am. sc ..	669	Cincinnati, Ohio	Partial	Cotton	8	50	Mississippi River.....	Vessel on fire.
Jan. 18	Stephen Bennett.....	.....do	243	New York	No dam- age.	Lumber	.....	7	Long Island Sound.....	Knocked overboard while reefing sail.
Jan. 18	City of Louisville.....	Am. str ..	554	Laid up in winter quarters.	Partial	Ballast	.....	1	Benton Harbor, Lake Mich.	Overcome by smoke; vessel on fire.
Jan. 19	Vigilant.....	Am. sc ..	87	Fishing banks	No dam- age.	.....do	.....	18	At sea.....	Washed overboard.
Jan. 19	R. T. Rundlett.....	.....dc	271	Jacksonville, Fla.	Partial	Fertilizer	.....	6	.....do	Lost overboard in gale.
Jan. 20	Mary E. Simmons.....	.....dc	104	Whaling voyage.	No dam- age.	Ballast	.....	21	.....do	Struck by a whale.
Jan. 21	City of Paducah.....	Am. str ..	318	Waterloo, Ala.do	Unknown	25	Tennessee River.....	Knocked overboard by machinery.

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1901. Jan. 21	Edith.....	Am. str.....	192		Fishing trip.....	No dam- age.....	Fish.....		81	1	Greenville nd, B. C.	Killed by escaping steam from broken valve.
Jan. 23	M. W. Kelly.....	do.....	95	Columbus, Ga.....	Apalachicola, Fla.....	do.....	Unknown.....	10	30	1	Apalachicola Riv- er Fla.	Fell overboard at night.
Jan. 23	Ann Arbor No. 2.....	do.....	1, 144	Lying at dock.....		do.....	do.....	25	1	1	Manitowoc, Wis.....	Fell overboard from gang plank.
Jan. 23	Ventura.....	do.....	6, 253	Philadelphia, Pa.....	San Francisco, Cal.....	Partial.....	Ballast.....	114	5	5	At sea.....	Bursting of steam pipe.
Jan. 24	Niagara.....	Am. sc.....	112	Boothbay, Me.....	Fishing trip.....	No dam- age.....	do.....	18	1	1	do.....	Fell overboard.
Jan. 24	Mary Ruhne.....	do.....	147	San Francisco, Cal.....	Eureka, Cal.....	do.....	Unknown.....	7	1	1	do.....	Do.
Jan. 20	Frank W. Howe.....	do.....	573	Brunswick, Ga.....	Boston, Mass.....	do.....	Lumber.....	8	1	1	do.....	Washed overboard.
Jan. —	Commonwealth.....	do.....	85	Gloucester, Mass.....	Georges Bank.....	Total.....	Ballast.....	16	16	8	do.....	Never heard from.
Jan. —	Celina.....	Am. bk.....	577	Mobile, Ala.....	Boston, Mass.....	do.....	Lumber.....	8	8	8	do.....	Do.
Jan. —	Florence.....	Am. sc.....	699	Port of Spain, Trin- idad.....	New York.....	do.....	Asphalt.....	9	9	9	do.....	Do.
Jan. —	John McDonald.....	Am. ship.....	2, 281	Baltimore, Md.....	San Francisco, Cal.....	do.....	Coal.....	25	26	26	do.....	Do.
Feb. 2	Walla Walla.....	Am. str.....	3, 069	San Francisco, Cal.....	Victoria, B. C.....	No dam- age.....	Unknown.....	122	86	1	do.....	Jumped while overboard.
Feb. 3	Daisy.....	do.....	106	Black Warrior Riv- er Ala.		Total.....	Ballast.....	14	1	1	Black Warrior Riv- er Ala.	Vessel carried over falls and crushed.
Feb. 10	Abner Taylor.....	Am. sc.....	139	Catais, Me.....	New York.....	No dam- age.....	Lumber.....	5	1	1	Vineyard Sound.....	Lost overboard.
Feb. 10	E. B. Sutton.....	Am. ship.....	1, 826	Honolulu, Hawaii.....	do.....	do.....	Unknown.....	21	1	1	At sea.....	Do.
Feb. 11	Elisha.....	Am. sc.....	10	Baltimore, Md.....	Tighmans Island.....	do.....	do.....	3	1	1	Baltimore Harbor, Md.	Fell overboard.
Feb. 14	Major Pickands.....	do.....	984			do.....	do.....		1	1	At sea.....	Fell overboard while adjusting anchor.
Feb. 15	Atalanta.....	do.....	103	St. Pierre, Miq.....	Gloucester, Mass.....	do.....	do.....	8	1	1	do.....	Jumped while overboard.
Feb. 15	Ruth.....	Am. str.....	42			do.....	do.....				Willamette River, Oregon.	Slipped and fell over- board.
Feb. 17	Edna Perry.....	Am. sc.....	40	Provincetown.....	Fishing trip.....	do.....	Ballast.....	12	1	1	Near Burnet, Mass.	Capstain of dory while attending.
Feb. 18	C. R. R. of N. J., No 7.	Am. sc.....	685	Boston, Mass.....	Bayonne, N. J.....	do.....	Unknown.....	4	1	1	Long Island Sound.	Lost overboard.

Feb. 20	Maverick	Am. str	1,516	At dock	San Francisco, Cal.	Honolulu, Hawaii	do	New York Harbor	1	21	Struck by a line while vessel was being warped into dock and instantly killed. While working aloft in a hurricane, was carried overboard with mast and rigging. Fell overboard.
Feb. 21	Olympic	Am. bk	1,469	San Francisco, Cal.	Portland, Ore	Astoria, Ore	Partial	At sea	1	18	Washed overboard in a gale.
Feb. 25	Lurline	Am. str	481	Portland, Ore	Portland, Ore	Astoria, Ore	No damage.	Columbia River	1	16	Fell overboard from Do.
Feb. 27	Josie Johnson	Am. sc	27	Trinidad, W. I.	Trinidad, W. I.	New York	Partial	Mobile River, Ala	1	1	Fell overboard from flat in tow while intoxicated.
Mar. 4	John K. Speed	Am. str	1,090	New Orleans, La.	New Orleans, La.	Cincinnati, Ohio	No damage.	Evansville, Ind	1	65	Knocked overboard.
Mar. 4	Mary Adelaide Randall	Am. sc	1,166	Savannah, Ga	Savannah, Ga	Philadelphia, Pa	do	Near Cape Hatteras, N. C.	1	9	Washed overboard in a gale.
Mar. 5	Jessie MacGregor	Am. bkn.	608	San Marcos Island, Mex.	San Marcos Island, Mex.	San Francisco, Cal.	do	do	1	1	Fell overboard from bowsprit.
Mar. 6	Lillebonne	Am. sc	218	Lying in port.	Lying in port.	Fishing grounds.	do	Red River, La	1	1	Fell overboard from bowsprit.
Mar. 7	George L. Bass	Am. str	53	Boston, Mass.	Boston, Mass.	Fishing grounds.	do	At sea	1	20	Fell overboard from bowsprit.
Mar. 9	Belle J. Neal	Am. sc	100	Portland, Ore	Portland, Ore	Astoria, Ore	do	Columbia River	1	35	Died from injuries received.
Mar. 10	Hassalo	Am. str	679	Portland, Me	Portland, Me	Apalachicola, Fla	do	At sea	1	8	While trying to secure spanker boom, fell overboard.
Mar. 11	Stephen G. Loud	do	499	Evansville, Ind.	Evansville, Ind.	Henderson, Ky	do	Henderson, Ky	1	10	Fell overboard.
Mar. 11	Jewel	do	201	Spanish River, Ont.	Spanish River, Ont.	Bay City, Mich	do	West Bay City, Mich.	1	1	Vessel on fire.
Mar. 12	Marine City	Am. sc	338	Jersey City, N. J.	Jersey City, N. J.	Long Island City, N. Y.	Partial	New York Harbor	1	6	Vessel caught by capsizing car float and submerged.
Mar. 12	Syosset	Am. str	176	Southampton, Eng	Southampton, Eng	New York	do	At sea	2	344	Died from effects of inhaling ammonia from broken refrigerating plant.
Mar. 14	New York	do	10,674	St. Louis, Mo.	St. Louis, Mo.	Beardstown, Ill.	No damage.	Grafton, Ill	1	40	Lost overboard.
Mar. 14	Bald Eagle	do	937	Carrabelle, Fla	Carrabelle, Fla	Ocklocknee River, Fla.	do	Ocklocknee River, Fla.	1	7	Fell overboard while intoxicated.
Mar. 21	Capitola	do	60	Boothbay, Me	Boothbay, Me	Fishing grounds.	do	At sea	1	16	Fearing collision with vessel, jumped overboard from dory.
Mar. 22	Patriot	Am. sc	81	Lying at wharf.	Lying at wharf.	Fishing grounds.	do	At sea	1	1	Scalded by steam from exploded pipe, and died from effects.
Mar. 23	Eva	Am. str	27				do	Mouth of Pascagoula River, Miss.	1	8	

TABLE 64.—Wrecks and casualties on and near the coasts and on the rivers of the United States, etc.—Continued.
(4) OTHER CAUSES—Continued.

Date of disaster.	Name of vessel.	Description of vessel.	Tons.	Port sailed from.	Port bound to.	Whether lost in collision or partial loss.	Nature of cargo.	Passengers.	Crew.	Lives lost.	Place of disaster.	Nature of casualty.
1901.												
Mar. 24	Dispatch	Am. str.	6	Baltimore, Md.	On a cruise.	None.	Unknown	10	3	1	Baltimore Harbor, Md.	Poll overboard.
Mar. 26	James R. Clark	Am. sc.	70	Gloucester, Mass.	Boston, Mass.	do.	do.		16	1	At sea	Knocked overboard by main boom.
Mar. 27	Goldsboro	Am. str.	98	Newbern, N. C.	Goldsboro, N. C.	do.	do.	4	1	1	Tennessee River	Poll overboard.
Mar. 30	Joe Wheeler	do.	192	Philadelphia, Pa.	Jacksonville, Fla.	do.	Coal		13	1	At sea	Do. Jumped overboard while delirious (supposed).
Mar. 31	Reba Sterling	Am. sc.	22	Rappahannock River, Va.	Baltimore, Md.	do.	Unknown		6	1	Baltimore Harbor, Md.	Poll overboard.
Mar. —	Monitor	Am. bkn.	235	Houquiam, Wash.	Aberdeen, Wash.	Total.	Lumber	1	7	8	At sea	Never heard from.
Apr. 1	Comus	Am. str.	4,828	New Orleans, La.	New York	Nodum-agg.	do.		67	1	New York Harbor	While vessel was being discharged of cargo, was struck by bale of cotton and killed.
Apr. 2	Julia	Am. sc.	82	Reidstown, Va.	Baltimore, Md.	do.	Unknown		4	1	Chesapeake Bay	Knocked overboard by jibbing of main boom.
Apr. 2	Annie P. Chase	do.	256	Lying in harbor.	Davis Island, Miss.	do.	do.		16	1	Norfolk, Va.	Poll overboard.
Apr. 3	Dixie	Am. str.	71	New Orleans, La.	Choptank River, Md.	do.	Shells		3	1	Month of Choptank River.	Vessel capsized.
Apr. 3	Dinifer	Am. sc.	10	Cambridge, Md.	Pittsburg, Pa.	do.	Unknown		22	1	Ohio River	While wheeling coal out of deck room, failed to make the proper turn and went overboard.
Apr. 5	John Moren	Am. str.	16	Cincinnati, Ohio		do.	Unknown		18	1	At sea	Washed overboard.
Apr. 5	Monarch	do.	43	Cruising		do.	do.			1	Mississippi River	Poll overboard.
Apr. 6	Herman Oelrichs	Am. sc.	76	Batesville, Ark.	McBee Landing, Ark.	do.	Ballast		6	1	New York Harbor	Capitling of yawl.
Apr. 9	Ozark Queen	Am. str.	210	Norfolk, Va.	Plankank River, Va.	do.	Miscellaneous.	10	28	1	White River, Ark.	Poll overboard.
Apr. 12	Francis A. Hall	Am. sc.	17	Boothbay, Me.	Fishing banks	do.	Unknown		2	1	Chesapeake Bay	Do.
Apr. 13	Jennie B. Hodgdon.	do.	118	Nashville, Tenn.	Lick Branch, Ky.	do.	do.		44	1	Cumberland River	Washed overboard. Poll overboard while intoxicated.
Apr. 13	Henry Harley	Am. str.	162			do.	do.					

Apr. 14	Haze	Am. sc.	10	Elizabeth City, N. C.	Cape Hatteras, N. C.	do	do	do	3	1	1	Albemarle Sound	Fell overboard.
Apr. 15	Anson M. Bangs	Am. str.	178	New York Harbor	Fishing trip	do	do	do	17	1	1	New York Harbor	Struck by crank.
Apr. 19	Lizzie B. Adams	Am. sc.	61	Galveston, Tex.	do	do	do	do	8	1	1	At sea	Jumped overboard to recover his hat.
Apr. 23	Joseph B. Thomas	Am. shp.	1,988	Newcastle, N. S. W.	Acapulco, Mex.	Partial	do	do	20	1	1	do	Lost overboard in a hurricane.
Apr. 24	Chester	Am. str.	681	St. Louis, Mo.	Cape Girardeau, Mo.	No damage.	do	do	10	40	1	Mississippi River	While carrying coal from barge to boat, fell overboard.
• Apr. 26	McLaurin	Am. shp.	1,374	San Francisco, Cal.	Bristol Bay, Alaska.	do	do	do	70	22	1	At sea	Fell overboard while furling sails.
Apr. 26	Resolute	Am. str.	426	Greenville, Miss.	New Orleans, La.	do	do	do	9	1	1	Mississippi River	Fell overboard.
Apr. 27	E. K. Wood	Am. sc.	620	Port Townsend, Wash.	Haiphong, China.	do	do	do	9	1	1	At sea	Do.
Apr. 29	No. 23	Am. scow.	204	Employed in harbor.	do	do	do	do	2	1	1	Duluth Harbor	Do.
May 10	Bon Voyage	Am. str.	500	Duluth, Minn.	Houghton, Mich.	Total	do	do	17	20	4	Big Point, Lake Superior.	Vessel destroyed by fire.
May 10	John W. Moore	do	1,961	Lying in harbor	do	No damage.	do	do	18	1	1	Buffalo Harbor, N. Y.	Fell into hold.
May 10	Fostoria	Am. sc.	287	Sandusky, Ohio	Sault Ste. Marie, Mich.	Total	do	do	5	2	2	St. Clair River	Vessel sunk by ice.
May 11	Jim Wood	Am. str.	625	Pittsburg, Pa.	Louisville, Ky.	do	do	do	30	1	1	Ohio River	Fell overboard.
May 12	City of Paducah	do	318	St. Louis, Mo.	Waterloo, Ala.	Total	do	do	15	50	4	Near Chester, Ill.	Vessel struck snag and sunk.
May 14	Owensboro	do	35	Evansville, Ind.	Calhoun, Ky.	do	do	do	6	2	2	Green River, Ky.	Vessel destroyed by fire.
May 20	Maud Wilmot	do	57	Lying in harbor	do	No damage.	do	do	20	2	2	Mississippi River	Fell overboard from barge in tow.
May 21	Josie M. Calder wood.	Am. sc.	90	Lockport, N. S.	Fishing banks.	do	do	do	20	2	2	At sea	One fell overboard, the other jumped overboard to rescue him, and both were lost.
May 22	Fremont	Am. bkn.	845	Unga, Alaska.	Fishing trip	do	do	do	34	1	1	do	Lost in small boat while fishing.
May 31	Rhode Island	Am. str.	2,888	Lying at pier	do	do	do	do	112	1	1	New York Harbor	Fell overboard.
June 1	George S. Ross	do	84	Westwego, La.	Profits Island	Total	do	do	5	1	1	Ohio River	Explosion of boiler.
June 1	Lady Grace	do	189	Honolulu, Hawaii	Seattle, Wash.	Partial	do	do	14	1	1	Mississippi River	Do.
June 1	Tanner	Am. brig.	281	do	do	No damage.	do	do	8	1	1	At sea	While temporarily insane, caused by drink, fell or jumped overboard.
June 8	Kaulani	Am. str.	884	do	Hilo, Hawaii	do	do	do	33	1	1	Kukaian, Hawaii	Lost overboard from lighter in tow.
June 11	Cruiser	do	841	do	Pittsburg, Pa.	do	do	do	25	1	1	Ohio River	Killed by explosion of cylinder.
June 12	R. J. Hackett	do	1,129	Cleveland, Ohio	Marquette, Mich.	do	do	do	14	1	1	Marquette, Mich.	Fell overboard.
June 14	Chester	do	681	St. Louis, Mo.	Cape Girardeau, Mo.	do	do	do	25	40	1	Grand Tower, Ill.	Do.

TABLE 64.—*Wrecks and casualties on and near the coasts and on the rivers of the United States, etc.—Continued.*

(4) OTHER CAUSES—Continued.

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.	Passengers.	Crew.	Lives lost.	Place of disaster.	Nature of casualty.
1901.												
June 15	Golden Rod	Am. sc	132	Canso, N. S.	Fishing banks	No damage.	Ballast	18	1	1	At sea	Capsizing of dory while attending trawls.
June 21	Lotus	Am. str	28			do	Unknown	1	1	1	Mississippi River	Fell overboard (supposed).
June 24	Gilbert Standliff	Am. sc	117	Portland, Conn	New York	do	do	3	1	1	Long Island Sound	Jumped overboard, supposed to be insane.
June 25	Chas R. Van Hise	Am. str	5, 117			do	Iron	1	1	1	Two Harbors, Wis	Fell into hold.
June 26	Carmen	Am. st. yet	58	New York		Partial.	Ballast	13	1	1	At sea	Boiler tube burst; fireman fatally scalded.
June 29	Martha Jane	Am. slp	6	Norfolk, Va	Craney Island Creek, Va.	No damage.	do	15	2	1	Norfolk Harbor, Va.	Fearing a collision, jumped for another vessel and fell overboard.
June 29	Ella Ellinwood	Am. sc	157	Milwaukee, Wis	Sturgeon Bay, Mich.	do	do	6	1	1	Lake Michigan	Fell overboard while intoxicated.
June 29	Mariska	Am. str	2, 325			do	Unknown	1	1	1	St. Marys River	Caught in messenger attached to hawser and instantly killed.
June 29	Preston	do	639			Partial.	Lumber	14	1	1	Lake Superior	Caught between two steamers and killed.

Total: Vessels, 249; tonnage, 156,667; total losses, 18; no damage, 210; number of passengers, 2,484; number in crew, 4,814; number of lives lost, 413.

TABLE 65.—Summary of wrecks and casualties on or near the coasts and on the rivers of the United States and at sea and in foreign waters during the year ending June 30, 1901, involving Loss of Life.

	Atlantic and Gulf coasts.	Pacific coast.	Great Lakes.	Rivers.	At sea and in foreign waters.	Total.
Foundering:						
Vessels.....	5		7		1	13
Tonnage.....	229		4,219		1,427	5,875
Passengers.....			9			9
Crews.....	19		53		5	77
Lives lost ^a	9		40		5	54
Strandings:						
Vessels.....	8	6	1		1	16
Tonnage.....	1,331	6,796	1,160		96	9,383
Passengers.....	2	97				99
Crews.....	39	196	15		4	254
Lives lost ^a	25	133	13		1	172
Collisions:						
Vessels.....	4		5	2	4	15
Tonnage.....	749		3,272	56	2,005	6,082
Passengers.....	425					425
Crews.....	22		33	9	67	131
Lives lost ^a	9		9	3	6	27
Other causes:						
Vessels.....	5		5	9	20	39
Tonnage.....	1,440		2,224	2,667	26,725	33,056
Passengers.....	30		17	68	374	489
Crews.....	45		76	204	670	995
Lives lost ^a	6		12	16	151	185
Totals:						
Vessels.....	22	6	18	11	26	83
Tonnage.....	3,749	6,796	10,875	2,723	30,253	54,396
Passengers.....	457	97	26	68	374	1,022
Crews.....	125	196	177	213	746	1,457
Lives lost ^a	49	133	74	19	163	438
Vessels totally lost:						
Vessels.....	12	4	12	5	17	50
Tonnage.....	2,182	5,936	8,405	510	6,717	23,750
Passengers.....	455	95	19	15	1	585
Crews.....	78	166	107	80	196	627
Lives lost ^a	28	131	60	10	149	378
Vessels damaged:						
Vessels.....	10	2	6	6	9	33
Tonnage.....	1,567	860	2,470	2,213	23,536	30,646
Passengers.....	2	2	7	53	373	437
Crews.....	47	30	70	133	550	830
Lives lost ^a	21	2	14	9	14	60
Vessels not damaged:						
Vessels.....	54	10	31	68	57	220
Tonnage.....	23,751	5,323	36,840	15,741	42,158	123,813
Passengers.....	155	265	131	848	596	1,995
Crews.....	619	233	265	1,136	1,096	3,349
Lives lost.....	57	15	33	77	62	244
Aggregate:						
Vessels.....	76	16	49	79	83	303
Tonnage.....	27,500	12,119	47,715	18,464	72,411	178,209
Passengers.....	612	362	157	916	970	3,017
Crews.....	744	429	442	1,349	1,842	4,806
Lives lost.....	106	148	107	96	225	682

^a Exclusive of lives lost on vessels not damaged.

NOTE.—Of the 438 lives lost on vessels sustaining material damage, 207 were lost on steamers and 231 on sailing vessels, as follows: Atlantic and Gulf coasts, steamers, 17; sailing vessels, 32. Pacific coast, steamers, 130; sailing vessels, 3. Lakes, steamers, 34; sailing vessels, 40. Rivers, steamers, 18; sailing vessels, 1. At sea, steamers, 8; sailing vessels, 155.

TABLE 66.—List of places on the coast 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.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MAINE.											
Bald Head Cliff.....		1									1
Blue Hill Bay:											
Black Island.....					1						1
Blue Hill Harbor.....				1							1
Brooklin.....										1	1
Ellsworth.....						1				1	2
Gotts Island.....									1		1
Moose Island.....										1	1
Orono Island.....				1							1
Placentia Island.....								1	1		2
Swans Island.....								1			1
York Narrows.....						1			1		2
Blue Hill Bay approaches:											
Great Duck Island.....	1										1
Little Duck Island.....								1			1
Long Island.....			1								1
Boothbay:											
Bantam Rock.....								1			1
Boothbay and Townsend Harbor.....	1		1		1		2	2			11
Damiscope Island.....				1					2	3	6
Southport Island.....						1					1
Spruce Point.....	1		1							1	3
Squirrel Island.....				1					1		2
Cape Elizabeth.....	1		1							1	3
Broad Cove.....				1						1	2
Maxwells Point.....			1								1
Portland Head.....						1		1			2
Spurwink River.....							1				1
Trundys Reef.....				1					1	1	3
Cape Neddick:											
Boon Island.....		1					1				2
Boon Island Ledge.....	2										2
Cape Porpoise.....	1				1						2
Bumpkin Island.....										1	1
Folly Island.....	1	1							1		3
Goat Island.....					1		1				2
Trotts Island.....			1								1
Cape Small Point.....				2							2
Bald Head Rocks.....		1								1	2
Fullers or Glovers Rock.....			1				1				2
Wood Island.....							1				1
Casco Bay:											
Aldens Rock.....				1		1				1	3
Bangs Island.....				1		1					2
Cow Island.....		1									1
Dingleys Island.....				1							1
Great Chebeag Island.....										1	1
Green Islands and Reef.....			1			2	1				4
Haddock Rock, Broad Sound.....		1									1
Harpwell.....				1							1
Horse Island Harbor.....		1									1
Long Island.....								1			1
Peaks Island.....	1							1	1		3
Ram Island.....		1							1		2
Richmonds Island.....				1			1				2
Cobscook Bay:											
West Pembroke.....								1			1
Cranberry Island, Great.....	1	1					1	2	1	1	7
Sperlins Point.....	1		2								3
Thompsons Ledge.....						1					1
Cranberry Island, Little.....	1	1	1		1				1		5
Bakers Island and Bar.....	2		3			1	2				8
Hardings Ledge.....	1										1
Cutler and approaches.....		1				2	1	2		1	7
Damariscotta River and approaches:											
Damariscotta River (mouth of).....										1	1
Fishermans Island.....		1						1			2
Linekins Neck.....										1	1
Ram Island.....							1			1	2
Thread of Life Ledge.....								1			1

*In a few instances the number of stranded vessels in this table does not agree with those reported in the annual report of the previous year, having been increased by wreck reports received since the publication of the last report.

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MAINE—continued.											
Deer Island Thoroughfare:											
Dumpling or Eastern Mark Island Ledge		1									1
Grog Island		1									1
Long Ledge							1				1
McGlatherys Island								1			1
Two-Bush Island			1								1
Deer Isle:											
Greens Landing	2		1	2	2	1					8
Eggmoggin Reach						1					1
Byards Point					1						1
Channel Rock			1								1
Crow Island						1					1
Punch Bowl							1				1
Triangles, The			1								1
White Island						1					1
Englishmans Bay:											
The Brother									1		1
Fishermans Island Passage. (See Moosabec Reach.)											
Fletchers Neck			2	8	1		4	3	2	4	24
Fox Island Thoroughfare:								1			1
Cross Island Ledges											
Frenchmans Bay:								1			1
Crabtree Ledge									1		1
Egg Rock				1					1		2
Porcupine Island			1							1	2
Pulpit Ledge	1						1				2
Sullivan Harbor								1	1		2
Winter Harbor									1		1
Frenchmans Bay approaches:											
Schoolie Island					1						1
Kennebec River (mouth of):	2								1	1	4
Atkins Bay							1				1
Bluff Head						1					1
Coxs Head				1							1
Dix Island								1			1
Hospital Point, rock near							1				1
Hunniwells Beach	3	4	3					2			12
Hunniwells Point		1	1								2
Indian Point		1									1
Jacks Rock			1								1
Long Island							1				1
Marrs Island			1								1
Parkers Flats	1										1
Perkins Island and Ledges			1								1
Pond Island		1					1	1			4
Stage Island		1								2	3
Sugar Loaves, The		1			1		1	2			6
Whales Back									1	1	2
Wood Island Ledges		1			1						2
Kennebec River approaches:											
Heron Island					1						1
Seguin Island and Ledges		1					1				2
Kennebunkport	1										1
Lubec Narrows	1		2					1	2	3	9
Machias Bay:											
Bare Island		2									2
Cross Island		1					2		1	1	5
Dogfish Ledges				1		1	1				3
Howards Bay		1		1							2
Libbey Islands		1		1	1			2			5
Machias	1										1
Stone Island Ledge									1		1
Machias Bay, Little		1									1
Cape Wash Island								1			1
Double Headed or Double Shot Island						1	1				2
Moosabec Reach										1	1
Bar Island			1								1
Brig Ledge, Fishermans Island Passage									1		1
Brownney Island and Ledges, Fishermans Island Passage	1	2	1								5

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MAINE—continued.											
Moosabec Reach—Continued.											
Crumple Island, Fishermans Island Passage			1								1
Fessenden Ledge								1			1
Fishermans Island		1		1							2
Green Island Ledge							1				1
Jonesport										1	1
Kellys Point and ledges near		1		2			1				4
Man Island		1									1
Sand Ledge		1				1					1
Sawyers Cove			1								1
Steel Harbor Island						2					2
Stevens Island, Fishermans Island Passage									1		1
Western Egg Rock, Fishermans Island Passage	1										1
Moose Cove:											
Shag Rocks	1										1
Mount Desert Island:											
Bass Harbor Bar and Head	2						1	1			5
Bear Island										1	1
Long Ledge		1					1				2
Sea Wall			1								1
Southwest Harbor				1	1		1	2			5
Suttons Island (ledges near)		1									1
Mount Desert Rock			1	2							3
Muscle Ridge Channel:											
Ash Island Ledge	1										1
Burnt Island and Ledges	2										2
Channel Rock								1			1
Clam Ledges							2				2
Crescent Island (near)				1							1
Dix Island	1		1	1							3
Ebens Island	1										1
Emery Ledge		1									1
Garden Island											1
Grindstone Ledge	1	1	2	1					1		9
Halibut Rock					1						1
Hay Island Ledge				1		1	1		1	1	5
Howies Rock			1								1
Hurricane Ledge	1	1			1				1		4
Lark Ledges								1			1
Lobster Cove								1			1
Long Ledge, Seal Harbor	1					1			1		3
Monroe Island		1	1								2
Northwest Ledge							1				1
Nortons Island and Ledges	1										1
Otter Island Ledge		1	2					1		1	5
Rackliffs Island, Seal Harbor		1	1				1				3
Seal Harbor	1	2			2	1	2				9
Sheep Island and Shoals		1	1	1	1		1				5
Spruce Head Island	1			4	2	1	2	1			11
Upper Gangway Ledges						2	1	1			4
Weskeag River (mouth of)		1									1
White Head Island		2	1		1	1		1	1		7
Muscongus Bay:											
Black Island Ledge				1							1
Friendship								1			1
Kegs, The						1		1			2
Little Egg Rock		1									1
Pemaquid Point			1								1
Muscongus Bay approaches:											
Browns Head			1								1
Monhegan Island	2	1		1		1					8
Narraguagus Bay and approaches:											
Baldwins Head								1			1
Bois Bubert Island			1			1					2
Jerrys Ledge								1			1
Millbridge (ledge near)	1										1
Pond Island	1										1
Penobscot Bay:											
Inner Bay Ledges							1				1
Isle au Haut										1	1
Long Island				1							1
Ragged Island	1				1						2

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MAINE—continued.											
Penobscot Bay—Continued.											
Seal Island							1	1			2
Vinal Haven Island			1	1							2
Vinal Haven Island, Roberts Harbor	1		1								2
Penobscot Bay, East:											
Bear Island						1					1
Castine				1							1
Colt Head Island				1							1
Crow Island				1							1
Pond Island										1	1
Sandy Point				1							1
Penobscot Bay, West:											
Bantam Ledge				1							1
Camden		2				1					4
Great Spruce Head								1			1
Haddock Ledge		1									1
Heron Neck (ledge near)							1				1
Matinicus Island		1	1	1							3
Northern Triangles, The	1					1	1				3
Owls Head				2							2
Ragged Island				1							1
Roaring Bull Ledges									1		1
Rockland	2	2		1				2		2	9
Rockport	1			1							2
Seal Ledge				1				1			2
Southeast Breakers							2				2
Spragues Ledge							1				1
Sunken Pond Ledges			1								1
Two-Bush Island and Reef			2				1			1	4
Pigeon Hill Bay:											
Green Island				1					1		2
Petit Menan Island and Point		2				2		3	2		9
Pleasant Bay approaches:											
Nashs Island				1							1
Pot Rock		1									1
Portland Harbor:											
Breakwater Point				1							1
House Island						1					1
Portsmouth Harbor (Maine side):											
Clarks Islands							1				1
Fishing Islands								1			1
Gerrish Island			1	2		1					4
Kittery Point				1					1		2
Seaveys Island			1								1
West Sister, The	1										1
Wood Island			1	1		1				1	4
Prospect Harbor:											
Indian Harbor						1					1
Spruce Point						1					1
Quoddy Roads											
Crowells Ledge		1		1				2			6
Middle Ground					1						1
West Quoddy Head	2	1		1							4
West Quoddy Head, Carrying Point Cove	1										1
Saco Bay:											
Ferry Beach							1				1
Negro Island	2		2	1			2	1		1	9
Old Orchard Beach							1				1
Prouts Neck									1		1
Scarboro Beach				1							1
Stage Island		3			1					2	6
Whales Back, The					1						1
Wood Island	2				1						3
St. Croix River:											
Robbinston								1			1
St. Georges River and approaches:											
Bar Island			1								1
Benner Island				1							1
Brothers, The						1					1
Burnt Island		1									1
Caldwells Island							1				1
Careys Rock		1									1
Georges Islands		2			1						3

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MAINE—continued.											
St. Georges River and approaches—Continued.											
Griffins Island.....								1			1
Gunning Rocks.....								1			1
Harts Island Bar and Ledges.....	2	1		2	2	1	1	1		2	12
Herring Gut.....			1	1							2
Hoopers Island.....			2	1	1			1	1		6
Marshall's Point.....							1			1	2
McGees Island.....		1		1	1						3
Mosquito Island.....	2		1								3
Old Man Ledge.....								1			1
Otis Cove.....								1			1
Port Clyde.....		1		1	6	1		3		2	15
Stone Island.....								1	1		3
Stone Point.....								1			1
Thomaston.....								1			1
Turkey Point.....										1	1
Sheepscot Bay and River:											
Cuckolds, The.....								1			1
Fire Island.....								1			1
Hardings Ledge.....	1										1
Jewetts Cove.....	1										1
Sawyers Island.....										1	1
Southport Island.....				1						1	2
Tennants Harbor.....	1							1			2
Harts Neck.....					1						1
Long Cove.....								1			1
Southern Island.....	1					1					2
Wells Beach:											
Fishing Rocks.....				1							1
West Quoddy Head. (See Quoddy Roads.)											
Whealers Bay.....		1				1					2
Calf Island.....		1									1
Clarks Island.....						1					1
York River and approaches:											
York Harbor.....						1					1
York Ledge.....	2				1	1					4
NEW HAMPSHIRE.											
Hampton:											
Great Boars Head.....							1			1	2
Hampton Beach.....					1		1				2
Isles of Shoals:											
Appledore Ledge.....								1			1
Cedar Ledges.....							1	1			2
Duck Island.....								1	1		2
Eastern Rocks.....					1						1
Portsmouth Harbor (New Hampshire side):											
Fort Point.....								1			1
Jerrys Point.....							2	1			3
Odiornes Point.....		1						1			2
Rocks, mouth of harbor.....								1			1
Rye Beach.....					1						1
Stielmans Rocks.....			1							1	2
Wallis Sands.....	1								1		2
Rye Ledge.....								1			1
MASSACHUSETTS.											
Beverly Bay.....		1				1				4	6
Boston Bay and Harbor:											
Black Rock and Channel.....	1	1		2	3	2		3	3	1	16
Black Rock, Cohasset.....				1				2			3
Brewsters, The.....		1		2	1		1	3	2		10
Broad Sound.....			1								1
Castle Island.....			1			1		1			3
Cohasset Harbor.....								2			2
Commercial Point.....									1		1
Deer Island.....				1							1
Devils Back.....		1		1				1			3
Dorchester Bay.....						1		1		1	3
Fawn Bar.....	1										1
Gallops Island.....						1		4			5

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.	
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.		
MASSACHUSETTS—continued.												
Boston Bay and Harbor—Cont'd.												
Georges Island	3	1		1		2	1	1				9
Graves, The							1					1
Great Fawn Bar			1									1
Hardings Ledge		2			1		1					4
Hog Island						1						1
Hull Beach								2				2
Hunts Ledge									1			1
Long Island					1							1
Lovels Island			1					2	1			4
Lower Middle										2		2
Middle Ground								2	2			4
Minots Ledge							1				1	2
Moon Island								1				1
Nantasket Beach			1	1		1	1					4
Neponset				1								1
Nixs Mate			2		1	1						4
Nut Island								1				1
Pines Point							1					1
Pleasure Bay									1	1		2
Point Allerton			1			2						3
Point Shirley				1			1					2
Quincy Beach								3				3
Rainsford Island								3				3
Rams Head			1									1
Shag Rocks											1	1
Spectacle Island								2				2
Thompsons Island								3				3
Toddy Rocks	1	1	1		1	1	4	3	1			13
Weir River, entrance to												
Hingham Harbor		1		1								2
Weymouth				1								2
Windmill Point	1		1					1				2
Brant or Green Harbor Point								2				2
Buzzards Bay:												
Angelica Point								1				1
Clarks Point (rock near)		1										1
Cuttyhunk Harbor				1	2			1				4
Dumpling Rock	1								1			2
Great Ledge				1						1		2
Gull Island						1						1
Nashawena Island					1							1
New Bedford Harbor								1				1
Buzzards Bay approaches:												
Horse Neck Beach			1									1
Cape Ann:												
Annisquam			1						1			2
Averys Ledge								1				1
Bay View								1				1
Braces Cove									1			1
Dog Bar									1	2		3
Dolivers Neck							4					4
Eastern Point			2		1			1			1	6
Gloucester			1	4		1	5	6				17
Halibut Point				1		1						2
Kettle Island					1							1
Lanesville			1	1					1	1		4
Londoner, The (near Thatcher's Island)				1								1
Normans Woe				1								1
Pigeon Cove	1							6	6			13
Rockport	1	1	1					3	2		1	9
Salvages, The (off Rockport)										1		2
Ten-Pound Island							2	5				7
Cape Cod:												
Bearses Shoal			3			1	1					8
Cahoons Hollow					2	2			1			5
Chatham		2				1	2	2	2			9
Chatham Bar	2	1	1	1	1							6
Highland Light		1				1					1	3
Monomoy Point				1			3					5
Nauset Beach	3	1	1		3	2	2	1	2	1		16
Orleans Beach				2	1	2	1	2	1			9
Pamet River				2								2
Peaked Hill Bar		1	2	1	1	2	4	4	1	2		18
Pollock Rip	1	3	4	5	2	1	2	1	2	1		22

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MASSACHUSETTS—continued.											
Cape Cod—Continued.											
Race Point	1	6	2	2	4	2	3	3		2	25
Shovelful Shoal			4	4	2		2	4	3	6	25
Stone Horse Shoal			1	1	1	1					4
Cape Cod Bay:											
Beach Point										1	1
Billingsgate Island and Shoal		1		1							2
Brewster								1			1
Long Point	1								1		2
North Dennis	1										1
Provincetown	3	6	3			2	18				32
Wood End					1	1	2	3	4	2	13
Fall River				1							1
Gurnet Point	1					2		2	1		6
Ipswich Bay:											
Essex Bar				1							1
Ipswich Bar	2	1	1	1	3	2	2	4			16
Lynn Harbor			1	1							2
Manchester	1										1
Marblehead				1				4			5
Marshfield									1		1
Marthas Vineyard:											
Cape Poge	2					2			1		5
Cedar Tree Neck			1					1		1	3
Chappaquiddick Point		1						1		1	3
Chilmark				1							2
Cottage City		1									1
East Chop		1								1	2
Edgartown	4	3	1		1			1			10
Gay Head			1	1		1	2			1	6
Gay Head, Devil's Bridge	1										1
Menemsha Bight	1	1	1			2	3	2			10
No Man Land	1		1								1
Old Man Ledge				1							1
Toms Shoal		1									1
Vineyard Haven	3	3	3	1	1	7	1	22	1	3	45
West Chop		1	1	1						1	4
Nahant Bay:											
Egg Rock			1								1
Nahant		1		1			1				3
Shag Rock								1			1
Nantucket:											
Bar and Bay						1		2	1	2	6
Coskata			1			2		1			4
Great Neck								1			1
Great Point and Great Rip			3		2		2		1	1	9
Surfside							1				1
Nantucket Shoals	2		1				2	1			7
Nantucket Sound:											
Bishop and Clerks Shoal						1				1	2
Chatham Roads		1		1						2	4
Common Flats (near Chatham Roads)			3	2							5
Dennisport and Beach				1							1
Dog Fish Bar			1	1							3
Eldridges Shoal	1										1
Great Round Shoal	1										1
Handkerchief Shoal	3	6	3	5	1	1	2	1	2	3	27
Harwichport	2	1									3
Haves Shoal	1	2									3
Horseshoe Shoal							1				1
Hyannis		1	1	1				1		1	5
Kill Pond Bar			1	2							3
Long Shoal		3			2						5
Monomoy Island (shoals west side of)	2										2
Muskeget Island				1			1	1			3
Mutton Shoal								1			1
Nortons Shoal		1			1						2
Osterville							1				1
Rodgers Shoal		1									1
Shovelful Shoal (near Tuckernuck Shoal)	4	1					1				6
Tuckernuck Shoal		2	1		1		1			1	6

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MASSACHUSETTS—continued.											
Newburyport approaches:											
Newburyport Bar			1		1	1		4	2	3	12
Plum Island Point						1		1			1
Salisbury Point		1	2		1				1		5
Plum Island	1	3	1	4	4		1		2		16
Plymouth Bay:											
Browns Bank, or Browns Island		5		2	2	1	4			7	21
Cow Yard, The								1			1
Dicks Flat					1						1
Plymouth	1	1	1			1	1	9	1		15
Saquist Head								1		3	4
Salem Harbor and approaches:											
Bakers Island and Shoals			1	1		2	1				5
Dry Breakers			1								1
Endeavor Rocks							1				1
House Island								1			1
Juniper Point										2	2
Kettlebottom, The		1									1
Little Aqua Vite Ledge				1							1
Magnolia					1						1
Salem Harbor	1			1			1	2			5
Salisbury Beach					1						1
Scituate	1							2		1	4
First Cliff			1								1
Fourth Cliff			1			2				1	4
North Scituate		1						1		1	3
Vineyard Sound:											
Cuttyhunk Island	2	2		1		1		1	3		10
Hedge Fence Shoal						3	1		1	2	7
L'Homme dieu Shoal	1		1		1						3
Middle Ground						1	1				2
Nashawana Island			1	2				1		2	8
Naushon Island	1		3	2		1		1	1		9
Nobska Point										1	1
Pasque Island	5				1	4	1				11
Quicks Hole							1				1
Robinsons Hole	1	1	1	1							4
Sow and Pigs		1	1		1	1		2	1	2	9
Squash Meadow Shoals			1								1
Succoneset Shoal		1									1
Tarpaulin Cove	1	2		2		1		1			7
Woods Hole	1	1	1		2		1		3		9
RHODE ISLAND.											
Block Island:											
Block Island Breakwater	1			5		5	4	2	2	1	20
East side of	2	1		1			3	1		1	9
New Harbor						1			1	1	3
Northwest shore of					1	1	4				6
Sandy Point				3		2	2	1	1		9
South and southwest shore			1								1
West side of		1		1		3	1	1	1		8
Charlestown Beach	2				1						3
Green Hill Point		1									1
Little Narragansett Bay							1				1
Narragansett Bay:											
Bishop Rock			1								1
Bonnet Point			1								1
Boston Neck			1								1
Brentons Point and Reef				1		1					2
Caseys Point	1										1
Castle Hill						1		1			2
Church Point				1							1
Clump Rocks			1								1
Coasters Harbor Island	1										1
Coddington Point								1			1
Conanicut Island									1		1
Conimicut Point					1						1
Dutch Island	1	2	1	1				1			6
Eastons Beach										2	2
Fish Rock								1			1
Fort Adams		1									1
Gardiners Neck								1			1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
RHODE ISLAND—continued.											
Narragansett Bay—Continued.											
Goat Island.....		1		2							3
Jones Ledge.....										1	1
Kettle-Bottom Rock.....				1							1
Muscle Bed Shoal.....								1			1
Newport.....							1	4			5
Newtons Rock.....		1			1						2
Patience Island.....										1	1
Pawtucket River (mouth of).....					1						1
Portsmouth.....		1							1		2
Providence River.....						1					1
Prudence Island.....								7			7
Rose Island.....	1		1	1				1			4
Sachusset Neck and Beach.....					2					1	3
Sakonnet Point.....									2		2
Sisters, The.....		2									2
Tiverton.....						1					1
Watsons Pier.....				1							1
Whale Rock.....		1									1
Noyes Beach.....									1		1
Point Judith.....		1	1		4	2	2	2		2	14
Three miles west of.....		1									1
Quonochontaug Beach.....					2						2
Watch Hill.....	2	2	1		1	1					7
Catumb Reef.....				1			2			1	4
Napatree Point.....	1		1	2				3	1		8
Sugar Reef.....					1						1
CONNECTICUT.											
Black Rock Harbor.....			1								1
Branford Harbor.....					1						1
Branford Reef.....	1		1								2
Bridgeport.....			1		1		1				3
Connecticut River (mouth of):											
Cornfield Point.....		1									1
Cornfield Point Shoal.....			1								1
Saybrook Bar.....					2	1					3
Fairfield Beach.....								1			1
Fishers Island Sound:											
Bartletts Reef.....							1	1			2
East Clump.....								1			1
Groton Long Point.....		1									1
Latimers Reef.....	1		1				3				5
Middle Clump.....									1		1
Mystic River (mouth of).....								2	1		3
Noank (near).....	1										1
Quambo Cove.....			1								1
Grants Neck.....		1									1
Greenwich.....			2		1						3
Guilford.....		1	1								2
Long Island Sound (near coast of Connecticut):											
Bartletts Reef.....										1	1
Captains Islands.....	1					1					2
Cockenoes Island.....								1			1
Cows, The.....						1					1
Faulknors Island.....	1				1		1		1		4
Goose Island (near Faulknors Island).....		1							1		2
Long Sand Shoal.....				2							2
Norwalk Islands.....	1	1	1			1		1	1		6
Penfields Reef.....	1	1			1						3
Saugatuck.....	1						1				1
Thimbles, The.....			1		1			1	1		4
Wilsons Point.....										1	1
Millstone Point (near Niantic Bay).....	1										1
New Haven Harbor:											
Adams Fall Ledge.....				1							1
New Haven.....		1	2								3
New London Harbor and approaches:											
Black or Southeast Ledge.....			1								1
Cormorant Reef.....							1				1
Eastern Point.....		1									1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
CONNECTICUT—continued.											
New London Harbor and approaches—Continued.											
Goshen Reef.....				1		1					2
Ocean Beach.....					1						1
Pequot (near).....			1								1
Southwest Ledge.....			1								1
Niantic Bay.....			2	1							3
Norwalk Harbor.....		1									1
Saugatuck River (mouth of).....		1						1			2
Shippan Point.....						1		1			2
Stonington Harbor.....					2						2
NEW YORK.											
Block Island Sound:											
Fort Pond Bay.....				3			2	2			7
Gardiners Island.....	1					1					2
Goffes Point.....		1									1
Napeague Bay.....								1			1
Shagwong Reef.....		1	1					1			3
East River:											
Astoria.....										1	1
Barretto Point.....									1		1
Berrians Island.....		1									1
Blackwells Island.....	3		1	1			1	1			7
College Point.....		2									2
Governors Island.....	1					1					3
Hell Gate.....			1		2	2		1	1	5	12
Hell Gate, Flood Rock.....				1							2
Hell Gate, Halletts Point.....				1					1		1
Hell Gate, Mill Rock.....	1	1	1				1				5
Hell Gate, Negro Head.....			2						1		4
Hell Gate, Rylanders Reef.....								1	1		2
Hell Gate, The Hogs Back.....				1			1	1	1		4
Horns Hook.....		1									1
Lawrence Point.....	2						1				3
Man-of-War Rock.....	2				1	1	1	2			7
Newtown Creek (mouth of).....			1								1
North Brother.....				1						1	3
Old Ferry Point.....								1			1
Rock off East Fifty-sixth street, New York City.....	1										1
South Brother.....									1		1
Sunken Meadows, The.....		1				2	3	1	1		8
Wards Island.....	1										1
Gardiners Bay:											
Gardiners Island (see Block Island Sound).....											
Long Beach Bar.....			1				1				2
Sag Harbor.....						2		1			3
Shelter Island.....									1		1
Long Island (outside):											
Amagansett.....			1			1					2
Coney Island.....		2	4	1	4	3	2				16
Coney Island (Sheepshead Bay).....						1		1			3
East Hampton Beach.....			1								1
Fire Island Beach.....	2	3	2	2	1	2	1	1	1		16
Fire Island Beach (Great South Bay).....		3			1		2	7			13
Fire Island Inlet.....	2			5	5	5	5	2	1	5	30
Gilgo Inlet.....									1		1
Hempstead Bay.....									1		1
Hog Island Inlet.....		1									1
Jamaica Bay.....	1										1
Jones Beach.....	1										1
Long Beach.....		2	3	2		1	3			3	15
Mecox.....		1					1				2
Montauk Point.....		1	1					2	1		5
Moriches Beach.....			1	1			1	1	2		6
Moriches Beach (Moriches Bay).....							1				1
Napeague.....	1	1	1	1		1		2			7
New or Jones Inlet.....	3	1	2	4		3	3		2	2	20
Oak Island.....				1							1
Potunk.....		1									1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
NEW YORK—continued.											
Long Island (outside)—Cont'd.											
Quogue.....						1			1		2
Rockaway and Far Rockaway Beach.....	1			1	1	1			1	1	6
Rockaway Inlet and Shoals.....	2		1	6	1	3	2	3	1	3	22
Shinnecock Beach.....	1		1	2		4					8
Smiths Point.....			1								1
Zachs Inlet.....			1	1	1			2			5
Long Island Sound:											
Big Tom Rock.....					1		1				2
City Island.....						1				1	2
Cold Spring Harbor.....					1						1
Cow or Manhasset Bay.....			1								1
Davenport or Davids Island.....			1			1				1	3
Duck Pond Point.....								2			2
Eatons Neck.....	1	1		3	1				1	1	8
Execution Rocks.....			1								1
Fishers Island.....	1	1	1	4	1	2	1	2	1	2	16
Glen Cove.....	1										1
Glen Island.....						1					1
Great Gull Island.....							2				2
Hart Island.....		1			1	1	1		1		5
Hewletts Point.....	1										1
Hortons Point.....						1		1	1	1	4
Larchmont.....	2										2
Little Gull Island.....	1			1							2
Lloyds Neck.....	1	1	1			2			1		6
Luce Landing.....								1			1
Matinicoek Point.....				1	1				2	1	5
Mattituck Beach.....			1								1
Mount Sinai.....		1						3			4
New Rochelle Harbor.....			1	1			1			1	4
Oak Neck Point.....				1							1
Old Field Point.....				1			1	1		1	4
Old Silas Reef.....							1				1
Orient Shoal.....						1					1
Oyster Bay.....	2	1		1							4
Oyster Pond Point.....					1			2			3
Peconic Bay, Little.....	1										1
Peconic Bay, Great.....					1						1
Pelham Bay.....											1
Pine Island.....	1										1
Plum Island.....	1			1		1		1		3	7
Port Jefferson.....								2		1	3
Prospect Point.....				1							1
Race Point (near).....			1								1
Race Rock.....									1		1
Rocky Point.....								1	2		3
Rye Point.....	1	1			1			1			4
Sands Point.....	1		1	1							3
Valiant Rock.....									1		1
Wicopesset Island and Reefs.....	1								1	1	2
New York Bay and Harbor:											
Bath Beach.....	1		1								2
Bay Ridge.....								1			1
Bedloes Island.....					1				1		2
Bedloes Island (rock 1 mile west of).....					1						1
Black Tom Island.....								1			1
Castle Point.....			1								1
Constable Point.....							1		1		2
East Bank.....						1					1
Ellis Island.....			1			1					2
Gedney Channel.....				1							1
Great Kills.....			1								1
Nortons Point.....										1	1
Princess Bay.....							1	1			2
Robbins Reef.....				1							1
Romer Shoal.....	3	1	1	6	3	1	2	3	1	4	25
South Brooklyn.....									1		1
Staten Island.....	1		1					1			3
Swash Channel.....									1	1	2
Swinburne Island.....						2					2
West Bank.....				1	2	1			1	1	6

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
NEW JERSEY.											
Absecon Inlet	4	1	5	4	6	2	3	4	2		31
Atlantic City		3	2			3	1		1		10
Barnegat Inlet	2	5	1	2	2	1	3	1		2	19
Brigantine Beach and Shoals	3	2	2	2	2	1	2		2		16
Cape May	1			1	2	3	1	2	1	1	12
Cold Spring Inlet				1	1			1	2	2	7
Corsons Inlet Bar			3				1		2		6
Deal Beach	1	1	1		1						4
Delaware Bay (also see Delaware):											
Ben Davis Shoal				1						1	2
Cross Ledge							1				1
Egg Island Point									1		1
Fishing Creek Shoal			1								1
Green Creek				1						1	2
McCries Shoal			1								1
Miah Maull Shoal						1					1
North Shoal		1	1								2
Overfalls or South Shoals				1				1			2
Round Shoal					1						1
Somers Shoal		1									1
Five Fathom Bank				1			1				2
Five Mile Beach				2							2
Great Egg Harbor Inlet	2	2	3	1	3	5	3	10	13	10	52
Hereford Inlet	3		6	2		2	3	1	1		18
Highlands			1	1	3						5
Island Beach	1	1	1		2					2	7
Little Egg Harbor						1	5				6
Little Egg Harbor Inlet or New Inlet	1	3	5	3	1	4	5		5	5	30
Long Beach		2	1	1	2	2	1	3	1	2	15
Long Branch		1			1						2
Ludlam Beach						1		1			2
Monmouth Beach		1		1	2	1				1	6
Newark Bay, Shooters Island							2				2
Pecks Beach		1		1	1						3
Port Monmouth								1			1
Raritan Bay:											
Keyport			2					1			3
Perth Amboy								1			1
Point Comfort				1							1
Raritan										1	1
Red Bank				1							1
Sandy Hook	2	5	6	1	8	4	3	4	2	3	38
False Hook		1									1
Flynn's Knoll		1						2			3
Horse Shoe				1			1			1	3
Seabright		2				1					3
Shrewsbury River					1					1	2
Spring Lake									1		1
Squan Beach	1	2	1	1			1				8
Tatham				1	1				1		3
Toms River						1					1
Townsend's Inlet					3	2			2	3	10
Turtle Gut Inlet					1	1				1	3
DELAWARE.											
Cape Henlopen	1	4	1			1	5	2	3	3	20
Hen and Chickens Shoal		1	1				1				3
Delaware Bay (also see New Jersey):											
Bombay Hook Point		1									1
Brandywine Shoal	1							1			2
Broadkill River (mouth of)										1	1
Cedar Beach							2				2
Fourteen Foot Bank							1				1
Joe Flogger Shoals	1	1			1		1	3			7
Mispillion River				1			1				2
Shears, The		1	1								2
Delaware Breakwater	2	2	1	3		1	1	3	1	1	5
Indian River Inlet	5	1	2			2		3	1		14
Lewes			3	1	1		6	3	2	2	18
Rehoboth Beach			1						1	1	3

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
MARYLAND.											
Chesapeake Bay:											
Bear Point							1				1
Cedar Point	1						1				2
Chester River (mouth of)	1		1						1		3
Choptank River (mouth of)		1			1						2
Cornfield Point (mouth of Potomac River)							1				1
Cove Point		1								1	2
Curtis Point				1							1
Devils Woodyard				1							1
Drum Point				1			1				1
Fishing Bay			1								1
Hacketts Point	1					1					2
Herring Bay			2	1				1			4
Holland Island					1					1	2
Honga River					1						1
Horseshoe Point					1						1
James Point	1	1								1	3
Magothy River (mouth of)								2			2
Man of War Shoal				1							1
Millers Island				1							1
Patapsco River (mouth of)	1	1		1		1	2	1	1		8
Patuxent River (mouth of)								1			1
Point No Point					1						1
Sharps Island Bar	1	2									3
Swan Point							1				1
Thomas Point Shoal							1				1
Wades Point (Eastern Bay)						1					1
Fenwick Island			1	1				1			3
Fenwick Island Shoals	1										1
Green Run Inlet						1					1
Isle of Wight										1	1
North Beach	1		2		1		1			1	6
North Beach, Sinepuxent Bay							1			1	2
Ocean City									1		1
VIRGINIA.											
Assateague Island	1	2		2				1	2	2	10
Fishing Point				2		1	4	2	2	1	12
Turners Shoals							2			1	3
Assawaman Inlet							1				1
Cape Henry	4		3	2	3	2	2	2	1	3	22
Cedar Island	1		1	2							4
Cherrystone Inlet			1								1
Chesapeake Bay:											
Back River Shoals			1		1						2
Cape Charles City					1						1
Farnham Creek								1			1
Great Wicomico River (mouth of)						1					1
Gwinns Island	1										1
Middle Ground		3	1				1	3		1	9
New Point Comfort				1	1	1			2		5
Ocean View		1			1						2
Piankatank River (mouth of)	1		1						1	1	4
Plum Tree Bar		1	1								2
Pongateague Creek (mouth of)								1			1
Potomac River (mouth of)							1				1
Smiths Point	1									1	2
Stingray Point						1		1			3
Tail of the Horse Shoe							1			1	2
Watts Island								1			1
Willoughby Spit		1				1			1		3
Wolf Trap Shoal, Mobjack Bay											1
Chincoteague Inlet	2	3	2	1				2	5	3	18
Chincoteague Shoals (off Fishing Point)	1	1		1	2					1	6
Cobbs Island	1	1	1			1	1				5
Carters Shoals	3	1	1	1	2	1	1	1			11
Sand Shoal Inlet		2	1	1	2	1	4	1	1		13

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
VIRGINIA—continued.											
Dam Neck Mills									1		1
Elizabeth River:											
Lamberts Point						1			2		3
Middle Ground								1			1
False Cape		3			1	2			1	1	8
False Cape, Pebble Shoals					2	1		1	3	1	8
Fishermans Island (near Cape Charles)	1			1							2
Great Machipongo Inlet	1	3		2	1	2	2	2	1	3	17
Hampton Roads:											
Browns Shoals (mouth of James River)				1							1
Bush Bluff Shoal		1									1
Craney Island Flats									1		1
Hampton Bar		1				2				1	4
Nansemond River (mouth of)				1							1
Newport News			1	1			1				3
Old Point Comfort	1			1							2
Pig Point	1		1								2
Rip Raps					1						2
Sewalls Point							1	1			1
Hog Island	2	1	1				1		1		6
Little Island		1	1			1	1				4
Little Machipongo Inlet				1	1						2
Lynn Haven Bay					2	1					3
Metomkin Inlet	1		1			4			1		8
New Inlet Shoals										1	1
Paramore Beach	1									1	2
Sand Shoal Inlet									1		1
Ship Shoals		1	1							3	5
Smiths Island								1			1
Isaac Shoals	1			1	2	1	2	1	1		9
Little Inlet Shoals							1				1
Nautilus Shoal					1						1
Virginia Beach	1		2			1					5
Wachapreague Inlet	2			2	2				2		8
Dawson Shoals		2			1	1	2	1			7
Wallops Beach			2		1		1	1	3	1	9
NORTH CAROLINA.											
Albemarle Sound:											
Big Island						1					1
Bull Bay						1					1
Croatan Sound										1	1
Greenfield Point (near)								1			1
Kitty Hawk Bay										1	1
Pasquotank River (mouth of)					1						1
Perquimans River (mouth of)					1						1
Powells Point						1					1
Roanoke River (mouth of)		1					1				2
Bacon's Inlet			1								1
Beaufort	1										1
Big Kinnakeet (also see Pamlico Sound)				1					1		2
Bodies Island (also see Pamlico Sound)	1		1	1	2	1	1				7
Bogue Island and Inlet	2		2						2		6
Cape Fear, Frying Pan Shoals		2	2	3	1	1	1			1	11
Cape Fear River (mouth of)		4		3	1	1	3	1	3		16
Cape Hatteras		1								2	4
Diamond Shoals (inner and outer)		1	1		3	1	1		2	2	11
Cape Lookout		3		1		2	1	1		1	10
Cape Lookout Shoals	1		3				2				7
Chicamacomico			1	1			3				6
Core Beach			1			2		1	4		9
Core Sound						1				3	6
Currituck Beach		1	2			2	1	1			5
Currituck Sound				2			1	1			4
Jews Quarter Island										1	1
Long Point					1						1
Drum Inlet						1					1
Durants (also see Pamlico Sound)				1				1			3
Gull Shoal (also see Pamlico Sound)	1					1		1	2	1	6

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
NORTH CAROLINA—continued.											
Hatteras Inlet (also see Pamlico Sound)	3	2	1	2	1				1		10
Kill Devil Hills				2							2
Kitty Hawk		1				1			1		3
Little Island				1							1
Little Kinnakeet (also see Pamlico Sound)	1	1						1	1		4
Little River Inlet	1										1
Lockwoods Folly Beach			2	1			1				4
Nags Head				2		1					3
New Inlet			1		1				1		3
New River Inlet			1							1	1
Ocracoke Inlet			1	1		1	1		2		6
Ocracoke Island		1		8				1	2		12
Oregon Inlet		1		1					2		4
Pamlico Sound:											
Big Kinnakeet	1			2	3			2	2	1	11
Bodies Island	1										2
Brant Island		1						1			1
Chicamacomico				1							1
Durants	1					1		2			4
Gull Island and Shoal				1	1			1		1	4
Hatteras Inlet		2			1	2					5
Howard Reef				1							1
Kings Point						1					1
Jennett Landing						1					1
Little Kinnakeet	2				1	1	1				5
Log Shoal	1						1			1	3
Long Shoal	1										1
Neuse River				1		1					2
Ocracoke Inlet				2		2		2			6
Olivers Reef			3	1				1			5
Oyster Shoal								1	1	1	3
Pamlico Point							1				1
Porpoise Point									1		1
Roanoke Marshes								1			1
Robinson							1				1
Royal Shoals					2			1	1	1	5
Portsmouth Island									1		1
Rich Inlet			1								1
Shalotte Inlet				1					3		4
Southport									1		1
Wash Woods				1		1					2
Wrightsville Inlet							1				1
SOUTH CAROLINA.											
Bay Point								1			1
Beaufort			1								1
Bulls Bay		1									1
Calibogue Sound						1					1
Daufuskie Island	1		1					1			3
May River										1	1
Cape Romain			1					1		1	3
Capers Island		1	1					1			2
Charleston		1	4			1	1	1			7
Charleston Bar	4	1	3	1		2	1	2	1	1	16
Drunken Dick Shoal	1			1	1	1					4
Pumpkin Hill Shoal		1									1
Edisto Island								1			1
Fripps Island								1			1
Georgetown Breakers			1	2		1			1		5
Hilton Head Island								2			2
Kiawah Island			1								1
Little River Inlet					1				1		2
Long Island			1		1						3
Morris Island						1	1	1			3
Page Island			1						1		1
Pine Island Beach		1									1
Port Royal Bar		1						2			4
St. Helena Sound and approaches			1								1
St. Phillips Island						1					1
South Island			1								1
Stono Inlet					1				1		2
Sullivans Island							1		2	1	4
Winyah Bay				1							1
Youngs Island			1								1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
GEORGIA.											
Altamaha Sound		1						1		1	3
Brunswick						1		3	1	1	6
Cumberland Island and Shoals		1						1	2		4
Darien								1			1
Doboy Sound and approaches		2		1		1		1			5
Harris Neck								1			1
Jekyll Island								1			1
Little Wassaw Island						1					1
Long Island							1				1
Pumpkin Hammock, North River		1									1
St. Simons Bar	1	2				1					4
St. Simons Island										1	1
St. Simons Sound, Colonels Island						1					1
Sapelo Sound and approaches		1	1	1				1			4
Savannah River (mouth of)	1		3			1		2			7
Tybee Island					1	1		1	1	2	6
Wassaw Island							1				1
Wilmington River (mouth of)				1				1			2
Wolf Island, Spit, and Shoals		1					1				2
FLORIDA.											
Amelia Island							2				2
Apalachicola Bay								1			1
Carrabelle				1					3		4
East Pass Bar						1					1
Vincent Island								1			1
West Pass	1										1
Barrancas		1								1	2
Bethel Creek			1								1
Biscayne Bay		1									1
Cape Canaveral	1										1
Cape San Blas						1					1
Caseys Pass										1	1
Chester Shoals		1		2				1			4
Dog Island									7		7
Fernandina Bar and Harbor				1			1	3			5
Florida Reefs:											
Bird Key (near Tortugas)		1						1			2
Conch Reef									1		1
Content Key								1			1
Elbow Reef		1	1	1							3
Fowey Rocks				1							1
French Reef			1							2	3
Key West				2	1	1			1	1	6
Looe Key								1			1
Marquesas Key			1				1				2
Maryland Shoal					1						1
Middle Ground				1							1
New Ground Shoal										1	1
Pickle Reef			1								1
Pulaski Shoals	2		1								3
Quicksands							1				1
Rebecca Shoals		1				1	1				3
Tennessee Reef				2		1					3
Tortugas	1	1	1	2	1	1	1	1	1	1	11
Virginia Key							1				1
Western Dry Docks	2										2
Fort Lauderdale									2	1	3
Fort Pickens Point		1				1					3
Gull Point Bar			1								1
Hillsboro Inlet				1				1			2
Indian River, Eau Gallie			2								2
Indian River Inlet				2							2
Jupiter Inlet	2	3	3	2	5	1				2	18
Lake Worth Beach					1						1
Lake Worth Inlet	3			2							5
Lantana					1		1				2
Mosquito Inlet		1								2	3
Mosquito Lagoon		2									2
New River Inlet	1		2			1				1	5
Orange Grove (8 miles south of)	1										1
Ormond						1					1
Pablo Beach					1						1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
FLORIDA—continued.											
Palm Beach						1					1
Pensacola Bar		2	2		1		2				8
Pensacola Bay	1		4			4	2	3	2	1	17
Perdido River (mouth of)		1						1	1		3
St. Andrews Bay					2						2
St. Augustine Bar				1						1	2
St. Georges Island							1		7		8
St. Johns Bar		1	1		1	2		1	1	1	8
Santa Rosa Island		1	1	2	1	2		2			9
Sarasota Pass		1							1		3
Sebastian										1	1
Smiths Creek		1									1
Tampa Bay										2	2
Anna Maria Key				1							1
Egmont Key										1	1
Mullet Shoal							1			1	2
ALABAMA.											
Mobile Bay and approaches:											
Blakely Island			1								1
D'Olives Bay			1								1
Dixie Island	1	1							1		3
Fort Morgan				1							1
Heron Bay (Mississippi Sound)			2								6
Mobile Bay			2	1					2	1	2
Mobile Point	1										1
Montrose				1							1
Navy Cove				1							1
Petit Bois Island	1	1						1		1	4
Point Clear			1								1
Revenue Point							1				1
Sand Island								2		1	3
MISSISSIPPI.											
Mississippi Sound:											
Bayou Coden			1								1
Gaveline Bayou			1								1
Gulfport					1						1
Horn Island		1	1			1	1	2			6
Pascagoula			3								3
Pointe aux Chines			1								1
Ship Island	1			2	1	1					5
LOUISIANA.											
Calcasieu Bar		1	1	1	1	1	1				6
Chandeleur Island	1		1					2	1		5
Grand Island			1								1
Grand Lake			1								1
Lake Pontchartrain							1		1		2
Bayou St. John light						1					1
Little Woods					1						1
Little Constance Bayou								1			1
Mississippi River (mouth of)							3				3
Pass Fourchon								1			1
Schofield Bay, West Bay			1								1
Tiger Shoal					1						1
Timbalier Island						1					1
TEXAS.											
Aransas Pass		1	1		2				3	1	8
Boca Chica			1								1
Bolivar Beach		2									2
Brazos River (mouth of)		1	2	3		2	1	3	1	3	16
Brazos Santiago	2	2			2	1	1		4	1	13
Galveston Bar	3	3	2	6	4	3	1	4	5	1	32
Galveston Bay and Harbor		1		1	1	1		1	1	5	11
Laporte										1	1
Pelican Island and Flats	2				1						3
Pelican Spit	1						1				3
Galveston Island	2	2	1	4	2			5		1	17
High Island				1							1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

ATLANTIC AND GULF COASTS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
TEXAS—continued.											
Matagorda Bay.....	1										1
Matagorda Island.....			1		1				1		3
Matagorda Peninsula.....				1		1					2
Mustang Island.....	1						1	1		1	4
Padre Island.....				1	2			1			5
Pass Cavallo.....	2	1		2		2	2	1	1		11
Sabine Pass.....		1	1	4	1	1		1			9
East of.....					1						1
West of.....										1	1
Saint Joseph Island.....		2						1			4
San Bernard Bar.....	2	1	1			1	2				7
San Luis Pass.....			1	3	6	5		3	2		20

PACIFIC COAST.*

ALASKA TERRITORY.											
Admiralty Island.....									2		2
Agrepin Bay.....			1								1
Amlia Island.....			1								1
Anchor Point, Cooks Inlet.....				1							1
Barren Island.....						1					1
Cape Constantine.....							1				1
Cape Nome.....								1	1		7
Cape Rodney.....											2
Cape Romanzof.....									1		2
Chamisso, Kotzebue Sound.....									1		1
Chirikoff Island.....							1				1
Clarence Strait, Blashke Island.....								1			1
Cooks Inlet.....		1									1
Coronation Island.....										1	1
Dixons Entrance.....									1		1
Devils Rock.....							1				1
Geese Island, Kadiak Island.....				1			1				2
Golvin Bay.....										1	1
Goodnews Bay.....										1	1
Juneau.....							1				1
Kadiak Island.....				1					1	1	3
Kagalaska Island.....										1	1
Karluk, Kadiak Island.....					1					1	2
Kashevarof Island.....								1			1
Kayak Island.....		1	1								2
Lituya Bay.....		1			1						2
Lynn Canal, Shelter Islands.....							1	1		1	3
Haines Mission.....								1			1
Skagway.....							3				3
Sullivan Island.....										1	1
Taiya Sahnka.....								1			1
Marosco Bay.....		1									1
Middleton Island.....	1										1
Midway Island, Stephens Passage.....								1			1
Montague Island.....								1			1
Nakchamik Island.....								1			1
Nunivak Island.....									1		1
Point Barrow (reef near).....	1										1
Point Hope.....						1		1			2
Port Clarence Harbor.....					1						1
Pribilof Islands.....	1								1		2
Prince of Wales Island.....								1			1
Prince William Sound.....			1							1	2
Pybus Bay, Frederick Sound.....								1			1
Return Reef, Midway Island.....				1							1
Revillagigedo Channel:											
Mary Island.....								2			2
Rocky Point.....										1	1
Safety.....										1	1
Saint Lawrence Island.....										2	2
Saint Michael.....									6		7
Saint Paul Harbor.....			1								1
Sand Point.....		1									1

* In a few instances the number of stranded vessels in this table does not agree with those reported in the annual report of the previous year, having been increased by wreck reports received since the publication of the last report.

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
ALASKA TERRITORY—continued.											
Sannak Islands.....	1									2	3
Seal Rock.....								1			1
Shelikof Strait.....						1					1
Katmai Bay.....							2				2
Shumagin Islands.....									1		1
Sitka (near).....				1							1
Stephens Passage.....										1	1
Stuart Island.....										1	1
Thin Point.....						1					1
Tigalda Island.....								1			1
Tongass Narrows.....					1			1	1		3
Tugidak Island.....						1					1
Unalaska.....				1			2				3
Unga Island.....										1	1
Unimak Island.....							1			1	2
Wrangell Narrows.....				1				1	1		2
Yakutat.....			1		1						2
HAWAII.											
French Frigate Shoal.....					1						1
Hawaii Island.....										3	4
Honolulu.....								1			1
Kauai Island.....										1	1
Kihel.....									1		1
Lanai.....										1	1
Maui Island.....										2	2
Molokai Island.....										1	1
Oahu Island.....						1			2		3
Puna Island.....	1										1
WASHINGTON.											
Cape Disappointment.....	1										1
Ten miles north of.....	1										1
Cape Flattery.....							1				1
Cape Johnson.....			1								1
Grays Harbor.....	2			1							3
Fifteen miles north of.....	1										1
Five miles north of.....						1					1
North Spit.....				1							1
Ilwaco Beach.....						1					1
Long Beach.....					1						1
Puget Sound.....		2									2
Bear Point.....							1				1
Marrowstone Point.....	1	1									2
Ossete River (mouth of).....	1					1					2
Point No Point.....					1						1
Point Wilson.....		1			1	1			2		5
Port Blakeley.....										1	1
Port Townsend.....	1			1	2	1					5
Rocky Point.....								1			1
Seattle.....				1							1
Skagit River (mouth of).....			1								1
Snohomish River (mouth of).....	1										1
Tacoma.....										1	1
Useless Bay.....			1								1
West Point.....		1			1						2
Whitbey Island.....				1				1			2
Queetsu River (mouth of).....				1							1
Shoalwater Bay.....				2			1	1		2	6
Strait of Fuca.....											
Neah Bay.....					1						1
New Dungeness.....		1		1	1		1				3
Pillar Point.....								1			1
Smiths Island.....			1								1
Washington Sound.....											
Deception Pass.....	1					1					2
Fairhaven.....								1			1
Fidalgo Island.....								1			1
Henry Island.....				1							1
Lummi Island.....										1	1
Obstruction Island.....								1			1
Orcas Island.....	1							1			2
Port Roberto.....										1	1
Rosario Strait.....		1									1
San Juan Island.....	1	1									2
Willapa Bay.....										1	1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

PACIFIC COAST—Continued.

Name of place.	Fiscal year ending June 30—										Total.	
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.		
MOUTH OF COLUMBIA RIVER.												
Clatsop Spit											1	1
Chinook Sands	1											1
Chinook Spit	1											1
Sand Island				1								1
OREGON.												
Alesea Bay				1				1				2
Cape Arago	4	1			1			1	1	1		9
Cape Blanco					1							1
Chetko Cove					1							1
Coos Bay Bar	2	1	1			1		1	1			7
Coquille River (mouth of)	2	2	1		2	3	3	9	2	4		28
Nehalem River (mouth of)	2				1	1						2
Nestuggah Bay and Bar										2		2
Point Adams			1	1						3		5
Siuslaw River (mouth of)	1			2						3		6
Tillamook Bar		2						1	2			5
Umpqua Bar	2	2			2		1		2			9
Yaquina Bar		1						1				2
CALIFORNIA.												
Albion River (mouth of)		1	3									4
Bodega Bar		1										1
Bowens Landing, Mendocino County		1										1
Cambria				1								1
Caspar						1		1				2
Crescent City					1							1
Double Point										1		1
Duxbury Point								1		1		2
Eel River Bar	1				1							2
Fish Rocks	1	1										2
Fort Bragg, Mendocino County			1						1		1	3
Fort Ross		2										3
Golden Gate	1		1	2								4
Fort Point		2	1		1				1	1		6
Golden Gate Park										1		1
Point Cavallo	1											1
Point Diablo							1		1			2
Point Lobos	1										1	2
Presidio Shoal		1										1
Greenwood Landing, Mendocino County								1				1
Half Moon Bay							1					1
Hardy Creek							1					1
Hueneme, Ventura County						1						1
Humboldt Bar	1			1	2	1	2	2	1			10
Kents Point, Mendocino County							1					1
Klamath River (mouth of)	1											1
Little River (mouth of)	1									1		2
Mare Island, San Pablo Bay									1			1
Mendocino			1									1
Monterey Harbor				1								1
Navarro River (mouth of)	1											1
Newport		1										1
Noyo, Mendocino County		1										1
Pigeon Point						1						1
Pillar Point							1					1
Point Arena	1				2	1	1				2	7
Point Bonita			1	1			1					3
Point Conception	1		1									1
Point Gorda					1						1	2
Point Montara Reef (near)	1								2			3
Point New Year					1							1
Point Reyes				1		1						2
Point Sur			1									1
Point Vincent			1									1
Pyramid Point						1						1
Redondo Beach			2		2		1					5
Rockport	1			1								2
Russian Landing, Sonoma County		1		1								2
Salina River (mouth of)	1											1
Salt Point									1			1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

PACIFIC COAST—Continued.

Name of place.	Fiscal year ending June 30—										Total.	
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.		
CALIFORNIA—continued.												
San Francisco Bay and Harbor..				1								1
Alcatraz Island.....								1				1
Alviso.....								1				1
Angel Island.....			1									2
Anita Rock.....								1				1
Arch Rock.....							1					1
Bird Rock.....							1					1
Castro Rocks.....											1	1
Mission Rock.....					1							1
Oakland.....		1										1
San Mateo.....									1			1
Yerba Buena Island.....		1										1
Santa Barbara Islands:												
San Clemente Island.....		1										1
San Miguel Island.....				1						1	1	3
Santa Catalina Island.....			1									1
Santa Cruz Island.....						1						2
Santa Cruz Point, Needle Rock.....				1								1
Santa Rosa Island.....		1		1								2
Smiths River (mouth of).....		1				1						2
Stewarts Point, Sonoma County.....				1								1
Timber Cove.....								1				1
Tomaes Point.....							1					1
Ventura.....										1		1

GREAT LAKES.*

LAKE ONTARIO.												
Bath, Ontario.....						1						1
Big Sandy Creek, N. Y.....	1	2		1				1				5
Braddocks Point.....		1							1			2
Charity Shoal.....						1				1		2
Charlotte.....	1		1		1	2	1				1	6
Fair Haven.....	1											1
Forest Lawn, N. Y.....			1									1
Fort Niagara, N. Y.....												1
Galloo Island.....					1			1				1
Kingston (near), Canada.....			1									1
Little Salmon River, N. Y.....			4									4
Long Island, Canada.....				1								1
Niagara, Canada.....			1			1						2
Oak Orchard Reef.....							1					1
Ontario, N. Y.....		1						1				1
Oswego.....		4		2			1					11
Seven miles west of.....				2							2	2
Pigeon Island, Canada.....			2									2
Port Ontario, N. Y.....			1									1
Sandy Creek, N. Y.....					1							1
Six Town Point, N. Y.....					1							1
Stony Island.....		1										1
Stony Point, N. Y.....								1				1
Thirty-Mile Point, N. Y.....									1			1
Wellington, Canada.....			1									1
LAKE ERIE.												
Ashtabula, Ohio.....	2	2		2			2	1	3	1		13
Avon Point, Ohio.....	2											2
Ballast Island Reef.....									1			1
Bar Point, Canada.....	2		1	1		1			2	2		9
Black River, Ohio.....				1								1
Buffalo, N. Y.....	4		3			5	3		2	3		20
Cedar Point, Maumee Bay, Ohio.....			1			1						2
Cedar Point, Sandusky Bay, Ohio.....			1			1	1	1				4
Chick-e-nolee Reef, Canada.....			1									1
Cleveland, Ohio.....		5		3	3	5	4	1	4	1		26

*In a few instances the number of stranded vessels in this table does not agree with those reported in the annual report of the previous year, having been increased by wreck reports received since the publication of the last report.

[Note.—This list includes also places on the Canadian shore where American vessels have stranded.]

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

GREAT LAKES—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
LAKE ERIE—continued.											
Colchester Reef, Canada.....	1	1	1		1		1			1	6
Conneaut, Ohio.....		1			1	2					4
Erie, Pa.....	1	2	3	1	1		3				11
Fairport, Ohio.....					1	1					2
Fort Erie, Canada.....						1					1
Hen and Chickens Island, Canada.....	1										1
Horse Shoe Reef.....	3	1	3	3		1	2		1		14
Huron, Ohio.....			1								1
Kelleys Island and Shoal, Ohio.....		1	2		1	1			1		6
Little Point, Canada.....					1						1
Log Point, Canada.....						1					1
Long Point, Canada.....		3	1			2		1		1	8
Lorain, Ohio.....						1				1	2
Madison, Ohio.....	1										1
Marblehead, Ohio.....			1								1
Mentor, Ohio.....					1						1
Morgan Point, Canada.....					1						1
Mouse Island Shoals, Ohio.....					3			2	1		6
Niagara Reef, Ohio.....											1
Niagara River.....	1	2		2	1	1		1	3	1	12
North Harbor Isle, Canada.....				1							1
Pigeon Bay, Canada.....		1									1
Point Abino, Canada.....			1				1		1		3
Pointe au Pelée, Canada.....	2			3	5					2	12
Middle Ground.....	1				1			4		2	8
Pointe au Pelée Island, Canada.....	1		1	1	2						5
Port Colborne, Canada.....	1		1	1				2			5
Port Dover, Canada.....				1							1
Port Maitland, Ontario.....						1					1
Presque Isle, Pa.....		1									1
Rondeau, Canada.....				1							1
Sandusky Bay, Ohio.....			1	1		1			1	3	7
Scotts Point, Ohio.....			1			1					2
Selkirk, Ontario.....	2										2
Seneca Shoal, N. Y.....		1		2							3
South Bass Island, Ohio.....			1								1
Southeast Shoal, Ontario.....							1				1
Starve Island Reef, Ohio.....				1	3						6
Sturgeon Point, Mich.....	2										2
Sturgeon Point, N. Y.....	2								1		2
Toledo, Ohio.....				1	1	2				1	5
Tonawanda, N. Y.....						1					1
Turtle Island, Ohio.....	1	3									4
Van Buren Point, N. Y.....								1			1
Waverly Shoal, N. Y.....							1	1			2
West Harbor Reef, Ohio.....		1					2				3
Windmill Point, Canada.....		2									2
DETROIT RIVER.											
Amherstburg, Canada.....		2						1	1		4
Ballards Reef.....						1	5			1	7
Belle Isle, Mich.....							1				1
Bois Blanc Island, Canada.....		1	1		2			1	1	1	7
Detroit River.....	1		2		3	1	1	1	2		11
Fighting Island.....	1	2					1				4
Grassy Island and shoal.....		1	1								2
Linekilt Crossing.....	1		2	2	1	1	2	2	3	10	24
Stony Island.....	1								1		2
LAKE AND RIVER ST. CLAIR.											
Grasse Pointe, Mich.....		1		2	3	1	2		1		10
Middle Ground (near Port Huron), Mich.....	1	1								1	3
Peach Island, Canada.....					2						2
Port Edward, Canada.....		1	1				1				3
Port Huron, Mich.....							1				1
Russell Island, Mich.....											1
St. Clair Flats.....			2	2	1	1		1	3	4	14
St. Clair River.....		1	1		3	1	1	2	2		11
Stag Island, Canada.....								1	1		2
Thames River (mouth of).....	2										4
Windmill Point (rock near).....	1										1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

GREAT LAKES—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
LAKE HURON.											
Adams Point, Mich.....						1					1
Alabaster, Mich.....	1								1		2
Alcona, Mich.....								1			1
Algoma Mills, North Passage, Ontario.....									1		1
Alpena, Mich.....						1					1
Ausable and Point Ausable, Mich.....			1	2		3			1	1	8
Bedidore Bay, Ontario.....			1								1
Black River, Mich.....				1							1
Black River Island and Reef, Mich.....					2	1		1			4
Burnt Cabin Point Reef, Mich.....		2	1	6					4	1	14
Cape Ipperwash, Ontario.....		1		1							2
Charity Islands, Mich.....						1				2	3
Cheboygan, Mich.....										1	1
Cheboygan (9 miles southeast of), Mich.....	1	3									4
Cockburn Island, Canada.....										1	1
Corsica Shoal, Mich.....							1				1
Detour, Detour Passage, Mich.....				2	1	1		4	1	3	12
Drummond Island, Mich.....	2		3	2		1					8
Duck Island, Mich.....										1	1
Elm Creek, Mich.....	2								1		3
False Presque Isle, Mich.....		1	1	1	3	1	2	1		1	11
Fishermans Bay, Ontario.....			1								1
Forest Bay, Mich.....	1				1						2
Forester, Mich.....			1								1
Fort Gratiot, Mich.....		1	1		1	1					4
Fox Island.....									1		1
Georgan Bay, Canada.....					1						1
Beaver Stone River (mouth of).....						1					1
Collingwood.....							1				1
Cove Island.....								1			1
Giants Tomb Island.....										1	1
Hope Island.....	2										2
Mississauga Point.....	1										1
Portage Reef.....					1						1
Scarecrow Island.....				1							1
Three Star Shoal.....	1										1
Tobermory, Ontario.....						1			1		2
Waubushene, Ontario.....						1					1
Grand Manitoulin, Canada.....	1										1
Grindstone City, Mich.....			1		1	1		1	1		5
Gull Island, Mich.....			1								1
Hammonds Bay, Mich.....		1		1			1	1	1	1	6
Eight miles northwest of life-saving station.....	1		1								2
Fifteen miles northwest of life-saving station.....					2						2
Five miles northwest of life-saving station.....		1	1								2
Hardwood Point, near Sand Beach, Mich.....			1								1
Harrisville, Mich.....					1						1
Johnsons Reef.....	1										1
Kincardine, Ontario.....										1	1
Lake View Beach, Mich.....								1		1	2
Middle Island, Mich.....	1	1		1	2	1	1				7
Four miles southwest of New London Point, Mich.....			2		1	1					3
Nine Mile Point, Mich.....										1	1
North Point, Mich.....	4	4	1	2	1	1		1	1	3	18
Oscoda, Mich.....								2			2
Ottawa Point, Mich.....	1	1	3		1	2			1	6	15
Pointe aux Barques, Mich.....	1	5	1		6	1			1		15
Port Austin, Mich.....						1					1
Port Crescent, Mich.....			1								1
Port Hope, Mich.....	2			1					1		4
Presque Isle, Mich.....	2					1	1			2	6
Richmondville, Mich.....			1								1
Saginaw Bay, Hat Point, Mich.....			1								1
Saginaw Bay, Oak Point, Mich.....					1						1
Sand Beach.....	2	5	1		2	3	1	4	2	1	21
Seven miles south of.....								1	1		2

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

GREAT LAKES—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
LAKE HURON—continued.											
Sanilac, Mich.								1			1
Scarecrow Island, Mich.	1										1
Spectacle Reef, Mich.				1							1
Sturgeon Point, Mich.	1			2	2	1			1		7
Sulphur Island, Mich.								1			1
Tawas Harbor, Mich.		1							1		2
Thompsons Harbor, Mich.			1								1
Thunder Bay.			1								1
Thunder Bay Island and Reef, Mich.	1		1	1	2		1	1	3	1	11
Tobin Reef, Mich.									1		1
ST. MARYS RIVER.											
Fryingpan Island.					1						1
Hay Lake.				5		2	5	1	1		14
Mud Lake.					3					1	4
Neebish Rapids.	1	1	1								3
Pipe Island.		1					1	1			3
Pointe aux Pins, Canada.						1				1	2
Round Island.	1				2						3
Sailors Encampment.			2	1	4	3				2	13
St. Marys River.	7	7	3	11	4	3	1	2	1	6	45
Sand Island, Ontario.			1								1
Sugar Island.			2								2
Topsail Island.	2		1	2				2	1		8
LAKE SUPERIOR.											
Apostle Islands, Oak Island, Wis. Sand Island.				1					1		1
Baptism River (mouth of), Minn.								1			1
Beaver Bay, Minn.								1		1	1
Big Bay Point, Mich.		1									1
Caribou Island, Canada.				1							1
Chaquamegon Bay and Point, Wis.					2				1		3
Copper Harbor (reef at en- trance), Mich.		1			1			1			3
Copper Mine Point, Ontario Crisps, Mich.			1							1	1
Deer Park, Mich.				2			1	2			5
Devil Island, Wis.					1						1
Duluth, Minn.				2		1		1	1	2	7
Eagle River, Mich.				1				1	1		3
Grand Island, Mich.					2			1			3
Grand Marais, Mich.							1	1			2
Granite Point, Minn.									1		1
Gratiot River (mouth of), Mich. Gull Island, Mich.				1				3			4
Heron Bay, Minn.							2				2
Hills Creek, Mich.	1										1
Huron Island, Mich.			1								1
Iroquois, Mich.			1					1			1
Isle Royale, Mich.		1			1			4			6
Keweenaw Bay, Mich. Point Abbaye.							1			1	1
Keweenaw Point, Mich.		1									1
Laughing Fish Point, Mich. Magdalene Island.		1				1	1				3
Marquette, Mich.				2	3	1					6
Middle Ground, Mich. Pancake Shoal, Canada.			1						2		2
Pictured Rocks, Mich.	1		1								2
Pie Island, Ontario.					2						2
Pointe au Sable, Mich.	1	1									2
Point Iroquois, Mich.					3						3
Point Isabel, Mich.	1										1
Rasperry Island, Wis. Sandy Island, Canada.			1				1				1
Sauks Head, Mich.					1						1
Ship Canal, Mich.											1
Split Rock Point, Minn.	1	2	4	1	2	2		3	1	4	20
Sucker River (near), Mich.		1	1	1					1	1	2

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

GREAT LAKES—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
LAKE SUPERIOR—continued.											
Thunder Bay, Canada:											
Fort William	1										1
Hare Island	1										1
Two Harbors, Minn.	1	1				1				1	4
Two Heart River, Mich.	2							2			4
Vermillion Point, Mich.		2				2	1	1		1	7
Waiska Bay, Mich.		1	2	1	1	2	1				8
West Superior, Wis.	1										1
White Fish Point, Mich.		1	1	3	1	3	1		4	1	15
STRAITS OF MACKINAC.											
Bois Blanc Island	4	1	3	2	5	5	5		3	3	31
Carp River (mouth of)	1										1
Cecil Bay, Mich.			1								1
Cheboygan, Mich.	1	3	4	2	3		1				14
Goose Island, Mich.	1					1	1				3
Grahams Shoals, Mich.							1				1
Gros Cap, Mich.			1		1						2
Hessel Bay, Mich.		1									1
Isle Marquette, Mich.		1									1
MacGulpins Point, Mich.			1								1
Mackinac Island, Mich.		1		1		1	1	2			6
McLeod Bay, Mich.			1								1
Old Fort Mackinac, Mich.	1	1		1		1	3		1		8
Poe Reef, Mich.	3			1		1					5
Round Island, Mich.		1	1						1		3
St. Helena Shoal, Mich.								1			1
St. Martins Bay, Mich.		1									1
LAKE MICHIGAN.											
Ahnapee, Wis.	2	1			1		1				5
Algoma, Wis.										1	1
Antrim, Mich.				1							1
Baileys Harbor, Wis.	1		1			1	1	1	1	4	10
Beaver Island, Mich.	2	1	1		3	2	1	1		2	13
Big Summer Island, Mich.								1			1
Black Lake Harbor, Mich.				1							1
Calumet, Ill.	1	1			1		1				4
Cana Island, Wis.			2					1			3
Cat Head Point, Mich.		1			1		1		1		4
Centerville, Wis.			2	2	1						1
Charlevoix, Mich.			2	2						1	5
Chicago Harbor, Ill.	2	1	6	3	1	1	1	1	2	2	20
Hyde Park (off)						1	1				2
Clay Banks, Wis.					1						1
Cross Village (3 miles north of), Mich.		1		1							2
Craigs Bay										1	1
Deaths Door, Wis.	1					1		2			4
Detroit Island, Wis.	2					1	2		1		6
Edgewater, Mich.	1										1
Elk Rapids, Mich.	1	1									2
Fishermans Shoals, Wis.				1					1	2	5
Fort Sheridan, Ill.	1										1
Fox Point, Wis.	1		2		1		1			1	6
Frankfort, Mich.	1	2	2	2		1	1	1			10
Frankfort and Pierport (be- tween), Mich.		1	1								2
Garden Island, Mich.									1		1
Garretts Bay (entrance to Green Bay), Wis.				1							1
Gills Pier (8 miles north of Le- land), Mich.	1										1
Glen Arbor, Mich.		1			1				1		3
Glencoe, Ill.			1		2	1					4
Glen Haven, Mich.								1			1
Glenn Pier						1					1
Good Harbor Bay and Reef, Mich.		1	1			1				1	4
Grand Calumet Beach, Ind.			1								1
Grand Haven, Mich.	1	3		4		2					10
Grande Pointe au Sable, Mich.	4			1		2		2	1	2	12
Grand Traverse Bay, Mich.				1							1
Gravel Island, Wis.		1			1						2
Grays Reef, Mich.	1				1	1					3

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

GREAT LAKES—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
LAKE MICHIGAN—continued.											
Green Bay:											
Burnt Bluff, Mich	1				1						2
Cedar River, Mich				1		1			2	1	5
Chambers Island, Wis							1				1
Corona Shoal, Mich	1										1
Corsica Shoal, Wis	1										1
Dead Mans Point, Wis				1							1
Eagle Harbor										1	1
Eleven-foot Shoals, Mich			1					1			2
Escanaba, Mich	3										3
Ford River, Mich								1			1
Green Island, Wis						1		1			2
Hedge Hog Harbor, Wis		1			3			2	1		7
Horseshoe Shoal, Wis				1							1
Long Tail Point, Wis					1						1
Misery Bay, Wis	1										1
Peninsula Point, Mich	1	1					1			1	4
Peshtigo River (mouth of), Wis					1		1	1	1		4
Shoemakers Point										1	1
Sister Bay, Wis					1						1
Sturgeon Bay (entrance to), Wis				1	1						2
Sugar Creek, Wis									1		1
Whale Back Shoal, Mich		2			1	3					6
Grosse Pointe, Ill					1						1
Gull Island and Reef, Mich	1	1	1		1			1	1		6
Hamlin, Mich						1					1
High Island, Mich	2										2
Hog Island and Reef, Mich					1						1
Holland, Mich		1	2	3		1				1	8
Jacksonport, Wis	2		1	1	1	1		1			7
Kenosha, Wis		1		1		1	1				4
Kewaunee, Wis					1						1
Lees Pier, Mich	1	1		1							3
Leland, Mich		1		1							2
Little Gull Island, Mich					1						1
Little Traverse Bay, Harbor Point						2					2
Ludington, Mich	3	1		4		1		1			10
Manistee, Mich	1	1		1			1	1			5
Manistique, Mich	1	1		1	1					1	6
Manitowoc, Wis	1		1		1					2	6
Michigan City, Ind			3					1			4
Milwaukee, Wis		3	3	2	1	1	3				16
Eight miles south of								1			1
Five miles south of		1		2							3
Muskegon, Mich	1	2	1	1				3	1	1	10
Nausbinway, Mich	1	1			3						5
New Buffalo, Mich								1			1
New Mission Point, Mich		1									1
North Bay, Wis		1	1							1	3
North Fox Island, Mich		2								2	4
North Manitowish Island, Mich	1	2	2	5	2	1	2	1	2	1	19
North Point, Wis	2		1	2	1		1			1	9
Otter Creek, Mich								1			1
Pentwater, Mich	2	2			6	2			1		13
Pierport, Mich		1									1
Pilot Island, Wis	1	2			2		1	1			7
Pine Station, Ind			1								1
Plum Island, Wis					1		2	2	1		6
Pointe aux Barques, Mich			1		2			1		1	5
Point Betsy, Mich		1						1			2
Point Creek, Wis				2							2
Point Detour, Mich							2				2
Portage Bay, Mich			1						1		2
Port Sheldon, Mich			1					1			2
Poverty Island and Shoal (en- trance to Green Bay), Mich		1	1	1					1		4
Pyramid Point, Mich				1			1				2
Racine, Wis	1	1	4	2			1		2		11
Racine or Wind Point, Wis		2	1								3
Racine Reef, Wis	2	3	2	2	1		1			1	12
Rock Island, Wis			1								1
Rose Shoal, Mich		1									1
Rowleys Bay, Wis						1					1

TABLE 66.—List of places on the coast of the United States where vessels have stranded during the last ten years—Continued.

GREAT LAKES—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
LAKE MICHIGAN—continued.											
St. Joseph, Mich.....	1	2	1		3	1	2			1	11
Seven miles north of	1										1
Saugatuck, Mich		1	1								2
Scotts Point, Mich.....					1	1		1			3
Seul Choix Point, Mich			1	1		1					3
Sheboygan, Wis	1		4	4		2		1			12
Skulligalee, Mich			1					2			3
Sleeping Bear Point, Mich	1	1	1	4		1	2		2		12
South Fox Island, Mich.....	2	2		2			1	1	1	1	10
South Haven, Mich	2	1		4	1	2	3	2	1		16
South Manitou Island, Mich		7	2	3			2	1	1		16
Spider Island, Wis.....			1								1
Squaw Island, Mich.....	1					1		1			3
Sturgeon Bay, Wis.....	1		2	1				2			6
Summer Island (entrance to Green Bay), Mich					1	2					3
Torch Lake, Mich	1			1							2
Twin River Point, Wis.....					1	2	2				5
Two Creeks, Wis.....										1	1
Two Rivers, Wis.....		2		1	1					1	5
Vienna Shoal, Mich.....			1		1						2
Washington Island, Wis.....	1					1		1			3
Waugoshance Island, Mich.....	1										1
Waukegan, Ill.....									1	1	2
White Fish Bay and Point, Wis.....			1		3	2		1			7
White River Harbor, Mich.....			1	1	1		1	1			5
White Shoals, Mich			1								1
Whiting, Ind.....			1								1
Wiggins Point, Mich					1						1

TABLE 67.—List of places where American vessels have stranded during the last ten years.

AT SEA AND IN FOREIGN WATERS.*

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
Abbey Island, Ireland									1		1
Acera, west coast of Africa					1						1
Algoa Bay, Port Elizabeth, South Africa						1	1				2
Amoy, China									1		1
Anticosti, Canada					1						1
Arthurs Passage, British Columbia							1				1
Atlas Strait, Malay Archipelago, Java							1				1
Aves Island, Venezuela, Caribbean Sea									1		1
Azores (Fayal Island)			1								1
Bahamas		1									1
Abaco Island	1					1			1		3
Andros Island					1						1
Bimini Island	2		2		1						5
Brothers Shoal						1					1
Caicos Islands and Reefs		1	1	2	1		1		1		7
Conception Islands			1								1
Diamond Bank				1							1
Egg Island		1									1
Eleuthera Island			1					1			2
Exuma Island						1					1
Factory Cay Reef						1					1
Fish Cay Bank		1									1
Fortune Island			1	1		1	1				4
Ginger Cay				1							1
Gingerbread Ground				1	1						2
Great Bahama Bank	1							2			3
Harbor Island				1							1
Hog Cays			1		1						2
Hogsties Reef			1					1			2
Inagua Islands and Reefs		1									1
Long Island			1	1							2
Memory Rock				1		1					2
Mucaras Reef			1	1	1						2
Ragged Island						1					1
Rum Cay							1				1
Sandy Cay	1	1									2
Silver Key Bank				1							1
Turks Island				2	1	1	1				5
Verd Cay										1	1
Walkers Cay				1				1			2
Watling Island			1				1				2
Bahia Blanca, Argentine Republic, South America							1				1
Barbuda Island, British West Indies		1									1
Batavia, Java, East Indies						1	1				2
Bermudas				1	2		1				4
Brazil:											
Abrolhos	1			1							2
Aracaju				2		1			1		4
Bahia	1				1					1	3
Cape Frio						1					1
Cape St. Roque							1	1			2
Natal		1									1
British Honduras:											
Buttonwood Cay								1			1
Half Moon Key Reef						1					1
Buenos Ayres, South America			1								1
Punta de la Piedras								1			1
Bute Island, Scotland					1						1
Cape Breton Island			1				1				2
Aricbat				1					1		2
Flint Island	1										1
Glace Bay			1	1							2
Hawkesbury		1									1
Louisburg	1				2						3
Madams Island	1										1
St. Esprit Island	1										1
St. Peters Island	1							1			1
Scatary			1								1
Sydney					1						1

* In a few instances the number of stranded vessels in this table does not agree with that reported in the annual report of the previous year, having been increased by wreck reports received since the publication of the last report.

TABLE 67.—List of places where American vessels have stranded, etc.—Continued.

AT SEA AND IN FOREIGN WATERS—Continued.

Name of place.	Fiscal year ending June 30—										Total.	
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.		
Cape Gracias-á-Dios, Nicaragua, Central America					1							1
Cape Verde Islands:												
Mayo Island		1										1
Santiago			1									1
Cape Whittle, Labrador								1				1
Caratasca Bar, Honduras, Central America				1								1
Cardiff, Wales								1				1
Caroline Islands, Pacific Ocean								2				2
Cartagena, United States of Colombia			1									1
Caspar Strait, Java Sea						1				1		2
Celebes Islands						1						1
Chefoo, China		1										1
China Sea						1						1
Concession Reef, north coast of Brazil	1											1
Corn Island, Central America		1										1
Coronel (near), Chile		1										1
Courtown Bank, Central America										1		1
Cuba, West Indies:												
Anton Key		1										1
Avola			1									1
Cape San Antonio						1	1					2
Cardenas					1			1				2
Cay San Felipe				1								1
Cienfuegos							1					1
Colorado Reef	2	1		2	1	1					1	8
Havana	1	1										2
Isles of Pines (south of)	1			1								2
Matanzas (17 miles east of)	1											1
Nuevitas								1				1
Romano Key									1			1
Sagua la Grande Harbor	1		1	1			1	2	1	1		8
Salt Key Bank			1				1					2
San Carlos Reef								1				1
Santiago de Cuba				1					1			2
Danger Reef, British Columbia									1			1
Diego Ramirez Island, South Pacific Ocean				1								1
Dog Island, Caribbee Isles					1							1
Dowsett Reef, near Layson Island									1			1
Dundas Island, British Columbia					1							1
Eastern Island, Pacific Ocean						1						1
East London, Cape Colony, Africa				1								1
Falkland Island, South Atlantic Ocean						1						1
Port Stanley					1							2
Finlayson Channel, British Columbia							1					1
Flinders Island, Tasmania								1				1
Formosa Island (east coast of)				1								1
Gabriola Reef		1										1
Geronimo Island, Mexico										1		1
Gibraltar, Spain				1								1
Goree, Africa								1				1
Grand Cayman Island, Caymans	2											2
Green Island, British Columbia						1						1
Gulf of Georgia:												
Denman Island										1		1
Entrance Island						1						1
Haiti:												
Aux Cayes	1											1
Azimo				1								1
Isle la Vache (south of)	1											1
Jacmel		1										1
Navassa Island				1								1
Port à Paix									1			1
Hi Kish Narrows, British Columbia							1					1
Hongkong, China				1				1				2
Hudson Bay, Dominion of Canada						1						1

TABLE 67.—List of places where American vessels have stranded, etc.—Continued.

AT SEA AND IN FOREIGN WATERS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
Indian Point, Siberia										1	1
Isle of France, or Mauritius	1										1
Jamaica, West Indies:											
Bear Bush Key									1		1
Kingston										1	1
Negril Point			1								1
Point Morant							1				1
Port Antonio, Fort Point									1		1
Port Maria (near)								1			1
St. Anns Bay			1								1
Japan:											
Awa					1						1
Hakodate						1	1				2
Inoshima, Inland Sea									1		1
Ishinomaki				1							1
Kii Channel		1									1
Kooril Islands			1								1
Loo Choo Islands	1										1
Nomosaki				1							1
Towi Saki										1	1
Jeroidances Reef, coast of Honduras									1		1
Kootenai Lake, British Columbia			1								1
Lands End, England					1						1
Leixoes, Portugal							1				1
Lazaro Point								1			1
Lowland Point, Cornwall, England								1			1
Manuel Lagoon			1		1						2
Macayo, Brazil:											
Twelve miles north of		1									1
Twenty-seven miles northeast of				1							1
Madagascar Island, Indian Ocean		1									1
Magdalen Islands, Gulf of St. Lawrence	1	1		3		1	1				7
Ocean						1					1
Malin Head, Ireland			1								1
Malden Island, South Pacific	3				1						4
Martinique Islands, West Indies. Mexico:											
Agiabampo							1				1
Alacran Reef	1				1			1			3
Altata Harbor						1					1
Alvarado Bar				1					1		2
Anagedas Reef				1						1	2
Arenas Cay, Campeche Bay							1				1
Bagdad					1			1			2
Carzonas	1	1									2
Chincorro Reef, off coast of Yucatan								1			1
Coatzacoalcos River Bar	2								1		3
Cozumel Island						1		1			2
Elido Island				1							1
Ensenada						2					2
Frontera	2										2
Los Todos Santos		1									1
Lower California							1				1
Lobos, Gulf of California		1									1
Navidad Bay				1							1
Progreso				1							1
Rio Huach								1			1
Santa Ana		1		1	1					1	4
Santa Rosalia					2						2
Tampico									2		2
Tonala Bar	1										1
Topolobampo		1									1
Vera Cruz						1					1
Yucatan			1		1						2
Natunas Island, China Sea		1									1
New Brunswick:											
Campobello Island				1	1	2	1		1		6
Cape Lepreaux, Bay of Fundy	1										1
Grand Manan Island	1		1	1			1		1	1	6

TABLE 67.—List of places where American vessels have stranded, etc.—Continued.

AT SEA AND IN FOREIGN WATERS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
New Brunswick—Continued.											
Green Island						1					1
Hopewell Cape								1			1
Musquash, Bay of Fundy	1				1	1					3
St. John									1	1	2
Newfoundland:											
Baccalieu Island	1										1
Barnes Head								1			1
Bears Head, Bay of Islands				1							1
Bona Vista Bay	1										1
Cape Race	1										1
Cape Ray		1			1						2
Flower Rock	1										1
Fortune Bay		1	1	1							3
Green Island		1									1
Lamelin Reef						1					1
Miquelon				1							1
North Point, Conception Bay	1										1
Pass Island, Hermitage Bay							1				1
Placentia Bay		1					1				2
Port aux Basques		1	1	1						1	4
Portugal Cove						1					1
Ramea Island			1								1
St. Marys Bay		1	1								2
St. Pierre Island (off south coast)	1				4		1				6
Sand Island								1			1
Nicaragua (coast of)					1						1
Alargate Reef							1				1
Consignina Point								1			1
Nova Scotia:											
Apple River (mouth of)				1							1
Argyle				1							1
Baccora				1							1
Barrington		1		1							2
Beaver Island							1				1
Blanche Island						1					1
Brier Island	1				1						2
Cape Canso	3			1	1				1		6
Cape Chignecto					1						1
Cape Jack Ledges				1	1						1
Cape Negro	1						1				2
Cape Sable	2							1			3
Centerville	1										1
Cheverie	1										1
Ellingwood Island	1										1
Emerald Island, Shelburne County							1				1
Goose Island								1			1
Green Island				1					1		2
Gull Island				1						1	1
Gullivers Cove										1	1
Gut of Canso								1		1	2
La Have River (mouth of)	1										1
Liscomb Ledges							1				1
Liverpool Harbor	1		1	1	1				1		5
Locke Port	1		1						1		3
Lunenburg			1								1
Madame Island									1		1
Port Jolly Head					1						1
Port La Bear			1								1
Port Medway								1			1
Port Monton			1								1
River Herbert					1						1
Robinsons Creek	1										1
Rockport							1				1
Sable Island			1			1			1		4
St. Margarets Bay							1				1
Shag Harbor			2								2
Shelburne		1	1	1			1				4
Spencers Island					1						1
Trinity Ledge				1							1
Two Rivers		1									1
Whitehead			1							1	2
Yarmouth	1				1			1			4
Old Providence, Central America										1	1
Ottendorf, Germany						1					1
Papeete, Tahiti										1	1

TABLE 67.—List of places where American vessels have stranded, etc.—Continued.

AT SEA AND IN FOREIGN WATERS—Continued.

Name of place.	Fiscal year ending June 30—										Total.
	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	
Parana River, South America...				1							1
Paysandu, Uruguay.....		1									1
Pender Island, British Columbia.....										1	1
Philippine Islands:											
Luzon.....					1						1
Mindoro.....				1							1
Platte River (mouth of), South America.....	1								1		2
Point Arcana, Peru.....				1							1
Port Hope, Arctic Ocean.....			1								1
Porto Rico, West Indies.....						1					1
Arroyo.....					1						1
Eagle Point.....							1				1
Ponce.....									1		1
Prince Edward Island.....								1			1
Georgetown.....							1				1
North Cape.....			1								1
Quaco.....						1					1
Tignish.....			1								1
Tyron Shoal.....									1		1
Regatta Reef, Seaforth Channel, British Columbia.....						1					1
Roncado Reef, Central America.....			1								1
Ruatan Island, Honduras.....		1									1
Sabine Bank, Gulf of Mexico.....									1		1
St. Martin Island, West Indies.....		1									1
St. Vincent, West Indies.....								1			1
Santa Cruz, West Indies.....		1		1	1			1			4
Santo Domingo, West Indies.....			1		1						2
Azua.....							1				1
Coral Reef.....						1					1
Isle La Vache.....						1					1
Palenque.....		1									2
Porto Plata.....							1				1
Saona Island.....				1	1						2
Silver Bank.....							1				1
Sapadillo Keys, Guatemala.....	1										1
Seal Rock, New South Wales.....									1		1
Senegal, Africa.....				1							1
Senegambia, west coast of Africa.....					1						1
Serrana Keys, Caribbean Sea.....									1		1
Sheerness, England.....										1	1
Smythes Channel, southwest coast of South America.....	1						1				2
Somme, France.....			1								1
Sonderhoe, Germany.....		1									1
Stadthland, Norway.....										1	1
Strait of Magellan, South America.....								1	1	1	3
Strait of Sunda, Princes Island.....						1					1
Tamatave (reefs near), Madagascar, Indian Ocean.....			1								1
Twin Island, Strait of Belle Isle.....	1										1
Vancouver Island, British Columbia.....		1		1		1					3
Barclay Sound.....		1					1				2
Bonilla Point.....		1									2
Carmanah.....									1		1
Discovery Passage.....								1			1
Nitinat.....							1				1
Secretary Island.....					1						1
Venezuela (coast of), South America.....		1									1
La Vela de Cora.....								1			1
Verecker Shoal, China.....									1		1
Victoria Harbor, British Columbia.....			1								1
Vieque, or Crab Island, West Indies.....									1		1
Woo-Sung, China.....						1					1
Zanzibar (near), east coast of Africa.....						1					1

REPORT OF THE BOARD ON LIFE-SAVING
APPLIANCES.

MAY MEETING, 1901.

LETTER OF TRANSMITTAL.

BOARD ON LIFE-SAVING APPLIANCES,
Boston, Mass., May 22, 1901.

SIR: I have the honor to transmit herewith the report and proceedings of the Board on Life-Saving Appliances, together with the papers referred to it for consideration.

Very respectfully,

C. H. PEABODY,
President of the Board.

SUMNER I. KIMBALL, Esq.,
*General Superintendent U. S. Life-Saving Service,
Washington, D. C.*

REPORT OF THE BOARD ON LIFE-SAVING APPLIANCES.

I.—PREAMBLE.

The Board on Life-Saving Appliances, constituted by the honorable the Secretary of the Treasury in Department letter of January 3, 1882, met at Boston, Massachusetts, in the post-office building, room 148, at 10 a. m. on May 15, 1901, upon the call of the president of the board, dated April 13, 1901, for the transaction of such business as should be properly brought before it.

Present: Professor C. H. Peabody, president; Major D. A. Lyle, Ordnance Department, U. S. A.; Captain C. A. Abbey, U. S. R. C. S.; Lieutenant F. A. Levis, U. S. R. C. S., recorder; Superintendent B. C. Sparrow, Second District, U. S. L. S. S.; Superintendent J. G. Kiah, Eleventh District, U. S. L. S. S.; Superintendent H. M. Knowles, Third District, U. S. L. S. S.

II.—DOCKET.

CLASS II.—*Boats and miscellaneous appliances.*

1. Gresham's serpentine boat. (James Gresham.)
2. Hoy's improved lifeboat. (M. P. Hoy.)
3. The Aniello lifeboat. (W.—S. McCay, American Motor Company.)
4. Walsh's lifeboat. (John J. Walsh.)
5. Installation of mechanical power in the 34-foot lifeboat.
6. Moller's reindeer-hair life-preserver. (W. C. Moller.)
7. Lepore's life-saving suit. (F. M. Lepore.)
8. Roden's life-preserver. (E. K. Roden.)
9. McLellan's protected breeches buoy. (C. H. McLellan.)
10. Changes in canvas boat drogue. (C. H. McLellan.)
11. Cape Cod folding anchor. (Wilcox, Crittenden & Co.)
12. The McClary illuminating apparatus. (A. F. Randall.)
13. The phonoblast. (P. V. De Graw, Columbia Phonograph Company.)
14. The Newman watchman's clock. (A. Newman.)
15. The Twentieth Century watchman's clock. (A. Beyer.)
16. The Hahn watchman's clock. (Nanz & Co.)
17. Coston's improved patrol signals. (W. F. Coston.)
18. Coston's improved patrol-signal holders. (W. F. Coston.)
19. Tobin's whip-line block. (E. J. Tobin.)
20. Frahm's improved boat wagon. (John H. Frahm.)
21. The Bundy lantern. (J. W. Bowman.)

III.—COMMITTEES.

1. COMMITTEES APPOINTED.

1. *On Hoy's lifeboat.*—The full board.
2. *On Walsh's lifeboat.*—The full board.
3. *On the installation of mechanical power in the 34-foot lifeboat.*—The full board.
4. *On Moller's reindeer-hair life-preserver.*—Superintendent J. G. Kiah, Captain C. A. Abbey, and Lieutenant F. A. Levis.
5. *On Lepore's life-saving suit.*—Captain C. A. Abbey, Superintendent H. M. Knowles, and Lieutenant F. A. Levis.
6. *On Roden's life-preserver.*—Captain C. A. Abbey, Superintendent H. M. Knowles, and Lieutenant F. A. Levis.
7. *On McLellan's protected breeches buoy.*—Superintendent J. G. Kiah, Superintendent H. M. Knowles, and Lieutenant F. A. Levis.
8. *On changes in canvas boat drogue.*—Superintendent B. C. Sparrow, Superintendent J. G. Kiah, and Major D. A. Lyle.
9. *On the Cape Cod folding anchor.*—Major D. A. Lyle, Captain C. A. Abbey, and Superintendent H. M. Knowles.
10. *On the McClary illuminating apparatus.*—Captain C. A. Abbey, Superintendent B. C. Sparrow, and Lieutenant F. A. Levis.
11. *On the phonoblast.*—Major D. A. Lyle, Superintendent B. C. Sparrow, and Superintendent H. M. Knowles.
12. *On watchman's clocks.*—Major D. A. Lyle, Captain C. A. Abbey, and Superintendent B. C. Sparrow.
13. *On Coston's improved patrol signals.*—Captain C. A. Abbey, Superintendent J. G. Kiah, and Superintendent H. M. Knowles.
14. *On Coston's improved patrol-signal holders.*—Captain C. A. Abbey, Superintendent J. G. Kiah, and Superintendent H. M. Knowles.
15. *On Tobin's whip-line block.*—Superintendent H. M. Knowles, Superintendent J. G. Kiah, and Lieutenant F. A. Levis.
16. *On Frahm's improved boat wagon.*—Superintendent J. G. Kiah, Superintendent B. C. Sparrow, and Major D. A. Lyle.
17. *On the Bundy lantern.*—Captain C. A. Abbey, Superintendent B. C. Sparrow, and Lieutenant F. A. Levis.

2. COMMITTEES CONTINUED.

1. *On Gresham's serpentine boat.*—Captain C. A. Abbey, Superintendent H. M. Knowles, and Lieutenant F. A. Levis.

3. COMMITTEES REPORTED.

1. On Gresham's serpentine boat.
2. On Hoy's lifeboat.
3. On Walsh's lifeboat.
4. On the installation of mechanical power in the 34-foot lifeboat.
5. On Moller's reindeer-hair life-preserver.
6. On Lepore's life-saving suit.
7. On Roden's life-preserver.
8. On McLellan's protected breeches buoy.
9. On changes in canvas boat drogue.
10. On the Cape Cod folding anchor.

11. On the McClary illuminating apparatus.
12. On the phonoblast.
13. On watchman's clocks.
14. On Coston's improved patrol signals.
15. On Coston's improved patrol-signal holders.
16. On Tobin's whip-line block.
17. On Frahm's improved boat wagon.
18. On the Bundy lantern.

IV.—TESTS.

1. The Cape Cod folding anchor.
2. Coston's improved patrol signals.
3. The Bundy lantern.

V.—PRESENCE OF EXHIBITORS.

Inventors and exhibitors were allowed to appear before the board to explain the construction of their devices and to set forth the merits claimed for them.

VI.—RESULTS, OPINIONS, AND RECOMMENDATIONS.

1. *Gresham's serpentine boat.*

RESULTS.—The model and plans of this boat having been returned to the inventor at his request, and no further communication relative to testing a boat of this pattern having been received, the board decided to drop this subject from the docket.

2. *Hoy's improved lifeboat.*

RESULTS.—From the evidence before the board it appears that no boat of this model has been constructed; in fact it is merely an idea that has never been reduced to practice. The inventor states that it is designed to be inclosed so that water can not enter it even in a rough sea, and it is so constructed as to be buoyant even though one or more of its compartments should become filled with water. It is circular in cross section, has a deep keel extending along its full length, and is fitted with a central chamber which affords sufficient space for a number of occupants. Air tubes are provided for purposes of ventilation. The boat is driven by a hand-operated propeller, but the inventor states that when the hatches are opened oars may also be used. Cork belts are secured to the sides below the hatches to help the boat to right itself under all conditions.

OPINION.—The board is of the opinion that this form of lifeboat is not adapted to the needs of the Life-Saving Service.

3. *The Aniello lifeboat.*

RESULTS.—Mr. McCay states in his correspondence with the Department that he will not be able to submit this boat to the board during the present session. He desires to know the date of the next meeting of the board in order that he may submit his boat for a test at that time. After hearing the correspondence read, the board decided to inform Mr. McCay that it would consider the Aniello lifeboat at its next meeting, and to drop the device from the docket for the present session.

4. *Walsh's lifeboat.*

RESULTS.—This boat has suspended beneath its keel by connecting rods a water-tight cylindrical body which carries a shaft and propeller. The inventor states that the cylinder can be arranged so that it can be drawn up close to the keel in shallow water, and that when not in use it will be necessary to provide a slip or pier for the boat. A sprocket chain connects the propeller shaft to a hand crank in the boat, where two men furnish the power. The crew and passengers are protected by a storm shield. The inventor claims that the propeller, being below the rough water, will force the boat through any storm, and he states that he will allow the Government to use his plans for the sum of \$5,000. He has not constructed a boat or model, but submits drawings and description.

OPINION.—The board is of the opinion that this design of a lifeboat is not adapted to the needs of the Life-Saving Service.

5. *Installation of mechanical power in the 34-foot lifeboat.*

RESULTS.—The action of the board upon this subject at a former meeting is set forth in the Report of the Life-Saving Service for 1900, page 421, in which the board recommended "that a commission be appointed to examine into and consider the subject of power propulsion for lifeboats in all its phases." Such a commission was appointed by the Secretary of the Treasury, with the president of the Board on Life-Saving Appliances designated as chairman.

This commission made a report dated October 23, 1900, to the General Superintendent of the Life-Saving Service upon their preliminary experiments with a 34-foot lifeboat fitted with a "Superior" gasoline engine, and recommended that another 34-foot boat be fitted up with engine and other modifications suggested by the commission. It is understood that this boat is now ready for experiment.

The General Superintendent transmits this report for the information of the board. It is merely a progress report, and since it is only preliminary and does not treat of the subject "in all its phases," there are no definite conclusions to be considered at this time. The subject will be continued on the docket as unfinished business.

6. *Moller's reindeer-hair life-preserver.*

RESULTS.—This life-preserver was before the board at its meetings 1899 and 1900, and at the latter meeting the recommendation was made "that if these life-preservers are offered for sale at a reasonable price the General Superintendent purchase some of them and place them at such stations as he may deem best, so that they may be further tested in comparison with the regular cork life-preserver now used in the Service."

OPINION.—No further tests have been made for the reason that these life-preservers are not procurable in this country, and the board is of the opinion that further consideration of this subject is unnecessary and that it should be dropped from the docket.

7. *Lepore's life-saving suit.*

RESULTS.—This device consists of a cork ring buoy, with trousers, jacket, and hood attached. The trousers are closed at the bottom and contain air channels, which the wearer can inflate by squeezing a rubber ball with his hand when he wishes to float on his back. The hood is fitted with a visor, which the wearer can haul down over his face when necessary. The inventor states that his device is adapted for ocean travel.

OPINION.—It is the opinion of the board that this device presents no advantages over several similar devices which have been rejected by the board in the past as unsuited to the needs of the Life-Saving Service.

8. *Roden's life-preserver.*

RESULTS.—This device consists of an inflatable belt containing an aluminum box filled with calcium carbide, which upon contact with water that is to pass through an arrangement of valves and holes generates a gas that inflates the life-preserver and sustains the body of the wearer in the water. The supply of water is regulated by the pressure of the gas on the interior of the valve lid, and a safety valve is attached to the device.

OPINION.—The board is of the opinion that a device of this nature is not suited to the needs of the Life-Saving Service.

9. *McLellan's protected breeches buoy.*

RESULTS.—This device was considered at the meeting of the board in June, 1900, and since that time a communication has been received from Lieutenant McLellan stating that it would be better to have the bag closed at the bottom than to have the 5-inch hole, as recommended by the board at that time. He states that he has tried a bag with such a hole, and found that, being extended by the passenger's legs, it fills with great force and lifts a bagful of water when the wreck is rolling. He also states that it is almost an impossibility for water to enter the protected breeches buoy at the top when it is occupied, and that the ball valve at the bottom of the bag would permit the escape of any water that might possibly enter the bag on its passage off to the wreck.

OPINION.—After a full consideration of this whole subject the board is of the opinion that the breeches buoy now in use is sufficient for the requirements of the Life-Saving Service.

10. *Changes in canvas boat drogue.*

RESULTS.—Lieutenant McLellan recommends that the surfboat drogue be made somewhat smaller and constructed of waterproof cloth similar to the material used in the breeches buoy, so that when collapsed it will be yielding and fold into a smaller body than it does as now constructed. He states that there should be no roping on it; that there should be four eyelets at the mouth for crossed bails, and that the crossed bails should be long enough not to pull the opening together when the drogue is filled with water. He does not recommend the reduction of the size of the drogues used in the lifeboats, but states that they should be made in the same manner and of the same materials as the surfboat drogues.

OPINION.—The board approves the suggestion of Lieutenant McLellan in regard to lightening the construction of the surfboat drogue, and is of the opinion that a lighter quality of canvas and lighter cordage can be used in making it. Care should be taken that the cordage at the opening of the drogue is of sufficient size and stiffness to insure its filling with water.

RECOMMENDATION.—The board recommends that the General Superintendent, in fitting out new stations or replacing drogues at old stations, cause drogues of lighter pattern to be supplied; also that he place as many of these improved drogues as in his judgment may be necessary at stations at exposed points where drogues are most likely to be called into service. This recommendation does not apply to the boat drogue used with the 34-foot self-righting and self-bailing lifeboat.

11. *Cape Cod folding anchor.* (See plate marked II, on page 432.)

RESULTS.—This anchor consists of a stock, shank, two arms terminating in the usual flukes, an assembling pin, a movable crown, and two sliding rings, similar to bayonet clasps, with slots to pass over their proper studs and a cam surface on one edge to tighten them when in position. The arms and shank are assembled by means of a slot in the lower end of the shank and the riveted assembling pin. The material is malleable iron except for the stock and pin, which are wrought. There are no pins or loose parts to get lost. There is danger, of course, of its being frozen fast in cold, wet weather, so that it would not work promptly, but this could be obviated probably by a few blows. The whole anchor is galvanized.

The principal claims are—

1. That it will stand exposure to atmosphere and salt water without rusting.

2. That the long shank gives unusual holding power.

3. That it is complete in itself, not fitted with pins which may break or bend, and has no keys which would be liable to be lost or become jammed.

The action of opening and closing are sufficiently apparent from the drawings printed in the addenda of this report.

Two 12-pound anchors were furnished by the manufacturers for tests, viz, one made of solid forged wrought iron, and the other a folding malleable iron anchor such as submitted to the board.

The tests resulted as follows, viz:

1. Forged solid anchor. The anchor was tested in tension by pulling on the ring and near the point of one of the flukes. The anchor stood 500 pounds without yielding; at 650 pounds the anchor bent in the shank.

2. Folding anchor—malleable iron. Tested in the same way as the solid anchor. The anchor began to yield at 460 pounds and broke in the shank at 500 pounds at the point where the stud was cast in the shank.

OPINION.—The board is of the opinion that the Cape Cod folding anchor is adapted to the wants of the Service, and would recommend procuring it for such places as the General Superintendent may deem proper and necessary; provided, that the manufacturers make the shank of forged wrought iron.

12. *The McClary illuminating apparatus.*

RESULTS.—Mr. Randall recommends the use of this apparatus for lighting life-saving stations. The apparatus consists of two parts, the generating chamber in which the calcium carbide is placed and the gasometer, or holder, for storing the gas until used. The cost of the smallest plant—10 lights of 25 candlepower each—is \$100, and the circular submitted to the board states that the cost of the light per candlepower is one-half of a cent per hour, while ordinary city gas costs three-fourths of a cent per hour.

OPINION.—As life-saving stations require illumination to only a moderate extent, the nature of the services of the crews calling them either out of doors or to their beds, and as the stations are already fitted for and sufficiently lighted by the use of kerosene, at small expense, the board is of the opinion that it is neither necessary nor desirable to change the manner of lighting the stations at the present time.

13. *The phonoblast.*

RESULTS.—This is a modified watchman's rattle fitted with a sort of fog horn to concentrate and direct the sound and increase its intensity over a limited sector. It was originally designed as an alarm signal for attachment to a bicycle. The device consists of a resonant disk or diaphragm with a stud or button attached at the center. This disk is vibrated by the rotation of a spur wheel whose cogs or transverse corrugations strike the above-mentioned stud in rapid succession, producing the alarm signal. The apparatus is mounted in a movable case with two or more openings designed to facilitate its operation. A rough pencil sketch was submitted for a device with a hand crank, suggested for the Life-Saving Service. The agent for this device had not time to make a model designed for the Life-Saving Service, but proposed to make one or submit a working instrument at some future meeting of the board.

OPINION.—The board is of the opinion that this device is not in a condition for the board to pass upon it definitely at this time. With the imperfect data now before it, the board does not see that it presents any special advantages for the Life-Saving Service, and prefers to defer any further action until such time as a working model may be submitted. The subject will be dropped from the docket for the present.

14. *The Newman watchman's clock.*15. *The Twentieth Century watchman's clock.*16. *The Hahn watchman's clock.*

RESULTS.—These three time detectors are before the board at this time and should be considered together and in connection with the Imhauser time detector, which is now used in the Service. The latter seems to be favorably considered by the crews at most stations and no doubt has given reasonable satisfaction for years. The cost of the Imhauser time detector, was formerly \$50, but has been reduced by competition to \$23.

The Hahn appears to be fabricated with more care, as far as the case and external appearances go, than the other two. The board assumes that the movement is practically the same in each of them, or, at least, is good enough to serve the purposes desired by the Service.

Below is given the results of the board's investigations upon the three watchman's clocks before it.

First. The Newman watchman's clock (see plate marked III, on page 433): This clock was before the board at its meeting in 1900. The clock is fitted with an aluminum case, has an exposed time face graduated to twelve hours so that the time can be determined at any instant, and the dials for the registry of the time of inserting the impression key at the several stations are graduated to twelve or twenty-four hours as desired. At the above-mentioned meeting the board recommended that one or more of these clocks be placed in service for trial in order to test its serviceability and efficiency.

Two clocks were procured. One was sent to the Third District and one to the Eleventh for trial in the Service. The defects developed were substantially as follows: (1) The lack of a device to notify by its click when the indentation was registered on the dial; (2) the metal being so soft, the indenting key soon wears away the edges of the hole in the case; (3) some surfmen contended that it was more difficult to insert the key on stormy nights, and that sand was more likely to penetrate into the mechanism than in the case of the Imhauser clock.

In the clock submitted at this meeting, Mr. Newman states that he has overcome and remedied all these defects, real or supposed, and confidently asserts his belief that it is now completely serviceable in every respect. A spring has been added which clicks when the key is turned. The keyhole has been reenforced by an escutcheon plate, and the case has been made to operate easily.

The price is given at \$30 for each clock and 50 cents for each additional key. Mr. Newman stated that the price of \$30 per clock covers a full set of keys and a year's supply of dials.

Second. The Twentieth Century watchman's clock: This clock is similar to other time detectors, but was apparently prepared for factories or places where the climate is mild. In operating at stations the key is inserted, and in close juxtaposition to the key slot is a knob which must be turned one revolution to the right until it snaps when the record is made. In the Life-Saving Service there would be great difficulty in operating this knob with cold, benumbed fingers, generally clad in heavy gloves or mittens. If this defect could be remedied, this clock would probably be available for competition with similar clocks for use in the Service.

The prices are given as \$25 net for each clock; \$1 for each key, chain, holder, and bracket, or 75 cents for each key, chain, and bracket; and \$3 per thousand for extra dials.

Third. Hahn's watchman's clock: This clock was submitted to the board at its meeting in 1897, when the board recommended that the General Superintendent purchase a number of these clocks for new stations or to replace time detectors at old stations in order to test their qualities in service. (See page 481, Report of the Life-Saving Service for 1897.) During the active season of 1898 this time detector was placed during a period of two months for trial at Jerrys Point Station, First District, and at Assateague Beach Station, Sixth District. The only criticism from the First District was upon the absence of any sound to indicate the striking of the dial, as heard in the old clocks already in service. The report from the Sixth District showed that the Hahn instrument was susceptible of being opened and struck with other keys than those made for the purpose. It also appeared that this clock permitted more easily the introduction of sand and moisture than the old one. (See page 481, Report of the Life-Saving Service for 1899.) At its meeting in 1899 the board, weighing all the evidence adduced, declined to recommend this time detector for use in the Service.

Messrs. Nanz & Co. have now submitted to the board a watchman's clock, complete, for six stations. Price, complete for six stations, \$30; for eight stations, \$32. Reports before the board show that if the indenting key be turned but half way around, and left in that position instead of being turned an entire revolution, the dial card becomes fixed, and the motion of the clock continuing, the card is mutilated and the record worthless. In the clock submitted at this meeting the company claims to have made some improvements. It is well made and, while it does not click, the passing of the key ward over the indenting or recording device can be distinctly felt.

The records show that of 19 Imhauser clocks, sixteen years in service, many of them have been withdrawn but once for repairs.

OPINION.—The board after mature consideration is of the following opinion, viz:

1. That both the Newman and Hahn clocks are adapted to the use of

the Life-Saving Service, and are apparently equal to the clocks now in service.

2. That the Twentieth Century clock in its present form is not adapted to the use of the Life-Saving Service.

17. *Coston's improved patrol signals.*

RESULTS.—Mr. Coston submits to the board three improved patrol signals which, upon examination, proved to be about three-eighths of an inch longer than his old signals and a trifle too large for the holder. These signals were taken to the City Point Life-Saving Station on the evening of May 21, 1901, and tested in comparison with the ordinary Pain signal. The test showed that the new Coston signal burned about forty-five seconds longer than the Pain signal, and that in intensity of color (red) and brilliancy there was no material difference in the two kinds of signals. The sputtering, which was noticeable in the Coston signal during the test of the Pain signal at the last session of the board, has been eliminated from the new Coston signals which were tested. Any signal of equal brilliancy, which burns for one minute or more, is considered sufficient for the needs of the Service, the excess of the time of burning over one minute not being considered of any material benefit for patrol purposes. One of the new Coston signals was lost overboard, owing to the fact that its sabot did not fit the holder well. A table showing the result of the test is given below.

Test of Coston's improved patrol signals.

No. of test.	Distance from light to observer.	On bow of launch.			On stern of launch.			Remarks.
		Kind of light.	Time of burning.	Intensity of color.	Kind of light.	Time of burning.	Intensity of color.	
1	200yds.	New Coston.	120secs.	Good	Pain.....	80secs.	Good	Burned simultaneously.
2	200yds.	Pain.....	70secs.	...do...	New Coston.	116secs.	...do...	Do.
3	200yds.	...do.....	75secs.	...do...	Old Coston.	45secs.	...do...	Do.

OPINION.—The board is of the opinion that Coston's improved patrol signal is adapted for use in the Life-Saving Service if more care is taken to make the sabot fit the holder.

18. *Coston's improved patrol signal holders.*

RESULTS.—Mr. Coston submits two holders to the board, one patented in 1896 and one on May 21, 1901. The one patented in 1896 only differs from the holder now satisfactorily used in the Life-Saving Service, and upon which there is no patent, in that it has attached to its outside a flat brass spring arm, 6 inches long, bent across the end of the holder, and having a hole through which the striking pin passes. The brass spring presses at all times against one side of the striking pin when the holder is not in operation, and as the pin is encircled at the point of pressure by a cut about one thirty-second of an inch deep, the spring engages and locks the pin at this cut and prevents its operating. By grasping the holder tightly the spring is disengaged and the pin unlocked. It is claimed by the inventor that this device will prevent the accidental striking of the signal. The board finds that the pin is not always locked by the spring, but frequently worked as freely as though there were no spring and cut to prevent its moving. The device is therefore considered imperfect and uncertain of operation. Even if it should work well when new, the parts, being made of brass, would soon wear down and become inoperative.

As to the signal holder patented in 1901, the board finds that it differs from the signal holder now satisfactorily used in the Service in that a flange is added to the disk which surmounts the spiral spring and that the disk is secured to the end of the spring. It is claimed that this is an advantage in that the flange and the attachment of the disk to the spring prevents the upsetting or extracting of the disk, and its loss thereby. Granting this, there seems to be no necessity for such precautions, since the disk in its flat shape and without its being secured to the spring is extracted with some difficulty and can not be accidentally lost; it can be taken out and the spring withdrawn for cleaning or examining without injury to the holder. If the flanged disk secured to the spring is used, the screws holding the brass head of the holder to the wooden handle must be removed in order to examine or clean the interior.

OPINION.—It is the opinion of the board that Coston's improved signal holder, patented in 1896, offers no advantages over the signal holder now in use in the Service. Furthermore, up to the present time, it does not appear that the Life-Saving Service has suffered any detriment or inconvenience through the absence of such an attachment to the holder.

The board is also of the opinion that Coston's improved signal holder, patented recently, offers no advantages over the signal holder now in use in the Service. So far as the board is informed, the Life-Saving Service has suffered no loss or inconvenience through the absence of such a disk as is proposed by Mr. Coston, and the board does not see that any material advantage is to be derived from its use.

19. *Tobin's whip-line block.*

RESULTS.—This device was referred to the board at its meeting in May, 1899, but as no model of the block was received for examination the subject was dropped from the docket. The model, or sample block, submitted at this session of the board, is constructed of an iron frame, triangular in shape, with an oak frame substantially riveted to it on the outside, and weighs about $3\frac{1}{2}$ pounds. A 3-inch lignum-vitae sheave is placed at the head of the frame, and at each of the two other corners there is an iron roller which keeps the two parts of the whip line spread apart to prevent their twisting together while being hauled off to a wreck. The inventor claims that this device will also keep the gear clear while the hawser and breeches buoy are being hauled out to the wreck. He recommends that two iron rollers be placed in each of the two corners to reduce the friction, instead of one, as shown by the model. This device is offered to the Service without expense, the inventor being a surfman at the Gurnet Life-Saving Station, who stated to the board that he freely gives this plan of a block to increase, if possible, the efficiency of the Service.

RECOMMENDATION.—The board recommends that the General Superintendent place this device at some station for a practical and thorough test, and that the officer making the test report thereon to the General Superintendent before the next session of the board.

20. *Frahm's improved boat wagon.*

RESULTS.—A small working model of this wagon is before the board, and also a letter in which the inventor sets forth its merits, stating that it is not covered by caveat or patent and that he gives this plan of wagon to the Service without expecting any remuneration in case the board recommends its use at life-saving stations. This wagon seems to possess some improvements over other wagons in use in the

Service, both in the easier manner of loading and unloading, and in there being no liability of the forward wheels injuring the bilges of the boat when making short turns.

OPINION AND RECOMMENDATION.—In the opinion of the board a wagon of this pattern should be constructed and placed for trial at such station as the General Superintendent may direct; and for this purpose the board recommends that Keeper John H. Frahm, of the Pointe aux Barques Life-Saving Station, be furnished with the necessary material to construct a wagon on the lines of the model which he submits to the board.

21. *The Bundy lantern.*

RESULTS.—This is an ordinary-shaped lantern which burns acetylene gas instead of coal oil. A metal cylinder about 5 inches high and 2½ inches in diameter contains the mechanism, which consists of a receptacle for the calcium carbide at the bottom and a chamber for water at the top, the combination of the water and carbide producing acetylene gas. The operation is simple and easily understood. When the bottom of the cylinder is unscrewed, the carbide holder can be withdrawn and filled. A gas-tight joint is insured at the bottom by a rubber ring. The opening for filling the water chamber is fitted with a screw cap which has a small vent hole in its center. In order to light the lantern a small needle valve is opened slightly, allowing water to drip down and come in contact with the carbide. The gas generated rises through a tube and escapes at a gas tip where it may be lighted in about 40 seconds after the valve is opened. The bottom of the gas tube contains a tuft of damp cotton through which the gas passes to cleanse it of impurities. In order to extinguish the light the valve is closed, thus cutting off the water supply. The sample lantern was lighted and swung rapidly in all directions, was lifted and then dropped quickly, and was subjected to as rough handling as was consistent with safety. During these tests the flame was not extinguished, but, on the contrary, seemed brighter than when the lantern was at rest. The flame, however, was made somewhat irregular by these tests, one side of it rising above the other, but this irregularity gradually disappeared when the lantern was left stationary again, and small particles entering one of the two small holes in the gas tip may have caused it.

Lanterns like the sample, which is nickel plated, are offered for \$36 per dozen. It is presumed that tin lanterns will cost less.

OPINION.—The board is of the opinion that the Bundy lantern offers advantages which may make its use in the Life-Saving Service desirable.

RECOMMENDATION.—The board recommends that the General Superintendent purchase some of these lanterns, and have their durability tested in actual service at life-saving stations.

VII.—UNFINISHED BUSINESS.

1. Installation of mechanical power in the 34-foot lifeboat.

VIII.—ADDENDA.

- I.—Daily record of proceedings of the board.
- II.—Plate of the Cape Cod folding anchor.
- III.—Plate showing dials of the Newman watchman's clock.
- IV.—All papers of inventors or agents received from the General Superintendent on the following subjects:
 1. On Gresham's serpentine boat.

2. On Hoy's improved lifeboat.
3. On the Aniello lifeboat.
4. On Walsh's lifeboat.
5. On the installation of mechanical power in the 34-foot lifeboat.
6. On Moller's reindeer-hair life-preserver.
7. On Lepore's life-saving suit.
8. On Roden's life-preserver.
9. On McLellan's protected breeches buoy.
10. On changes in canvas boat drogue.
11. On the Cape Cod folding anchor.
12. On the McClary illuminating apparatus.
13. On the phonoblast.
14. On the Newman watchman's clock.
15. On the Twentieth Century watchman's clock.
16. On the Hahn watchman's clock.
17. On Coston's improved patrol signals.
18. On Coston's improved patrol signal holders.
19. On Tobin's whip-line block.
20. On Frahm's improved boat wagon.
21. On the Bundy lantern.

V.—Reports of committees on the following subjects :

1. On Moller's reindeer-hair life-preserver.
2. On Lepore's life-saving suit.
3. On Roden's life-preserver.
4. On McLellan's protected breeches buoy.
5. On changes in canvas boat drogue.
6. On the Cape Cod folding anchor.
7. On the McClary illuminating apparatus.
8. On the phonoblast.
9. On watchman's clocks.
10. On Coston's improved patrol signal holders.
11. On Tobin's whip-line block.
12. On Frahm's improved boat wagon.
13. On the Bundy lantern.

C. H. PEABODY,
President of the Board.

D. A. LYLE,

Major, Ordnance Department, U. S. A.

C. A. ABBEY,

Captain, U. S. R. C. S., Inspector, L. S. S.

F. A. LEVIS,

Lieutenant, U. S. R. C. S., Recorder.

B. C. SPARROW,

Superintendent, Second District, L. S. S.

JEROME G. KIAH,

Superintendent, Eleventh District, L. S. S.

H. M. KNOWLES,

Superintendent, Third District, L. S. S.

There being no further business before the board, it adjourned sine die.

C. H. PEABODY,

President of the Board.

F. A. LEVIS,

Lieutenant, U. S. R. C. S., Recorder.

ADDENDA.

1.

DAILY RECORD OF THE PROCEEDINGS OF THE BOARD.

POST-OFFICE BUILDING,
Boston, Massachusetts, Wednesday, May 15, 1901.

In compliance with the call of the president, at the request of the General Superintendent of the Life-Saving Service, the Board on Life-Saving Appliances met in the post-office building, Boston, Massachusetts, on Wednesday, May 15, 1901, at 10 o'clock a. m.

Present: Professor C. H. Peabody, president; Major D. A. Lyle, Ordnance Department, U. S. A.; Captain C. A. Abbey, U. S. R. C. S.; Lieutenant F. A. Levis, U. S. R. C. S., recorder; Superintendent B. C. Sparrow, Second District, U. S. L. S. S.; Superintendent J. G. Kiah, Eleventh District, U. S. L. S. S.; Superintendent H. M. Knowles, Third District, U. S. L. S. S.

General Superintendent Sumner I. Kimball, U. S. L. S. S., was also present.

A motion was made and carried that the reading of the proceedings of the last session of the board be omitted, they having been read and approved during that session and recently published.

The recorder read a communication from the General Superintendent of the Life-Saving Service, dated May 11, 1901, which referred the following papers to the board for consideration, viz:

Letters from James Gresham relative to his serpentine boat.

Letters from M. P. Hoy relative to his improved lifeboat, inclosing plans and description.

Letters from W. S. McCay (American Motor Company) relative to the Aniello lifeboat. Patent specifications inclosed.

Letters from John J. Walsh, inclosing drawings and description of his lifeboat.

Report of the commission on the mechanical propulsion of lifeboats and supplemental reports relative to the installation of mechanical power in the 34-foot Service lifeboat, inclosing blue print, photographs, and drawings.

Letters relative to Moller's reindeer-hair life-preserver and a new descriptive circular and price list.

Letters from the Reverend F. M. Lepore relative to his life-saving suit and inclosing patent specifications.

Letters from E. K. Roden inclosing drawings and description of his acetylene-gas life-preserver.

Letters relative to McLellan's protected breeches buoy.

Letter from Lieutenant C. H. McLellan recommending certain changes in the canvas drogue used in the Life-Saving Service.

Letters from Wilcox, Crittenden & Co. relative to their Cape Cod folding anchor, and submitting circular and price list.

Letter from A. F. Randall recommending the use of the McClary acetylene-gas generator at life-saving stations for illuminating purposes, requesting that an expert be detailed to examine the device, and submitting a descriptive circular.

Letters from P. V. DeGraw (Columbia Phonograph Company) relative to the introduction of the "Phonoblast" into the Life-Saving Service, and inclosing letters patent.

Letters from A. Newman relative to the Newman watchman's clock.

Letters from A. Boyer relative to submitting the Twentieth Century watchman's clock to the Board on Life-Saving Appliances.

Letter from Nanz & Co. requesting another trial of their improved Hahn watchman's clock, and the papers relative to the previous test of this device.

Letters from William F. Coston relative to his new patrol signals and changes in the patrol signal holder.

Letters from E. J. Tobin, surfman at Gurnet Life-Saving Station, relative to his whip-line block.

Letter from Keeper John H. Frahm, Pointe aux Barques Life-Saving Station, setting forth the merits of his boat wagon, a model of which he submits to the board for examination.

General Superintendent Kimball then referred to the board a communication from the Bundy Lamp and Light Company recommending the use of the Bundy lantern at life-saving stations, and submitting a sample lantern to the board for trial purposes.

The chairman of the committee on Gresham's serpentine boat made an oral report, stating that the committee had received from Mr. Gresham during the year no word relative to testing his boat. The recorder read a letter from Mr. Gresham asking that his model and plans be returned to him, and stated that Mr. Gresham's request had been complied with. The board then decided to drop this device from the docket.

The recorder then began to read the papers relative to the various devices before the board, in regular order, and the board commenced a preliminary discussion of the docket.

After hearing the reading of the correspondence with Mr. McCay, of the American Motor Company, in which he states that he will not be able to submit the Aniello lifeboat to the board during the present session, and desires to know the date of the next meeting of the board in order that he may submit this boat for a test at that time, it was moved and carried that this company be informed that the board would consider the Aniello lifeboat at its next meeting, and that the device be stricken from the docket for the present session.

At 12.30 p. m. two representatives of the firm of Wilcox, Crittenden & Co. appeared before the board and explained the fabrication of their Cape Cod folding anchor.

At 1 p. m. the preliminary discussion of the docket was resumed and continued until 2.30 p. m., when the president of the board announced the committees appointed. The board then adjourned until 10 a. m. to-morrow.

F. A. LEVIS, *Recorder*.

THURSDAY, *May 16, 1901.*

The board assembled at 10 a. m. pursuant to adjournment, Major Lyle in the chair.

On motion, it was decided to suspend the regular order and to devote the morning session to committee work.

At 12.30 p. m. the board took a recess until 2 p. m.

At 2 p. m. the board reassembled, Major Lyle in the chair.

Surfman E. J. Tobin, of the Gurnet Life-Saving Station, appeared before the board and explained the manner of using his improved whip-line block.

At 2.30 p. m. President Peabody entered the board room and took the chair.

Mr. A. Newman was invited into the board room. He exhibited a sample of his improved watchman's clock and explained its construction.

The minutes of the previous session were read and approved.

The president then called for committee reports.

COMMITTEE REPORTS.

The committee on Roden's life-preserver presented its report. The board adopted the committee's opinion on this subject as its own, and discharged the committee.

The report of the committee on Lepore's life-saving suit was considered. The board concurred in the opinion of the committee on this subject.

The board adopted the report of the committee on Moller's reindeer-hair life-preserver and discharged the committee.

The next report presented was from the committee on the "Phonoblast." After considerable discussion the report was slightly altered and then accepted as expressing the opinion of the board. The committee was discharged.

The hour of 5 p. m. having arrived, the board adjourned until 10 a. m. to-morrow.

F. A. LEVIS, *Recorder.*

FRIDAY, *May 17, 1901.*

At 10 a. m. the board met pursuant to adjournment, Major Lyle in the chair.

On motion, the reading of the minutes of yesterday's session was deferred until later, and it was decided to devote the forenoon session to committee work.

At 12.30 p. m. the board took a recess until 2 p. m.

At 2 p. m. the board reassembled, Major Lyle in the chair, and continued committee work.

At 3 p. m. President Peabody entered the board room, took the chair, and called for committee reports.

COMMITTEE REPORTS.

The committee on the McClary illuminating apparatus presented its report. The board concurred with the committee in its opinion on this subject.

The report of the committee on Tobin's whip-line block was submitted to the board. After discussion it was modified, and then accepted as expressing the opinion of the board.

The board considered the report of the committee on the changes in the Service canvas boat drogue, as recommended by Lieutenant C. H. McLellan, U. S. R. C. S. After discussing the subject, it was decided to refer the report back to the committee for certain alterations that would make it acceptable to the board.

The report of the committee on Frahm's improved boat wagon was adopted as the report of the board. The committee was discharged.

The committee on the Cape Cod folding anchor presented its report to the board. President Peabody gave the board the result of a test of this anchor in comparison with a solid wrought-iron anchor of the same weight. After a lengthy discussion, the board amended the committee's report, and then accepted it as representing the opinion of the board.

The minutes of yesterday's session were read and approved.

At 4.30 p. m. the board adjourned until 10 a. m. to-morrow.

F. A. LEVIS, *Recorder*.

SATURDAY, *May 18, 1901.*

At 10 a. m. the board met pursuant to adjournment, Major Lyle in the chair.

The minutes of the previous session were read and approved.

A communication from Mr. A. Newman, relative to the Newman watchman's clock, was read and then filed with the other papers on this subject.

A long discussion about the surfmen's patrol and the use of patrol clocks followed.

The committee on the changes in the Service boat drogue submitted its report, which the board adopted as expressing its opinion on this subject.

The next report submitted to the board was from the committee on McLellan's protected breeches buoy. It was moved and seconded that the report of the committee be adopted as the report of the board. A discussion followed. Superintendent Kiah moved that the committee's report be amended by striking out the opinion of the committee and inserting the following recommendation in its place, viz:

That the board recommends that the General Superintendent supply such stations as he may deem best suited for the purpose with the McLellan protected breeches buoy, in order that it may be tested in actual service.

This motion was seconded and the question of the amendment was voted upon. The amendment was defeated by a vote of 5 to 1. The motion to accept the committee's report as the report of the board was then carried.

At 12.30 p. m. the board adjourned until 10 a. m. on Monday next.

F. A. LEVIS, *Recorder*.

MONDAY, *May 20, 1901.*

At 10 a. m. the board met pursuant to adjournment, all the members being present.

The minutes of the previous session of the board were read, amended slightly, and then approved.

The committee on watchman's clocks presented its report to the board. After considerable discussion an opinion on this subject was formulated and accepted as the opinion of the board.

The board then resolved itself into the committee of the whole on lifeboats. Opinions were formulated on Hoy's improved lifeboat and on Walsh's lifeboat.

At 11.30 a. m. the committee on lifeboats rose, and the board resumed its regular session.

A discussion on Coston's patrol signals and signal holders followed, and afterwards the board examined the Bundy lantern.

At noon the board took a recess until 2 p. m.

The board reassembled at 2 p. m., President Peabody in the chair and all the members present.

The recorder read the opinions on Hoy's improved lifeboat and on Walsh's lifeboat, which were formulated by the committee of the whole on lifeboats during the forenoon session, and the board adopted them.

The subject of the installation of mechanical power in the 34-foot lifeboat was then called up. The report of the commission on the mechanical propulsion of lifeboats and the supplemental reports upon this subject were read. A long discussion followed.

At 4.30 p. m. the board adjourned until 10 a. m. to-morrow.

F. A. LEVIS, *Recorder*.

TUESDAY, *May 21, 1901.*

The board met at 10 a. m. as per adjournment of yesterday, Major Lyle in the chair.

It was decided to suspend the regular order and devote the forenoon to committee work.

At 12.30 p. m. the board took a recess until 2 p. m.

The board reassembled at 2 p. m., all the members being present.

The minutes of the previous session were read and approved.

The board then resolved itself into the committee of the whole on lifeboats and discussed the installation of mechanical power in the 34-foot lifeboat. A report on this subject was formulated and accepted by the committee.

At 3 p. m. the committee on lifeboats rose, and the board resumed its regular session.

On motion, the board adopted the report of the committee on lifeboats on the subject of the installation of mechanical power in the 34-foot lifeboat.

The board tested the Bundy lantern, and the committee on this device presented its report. The board adopted the report and discharged the committee.

It was then decided that the members of the board should assemble at the City Point Life-Saving Station at 8 p. m. this day, for the purpose of testing Coston's improved patrol signals.

At 4.30 p. m. the board adjourned until 10 a. m. to-morrow.

F. A. LEVIS, *Recorder*.

WEDNESDAY, *May 22, 1901.*

At 10 a. m. the board met pursuant to adjournment, Major Lyle in the chair.

On motion, it was decided to suspend the regular order for the purpose of allowing the committee on Coston's improved patrol signals and signal holders to prepare its reports to the board.

At noon the chairman called the board to order.

The report of the committee on Coston's improved patrol signals was submitted to the board. After a short discussion an opinion was formulated and accepted as the opinion of the board on this subject.

The committee's report on Coston's improved patrol-signal holders was then read. It was adopted as expressing the opinion of the board, and the committee was discharged.

At 1 p. m. it was moved and carried that the board take a recess until 3 p. m. in order to permit the recorder to prepare the board's report for signatures.

At 3 p. m. the board reassembled, all the members being present.

The minutes of yesterday's session were read and approved.

A communication, addressed to the recorder of the board, from Mr. F. B. Hill, secretary of the American Roller Bearing Company, was read. Mr. Hill asked the board to again consider the use of roller bearings for boat-wagon wheels. On motion, the recorder was instructed to inform Mr. Hill that this device, having been acted upon by the board at its meeting in 1900, was now in the hands of the General Superintendent of the Life-Saving Service, to whom further communications about roller bearings should be addressed.

The recorder then reported that the docket was cleared and that the board's report was ready for signatures.

All members of the board signed the report.

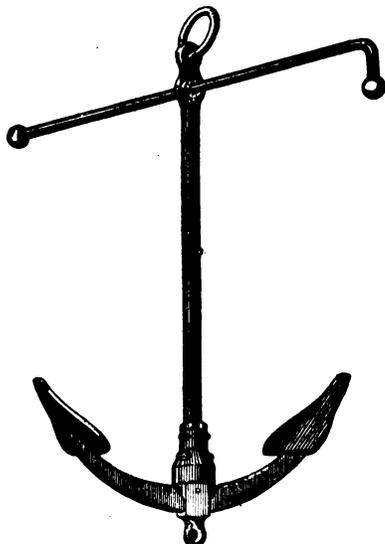
The minutes of the present session were read and approved.

There being no further business before the board, it adjourned at 4 p. m. sine die.

F. A. LEVIS, *Recorder.*

II.

Cape Cod Folding Anchor.

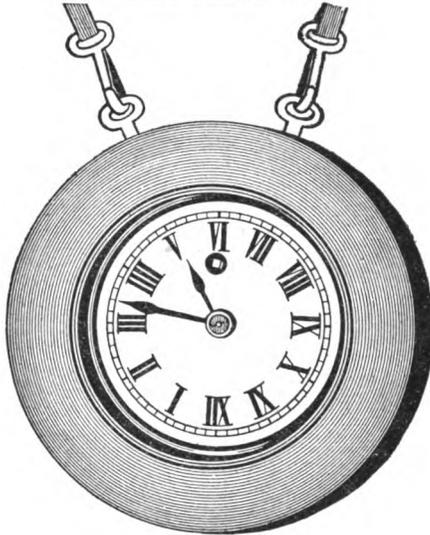


Open for use.

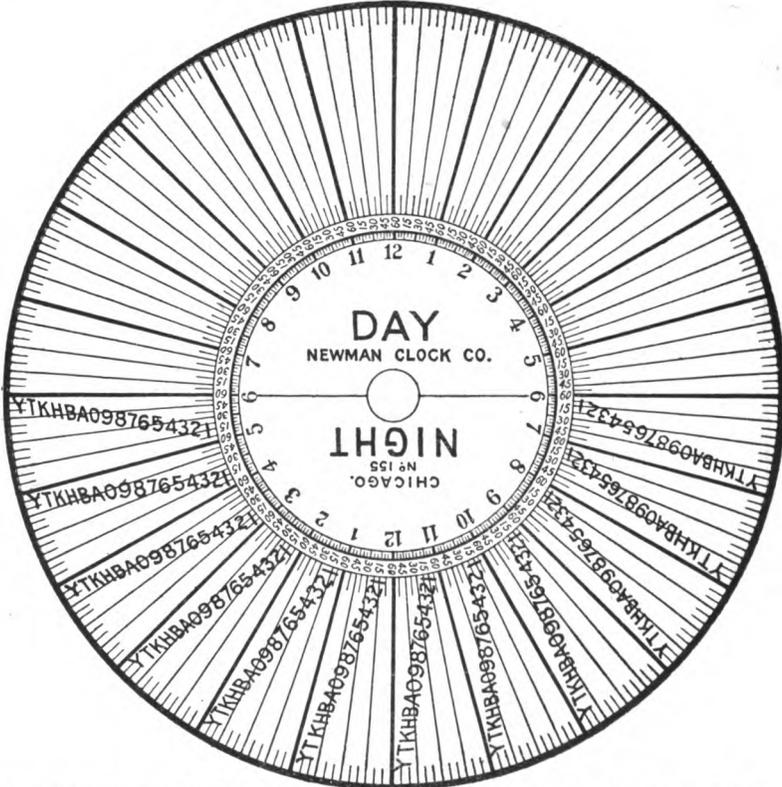


Closed for storage.

III.
The Newman Watchman's Clock.
Time-Face Dial.



Impression Dial.



This dial shows a watchman's rounds once an hour from 6 p. m. to 6 a. m. for sixteen stations.

REPORT ON THE MANUFACTURE OF LYLE
LIFE-SAVING GUNS.

435

LETTERS OF TRANSMITTAL.

OFFICE OF THE INSPECTOR OF ORDNANCE, U. S. A.,
MIDVALE STEEL WORKS,
Philadelphia, Pa., June 25, 1901.

SIR: I have the honor to inclose herewith a letter from the American Ordnance Company and a report upon the manufacture of Lyle life-saving guns made by Mr. W. A. Kinsman, S. B. (Massachusetts Institute of Technology), who superintended the construction.

I would respectfully recommend that these papers be printed in the annual report of the Life-Saving Service for the current fiscal year.

The information and data are numerous and valuable and should be preserved in printed form for further use and reference.

Very respectfully, your obedient servant,

D. A. LYLE,
Major, Ordnance Department, U. S. A., Inspector.

Hon. S. I. KIMBALL,
*General Superintendent U. S. Life-Saving Service,
Treasury Department, Washington, D. C.*

AMERICAN ORDNANCE COMPANY,
Bridgeport, Conn., June 24, 1901.

SIR: We beg to hand you herewith detailed report by Mr. W. A. Kinsman, who had charge of the work of the construction of the 105 Lyle life-saving guns under contract with the Ordnance Department, United States Army.

In case there is any additional information regarding this matter which you desire, kindly advise us and we will endeavor to forward same promptly.

Respectfully,

AMERICAN ORDNANCE COMPANY,
By H. N. SWEET,
Second Vice-President and Manager.

Maj. D. A. LYLE,
*Ordnance Department, U. S. A., Inspector of Ordnance,
Midvale Steel Company, Philadelphia, Pa.*

**Report of W. A. Kinsman, S. B., who superintended the construction of
105 Lyle life-saving guns and 1,560 projectiles for same.**

The 105 Lyle life-saving guns and 1,560 projectiles furnished the Life-Saving Service in 1900, were manufactured by the American Ordnance Company, Bridgeport, Connecticut. They were of the same design as the ones manufactured in 1879, 1884, and 1896 by the West Point foundry, and the specifications were the same as those given in the report of the Chief of Ordnance for 1896.

The following is a report of the foundry work carried on in connection with the manufacture of the guns at the foundry of the Bridgeport Deoxidized Bronze and Metal Company. The report is taken up under three heads as follows: The casting, including all apparatus used at the foundry, the metals, and the physical tests.

The general arrangement of the casting was the same as that followed in previous years. The furnace was similar to the one shown by a sketch in the report of 1884, but one large crucible, No. 125, was used in place of two smaller ones, the advantages being that the metal was more uniformly mixed and much easier handled. The pit for the chill was located handy to both furnace and heating oven, so that neither chill nor crucible had to be carried any distance, and its depth was such that the runner box was at an easy pouring height from the floor of the foundry. The chill was put in the oven the night before it was to be used, in order to have it thoroughly heated, then it was taken out in the morning soon enough before casting to allow it to cool to the desired temperature, which was such that the hand could be held on it for a second. After this it was dressed, bolted together and lowered into the pit. The sand head was then rammed up on top of the chill and the runner box clamped on. For the afternoon cast, the chill was not put back in the oven, but after taking out the gun already cast, the two halves were closed together and allowed to stand until ready for the second gun, there being heat enough to keep them hot until the afternoon gun was ready. After the first gun was poured the crucible was put back in the furnace as soon as the fire was ready. In the morning the crucible was not put in the furnace until the fire was well lighted, the crucible was then allowed to warm before the metals were put in. On several days three guns were cast, but on hot days, the chill would not cool sufficiently between castings.

The first chill was made similar to the one shown in the report of 1884, except that a place was cut out over the trunnions, as was done in the chill used in 1896 (see p. 459). This was done to prevent any dross from lodging in the pockets formed by the cavity for the trunnions. A similar, but narrower, place was cut out below the trunnions, and the corners on either side where the trunnions joined the breech at point B were rounded off. This was to prevent the formation of a swirl or eddie when the metal filled these cavities, for by cutting

away the chill at these points the metal, when entering, would not flow over a sharp corner. After casting and machining several guns it was still found that dirt lodged in the ends of the trunnions, near the corner D and, at the same time, it was also found that small bubbles and specks of dirt were lodged in the casting just above the point C, these were at such a depth under the surface that they could not be seen until the gun was nearly finished-turned. Their presence here seemed to show that a swirl must have been formed in the molten metal at this point C, the metal chilling before the bubbles of air and dirt could reach the surface. To prevent this, the corners at C were rounded off, but this only partially remedied the trouble. The corner at D was eased a little, but could not be chipped much without forming a pocket. The chill at the ends of the trunnions was chipped one-eighth inch longer to allow more stock, as it was hoped that by the addition of this metal, the dirt which collected here would all be machined out. The end of the recess for the cascabel was also chipped out one-fourth inch to allow the center in the end of the cascabel to be turned out in finishing the gun.

When the second lot of guns was turned up, dirt specks were also found in and just forward of the second reenforce. This was thought to be due to eddies being formed by the sharp corner and taper in the chill at this point, the corners above and below this taper not having been well rounded. When the second chill was cast directions were sent to make certain changes in the pattern to correspond to those just explained as made in the chill, but they were only partially carried out, the result being that the second reenforce and trunnions were the same as in the first chill. The corners of A and B, and the corner where the second reenforce joins the chase, were chipped off, but the corner where the first reenforce joins the second could not be reached. Before casting the third chill, the pattern was returned to the American Ordnance Company's shops and all the necessary changes made. In this third chill the curve at B joined a large fillet at E, the line CD instead of being straight was an easy curve, meeting the chase at a tangent at a point about an inch forward of C, this joined DE at D by an easy curve (see photograph of three chills, p. 459). The distance from the center line of the trunnions to the center of the radius of the breech was made one-fourth inch longer, giving more stock on the forward side of the trunnions and end of breech. The taper of the chase from the top to the trunnions was increased to allow the casting to move down freely while shrinking.

The second chill along the case was machined, as there were several cavities in the surface of the casting. The bronze did not take this machined surface any better than the cast surface of chill 1.

In ordering the third chill, it was especially stipulated that the surface of the casting should be smooth and free from *all* defects. The surface was very good, with but one exception, along the corner where the face of the chill joins the cavity for the gun the edge was rough. The sand of the mold had evidently been moistened too much, making the iron a little porous. The bronze would burn on the iron here, and, if not all filed off and the surface dressed well, small pin holes would be formed in the casting. These holes were no larger than the size of a pin, but very straight, and in one or two cases from half to three-quarters of an inch deep, but more often they would be from one-eighth to a quarter of an inch deep and in clusters.

After the chill had been used several times the metal would lodge in the seam between the two halves of the chill. This metal in hardening would expand and compress the iron of the chill denting in the corners along the breech and the chase. This caused the gun casting to be wedged in, and in many cases it could be started out only by the use of a sledge hammer. When the pattern was changed before casting the third chill the corners were beveled off so that a cross section of the chill looked, when exaggerated, as in the sketch.

When the first gun was cast a large crack started in both halves of the chill at the corner where the first reenforcement joins the second. Similar cracks started in the second chill after it was used a few times. These grew larger with every gun cast. The cracks in chills 1 and 2 were peened up before each casting, and after these cracks were peened several times a furrow was made in the surface where the iron was hammered in, and as the largest crack was just below the second reenforce this groove increased the eddies formed by the taper at this point. In all three chills the first and largest crack to start was this one in the corner, formed by the junction of the first and second reenforce. This extended across the chill through the cavities for the trunnions, which were the weakest place in the chill and, from its shape, the place where the strains formed by the sudden heating of the chill would meet. Chills 1 and 3 were braced by a steel strip bolted to the sides after the cracks grew large. In chill 3 the drawing was not followed and a mistake was made in machining, a bolt hole being placed directly opposite the place where this crack came.

The surface of many of the castings was marked with numerous holes. Some of these looked as if they had been caused by bubbles of air; the others were more like a pit with sharp corners. The cause of these was not known at the start, so several experiments were tried. The runner box was lifted a quarter of an inch off the sand head to allow the air in the chill to escape when the metal was poured, otherwise it would bubble up through the metal in the runner box and cause it to fly out on to the men pouring. It was first thought that the metal falling past this opening sucked air down with it, so the runner box was laid flat on the sand head; but this did not stop the air holes, and it seemed more likely that if this escape for the air was closed the increase in the air pressure in the chill would tend to check the rise to the surface of any air that might be in the metal. Gases which had not been worked out of the metal and possible dampness in the chill, due to the dressing, were also considered a possible cause for the holes. It was found that the holes referred to as pits were caused by the gases, for if they were thoroughly worked out of the metal no pits occurred, but the other holes were present even when the gases were all worked out and when the chill was given time to thoroughly dry after dressing. Another theory was that the metal might absorb a little moisture from the runner box. This runner box was made of cast iron with core sand packed in it to form a funnel-shaped basin. After each casting this was patched up, if necessary, and painted over with the core makers' mixture of sour molasses water and black lead, and then placed in the core oven to dry. It was proved that this last was not the cause by doing away with the sand and using a runner box cast to the shape required. Another possible cause of air getting into the metal was that it might be forced down into the metal by its dropping such a distance from the runner box; but as the holes with

one or two exceptions were always in the chase and most numerous near the top, and as they were always on the surface of the castings, this reason did not seem plausible. The fact that the holes were in most cases above one of the cracks in the chill led to the idea that the air might come from these cracks, this being accounted for in the following manner: The air which was confined in these cracks by the edges being peened together would expand when the gun was poured and be forced out into the metal, and, if it did not free itself, form a hole in the surface of the casting. To prove this theory, the cracks in the third chill were not peened, and as a result, the cracks being open, the air was forced out by the entering metal and set free, although in one or two cases where the metal was poured very rapidly the bubbles of air were caught before reaching the top.

Another cause of much trouble in the castings was due to a very fine, almost colorless sand, which appeared in blotches all over the surface of the castings. These were thickest toward the top of the chase. None of this sand was found until after the copper silicon was used. At first it was thought that this was the silica from the copper silicon, but as the amount of sand was often much greater than that of the copper silicon used, this did not seem possible. The crucibles were so short lived, only lasting for about ten melts, that it seemed evident that the copper silicon attacked the surface of the crucible and left this sand residue. This fine sand was always seen on the sides of the crucible where exposed to the metal, and when poured it would flow into the chill with the metal. It seemed to be mixed in with the metal, for the metal was always carefully skimmed while poured. Although the apparent cause of the sand was the copper silicon, its use in the metal was necessary, so the next question was to free the metal of the sand. To accomplish this the sides of the crucible were scraped with a stirring rod a few minutes after the silicon was added and once or twice before drawing. The metal was drawn hot, the sides of the crucible were thoroughly scraped, and the metal stirred well to bring any loose sand to the surface. When skimming the metal, just before pouring, the crucible was tipped as much as possible and the sides scraped again where bared; but even with these precautions some would remain on the lower sides and bottom and would flow into the chill. When the crucible was righted, if the sand had not been skimmed off the surface of the metal it would still cling to the sides of the crucible and the metal rise over it. This action seemed to be the same in the chill, for, except where eddies were formed, the sand was either on or just under the surface of the casting. When under, it was in layers parallel to the bore, forming cold shots. In such cases the metal would peel off when machining. This only happened when the metal was poured very cold, and in nearly every case was machined out. One advantage, however, of this sand was that when in abundance it prevented any bubbles of air from lodging along the sides of the chill and being caught in the chilling metal.

The metal was always skimmed when poured and the runner box, besides being a funnel for the metal, also acted as a skim gate. The metal was kept from 3 to 4 inches deep in the box, so that if any dross flowed with the metal it would float and not enter the chill until the last. At first a piece of sheet copper with several holes punched in it was tacked in the runner box over the hole. This was done to check the metal when first poured, so that there would be enough in

the box to float any dross before the metal would melt the copper and flow into the chill. This worked very well, but the danger of loosening the sand in the runner box by nailing the copper to it prevented its continued use.

The best dressing and the mode of applying this dressing to the chill were points which were experimented with. At first the regular core makers' blacking—a mixture of sour molasses water and black lead—was used, but was not entirely satisfactory, as it washed off the chill and collected along the surface of the casting, and when caught in the eddies lodged under the surface. A liquid was wanted that would hold the dressing on the chill and would not give off gases injurious to the metal. Benzine and lampblack were tried. The flame from the benzine being a reducing flame, would aid in reducing oxides that might be formed, but the lampblack washed off in the same way as the black lead. Bone ash and water were also used, as the bone ash would give off reducing gases; but this was not satisfactory, so the molasses water and black lead dressing was used for the rest. The best results were obtained by painting the chill while it was hot enough to make the dressing sizzle. After drying, most of the black lead was brushed off with fine sandpaper, and the surface was then rubbed with cloth until polished.

The pressure in the chill when the metal was poured was very great. In many cases it snapped the heads off of one and even two of the bolts. To prevent this, cupped washers were used; but these were soon flattened. Toward the last the bolts were not screwed up so tight. This left the sides of the chill farther apart and made the fin of metal that leaked in here larger; but this did not seem to injure the casting in any way.

When the sand head was molded on the top of the chill, the tapered block which was used as a pattern was set into a core ring which rested on the top of the chill. This ring was flat, 2 inches thick, and its hole a little smaller than that in the chill. This allowed the metal of the sand head to shrink down without striking the top of the chill. The runner box was set on the top of the flasks used for the sand head and clamped to the chill. This box was 12 inches square by 6 inches deep, with a hole in the center, and cores and was packed in the box to form a funnel. This was baked and could be used many times without being replaced.

Holes of several sizes were tried in the runner box, and the size thought to give the best results was $1\frac{1}{4}$ inches in diameter. A hole as large as 2 inches was tried in order to be able to pour the metal as cold as possible to prevent the segregation of tin, and with the idea that if the surface of the metal in the chill rose faster the fine sand would not lodge along the surface; but this increased the air holes in the chase and had very little effect on the sand.

THE METALS.

The metals used in these guns were Calumet and Hecla (Lake Superior) copper and Banca tin. In most of the guns after No. 35 a small quantity of copper silicon from the Cowles Electric Smelting and Aluminum Company was used as a flux or reducing agent. The tin was melted down into small pigs weighing about 2 pounds to facilitate handling.

Before starting, the foundry asked permission to use a little zinc or phosphorus with the copper and tin to flux them and reduce the gases. The inspecting officer would not allow the use of either of these, as he thought they would deteriorate the properties of the bronze. The first 35 guns were cast without the use of the flux, but in the rest of the castings permission was obtained to use a small amount of copper silicon as a deoxidizing agent. The first four guns were cast from nearly all ingot metal. No. 1 was remelted with 60 pounds of ingot metal for No. 5; the others up to No. 40 contained a little in excess of two-thirds ingot metal. Nos. 40 to 81 contained about one-half ingot metal, and from No. 81 up to No. 103 about one-third. The remaining 47, with the exception of 10, were all cast from remelted bronze, these 10 containing about two-thirds ingot metal.

The test pieces were broken at the American Ordnance Company's shops, so that no time was lost in obtaining the results; but the hardness test pieces were tested at Watertown, and these results were not obtained until about three weeks after the guns were cast. Small black spots were noticed in the fracture of some of the test specimens, but the tensile tests were much higher than the specifications required even when these were present, and as the gun castings then appeared free from any defects the castings were made as fast as possible. The result was that 15 guns were cast before the first were proof fired, and 19 more had been cast before the measurements taken after proof firing had been submitted to the inspecting officer and an answer received. He immediately reported that the enlargement or blooming of the bore from proof firing was very excessive in guns Nos. 2, 4, 6, 7, and 9, all but one (No. 5) of the first lot fired. At about this same time the first guns proof fired had been finish bored to 2.50 inches, and in a number of the guns the bore was found to be checked with these black spots referred to, on account of which several of the guns were condemned.

The inspecting officer was consulted about this excessive blooming of the bore and about the black spots, which were thought to be an oxide of copper, and his permission was asked to try a small amount of copper silicon as a deoxidizing agent in one of the guns; this being given, it was tried in the next casting, No. 36. The results of the physical tests were immediately sent him, and as they proved very satisfactory permission was granted to use this copper silicon in the remainder of the guns. There was a short delay in obtaining a sufficient quantity, and in the meantime hardness specimens were made and tested from Nos. 4, 5, 6, 7, 35, 36, and 37. Copper silicon was used in the last two, and the results showed a marked increase in the hardness. Their hardness can not be compared with that of No. 5, for this was cast from remelted bronze.

Both copper and tin in a molten state have a great affinity for oxygen, that of the latter being the greatest. When tin combines with the oxygen of the air the oxide volatilizes; for this reason the tin was always added as short a time as possible—about five minutes—before drawing the crucible. To protect the molten metal from oxidation by the air its surface in the crucible was kept covered, until just before pouring, with a thick layer of glowing charcoal, which burns with a reducing flame. A layer of small pieces of charcoal was put in the bottom of the crucible, the ingots of copper packed on top, and a

shovelful of charcoal thrown over the ingots. In this way as soon as the copper began to melt and drop to the bottom it was sure to be covered. From time to time as this charcoal would burn up, more was thrown into the crucible and a new supply was always added after the tin. A wooden stick was tried as a stirring rod, its effect being to help free any oxides if formed from the air; but the wood caused the metal to boil violently, particles spattering out of the crucible, so it was abandoned for an iron one.

In the first few guns the metal was drawn hot, skimmed, and then stirred very hard, even beaten at times. This was done with the idea of freeing the gases, and when the metal came to rest bubbles could be seen rising to the surface. As the charcoal had been skimmed off the stirring had the injurious effect of beating the air into the metal. When bronze cools slowly any air or freed gases in the molten metal escape, but if suddenly cooled, as by the chill, only part escapes and the rest is broken up into very small particles, causing porosity and greatly reducing the physical properties of the bronze. With the guns the gases that did escape while the metal was chilling formed pits on the outside of the casting. These pits which have been referred to in the discussion of the chill resembled in appearance the cell of a honeybee. The surface of the castings where these occurred was highly colored. Guns Nos. 1, 4, 6, 54, and 55 are the best examples of this.

Gun No. 1.—The copper after it was melted was left in the furnace over one and one-half hours before the tin was added, with only a thin layer of charcoal covering it. No flux was used. It was not thoroughly stirred before pouring and was poured very hot. The surface of the casting had several large pits in both the breech and chase, and the physical properties were below specifications, the low specific gravity indicating porous metal.

Guns Nos. 4 and 6.—The copper was melted from one and one-half hours to two hours before the tin was added and the crucible drawn. No particular care was taken to keep the surface covered with charcoal. The metal was skimmed as soon as drawn and then thoroughly stirred. The castings had many of these pits in the exterior. The specific gravity was below that specified. The other physical properties were low and the blooming was excessive.

Guns Nos. 54 and 55.—No charcoal was used until after the copper was all melted. It was left off to see if the cause of the fine dirt already referred to could be attributed to the charcoal. The regular amount of silicon was used. The castings had many pits in the surface and were highly colored. The specific gravity and hardness were low and the blooming was excessive.

The charcoal used in the crucible helps to prevent the absorption of oxygen from the air, but will not reduce any stannic or cuprous oxides that may occur in the ingot metals used, as these two oxides are easily soluble in alloys of bronze. All ingot copper contains some oxygen in the form of cuprous oxide. Cupric oxide, which is black, is a higher oxide and is not soluble in bronze alloys, but enters readily into a mechanical mixture with them and is not easily removed. The black spots which appear in many of the test pieces up to No. 36 before the silicon was used proved to be spots of cupric oxide. This cupric oxide appeared either as holes ranging from one-sixteenth inch down and coated with black or as a black spot, and when in the bore of the guns

it appeared as single spots, in clusters, or in large blotches of black. The metal can only be freed from these cuprous oxides by the use of some deoxidizing agent. In most ordnance bronzes from 1 to 2 per cent of zinc is used as a flux. A very little phosphorus is often used, but for these guns silicon was advised, for this reason:

Silicon acts upon copper in almost exactly the same manner that phosphorus does, except that it appears to be a more natural alloy and a flux or reducing agent to the oxide of copper that is produced when copper is in a melted condition, and it is thereby more active in clarifying, refining, hardening, and strengthening copper and its alloys. In this respect it is more vigorous and pronounced than phosphorus.

The qualities that particularly recommend silicon bronze are great strength, toughness, high electrical conductivity, and resistance to corrosion. (The Metallic Alloys, by William T. Braunt.)

The amount of this cuprous oxide in the ingot copper is about one-tenth of 1 per cent, and the silicon required to reduce this is 1 ounce of silicon to 100 pounds of copper. The silicon used was in the form of the alloy, copper silicon. That used at first for trial contained 17 per cent silicon, 6 ounces being used to 100 pounds of ingot copper; the rest, beginning with gun 47, was 22 per cent silicon, 4.64 ounces being used. When much old bronze was used, a little in excess of this amount was added.

The copper silicon comes in pigs about the size of a copper ingot, and is very hard and brittle. These were broken up in pieces small enough for two or three to be used at a time. The copper silicon was added to the metal from twenty to thirty minutes after the copper was melted, when it was hot enough to give a good jar when tested with an iron rod. When added it was stirred in very thoroughly, and about five minutes after the metal was stirred again, and then the old bronze added. This was considered sufficient time for the silicon to reduce the gases and for the silica residue to be thrown off at the surface. No trace of the silica was found in any of the analyses. When the silicon was used with casts of all old bronze, it was added after the metal had melted and was heated to its hottest point.

The blooming of the bore of many of the guns after No. 100, although cast from remelted bronze, was still excessive. It was therefore decided to use copper silicon with old bronze when remelted; the amount chosen after several trials was 250 grams, a little over 8½ ounces per casting, and the effect that it produced is very readily shown in tables A and B, p. 446.

In Table A the average of the tests taken from the 12 guns cast before the silicon was used is compared with the average of 12 others cast after it was used. In both lots of guns, the amounts of ingot metals used are approximately the same, but the old bronze used in the guns with silicon was bronze that had been remelted a great number of times, and in which silicon had also been used before. A comparison of the two averages shows that all the properties have increased or diminished, as would be expected with a harder metal. The hardness of the two lots can not be compared by the results of tests, as only one hardness test was made from the lot without silicon, but the relative amounts of the enlargement of the bore which depends directly upon that property of the metal can be, and such a comparison shows that the enlargement of the bore of the guns with silicon was nearly half that of the others. The elastic limit and tensile strength have been increased about 2,000 pounds, and the specific gravity has been

increased a little. The per cents of elongation and contraction are less, as would be expected, but they have only been reduced 4 per cent.

In Table B the average of the results of the test of two lots of guns cast from old bronze is compared. In the first, silicon was not used, but in the second it was. In the lot with silicon the enlargement of the bore has been cut down over one-third and the hardness increased from 4.786 to 5.99. The elastic limit is raised 3,100 pounds and the specific gravity is also increased a little. The tensile strength is approximately the same, but the elongation has been reduced 17.6 per cent and the contraction 10.7 per cent.

TABLE A.

Average of the tests from two lots of guns cast from approximately two-thirds ingot metal, with and without using copper silicon.

First averages, no silicon used—guns 24 to 35, inclusive.

Second averages, silicon used—guns 37, 38, 39, 40, 112, 116, 118, 122, 124.

Elastic limit.	Tensile strength.	Elongation.	Contraction.	Specific gravity.	Maximum enlargement.	Hardness.
<i>Pounds.</i> 20,934	<i>Pounds.</i> 48,335	<i>Per cent.</i> 38.6	<i>Per cent.</i> 35.9	8.87	<i>Inches.</i> 0.137	.....
22,716	50,306	34.3	31.9	8.90	.082	5.15

TABLE B.

Average of the tests from two lots of guns cast from all bronze, with and without using copper silicon.

First averages, no silicon used—guns 101, 104, 107, 108, 109, 111, 114, 115.

Second averages, silicon used—guns 119, 120, 121, 123, 125, 126, 127, 128, and 131 to 144.

Elastic limit.	Tensile strength.	Elongation.	Contraction.	Specific gravity.	Hardness.	Maximum enlargement.
<i>Pounds.</i> 22,194	<i>Pounds.</i> 50,464	<i>Per cent.</i> 43.5	<i>Per cent.</i> 36.4	8.85	4.79	<i>Inches.</i> 0.101
25,298	50,414	25.9	25.7	8.88	5.99	.064

The silicon had the desired effect on the cupric oxide spots, as there was barely a case where even a trace of these oxide spots was discovered in either the test piece or the bore of the gun. The two cuprous oxides, yellow and red, were not entirely reduced and often appeared in the fracture of the test piece as spots of varying sizes. The color in some cases was yellow, but more often yellow orange or reddish brown. These spots could not be detected in the finished metal, and were only visible in the fractured surface. The bronze near this oxide seemed to corrode very easily. This was noticed in the bore of several of the guns which lay on the bench two or three weeks without wiping the oil from them. The bronze seemed to corrode in spots,

and these spots were thought to be where this oxide was present. Beside the deoxidizing property, another beneficial quality of this copper silicon is that it made the molten metal more fluid, so that it could be poured colder and would take the chill better.

The decided improvement in the quality of the metal as adapted to these guns, which resulted from remelting the bronze before using for the casting, was first noticed in gun 5 when the proof tests of the first 7 guns and their relative amounts of blooming were compared. Before there was a good supply of old bronze it was not considered necessary to first alloy the metals and then remelt the bronze for the gun castings, because at this time the question of hardness and the blooming of the bore had not arisen, although it was known that the metal would be better alloyed if remelted. Up to the time the first 35 guns were cast, the sinking heads and chips from them did not come along fast enough to allow more than 75 to 100 pounds of old bronze to each casting. The castings weighed about 300 pounds and the finished guns only 114 pounds. As the first guns neared completion and more were cast, the supply of old bronze increased. After No. 35 from one-third to one-half was used, and after No. 100 many of the guns were cast entirely from old bronze.

The bronze grows brittle after several remeltings. This is clearly shown as the number of remeltings increased in the last guns cast from old bronze. The elastic limit increased and the per cent of elongation and contraction diminished until in No. 142 and No. 144 the per cent of elongation fell below that specified. The repeated treatment of the bronze with silicon is also thought to increase its brittleness. The number of times that parts of the bronze in these two guns was remelted is shown in diagrams, pages 456 and 457. In these diagrams the number of the gun is given from which the heads were taken and remelted for the following casting, and these guns are traced back to the castings in which part ingot metal was used.

When the old bronze was first used, it was suggested by the inspecting officer that one-fourth of 1 per cent of tin must be added to the bronze when it is remelted, to replace that volatilized by oxidation, and it was added in a few guns. When the blooming of the first guns proved excessive and the trunnions were found to be bent, due to the proof firing, an analysis of the metal near the trunnions of gun 2 was made, to see if this bending could be attributed to soft metal resulting from a low per cent of tin. This gun was from all ingot metal and 9 per cent of tin was used, but the analysis gave only 7.61 per cent, and the metal for analysis was filings taken from one-eighth inch under the surface of the casting at a point between the trunnions. This low percentage of tin seemed at that time to account for the bending of the trunnions and enlargement of the bore, and to indicate that there was a tendency of the tin to rise toward the top of the casting. To make sure of this rise of tin toward the top, an analysis of metal from the upper part of the sand head of gun No. 21 was made. The head of No. 2 had been remelted, so a direct comparison could not be made.

The chips for this analysis were taken from a point 4 inches below the top of the casting. This was as near the top as they could be taken and avoid the scum and dirt which collect here. The chips were drilled from the sand head, so that an average of the metal from the center and surface was obtained. The analysis gave 9.47 per cent tin. The estimate of tin in the casting was 9 per cent. This apparently

showed that the tin did rise toward the top of the casting. To further investigate this matter, analysis was made of the bronze taken at several places from the same gun. Gun No. 35 was then being machined, so selected for this purpose. Chips were taken from the casting in three places, as follows:

1. Upper end of test block, just under the surface; per cent of tin by analysis is 10.21.
2. Upper end of test block, three-eighths inch from center of casting; per cent of tin by analysis is 8.59.
3. Between the trunnions and vent, just under the surface; per cent of tin by analysis is 10.25.

These analyses showed very plainly that near the surface of the casting the metal did not rise toward the top, but this was due to the sudden cooling of the metal. Toward the center and in the sand head, where the metal cooled more slowly, the tin undoubtedly did rise toward the top, as it does in castings made in sand molds. To prevent this and the segregation of the tin in the center of the casting, the metal was poured as cold as possible. Another fact brought out by these analyses was that the tin moves toward the outside of the casting. An analysis of the bronze of the gun 37, taken from one-eighth inch under the surface of the casting, between the trunnions and vent, showed 9.02 per cent tin, whereas the analysis of the hardness blocks showed 9.70 per cent.

In the remainder of the guns the heads were considered to contain the same percentage of tin as the gun. The chips from the outside of the gun were kept separate as far as possible from the borings, but when mixed they were taken at about 10 per cent tin. That this assumption was a little high is shown by the analysis of an ingot of some of the first chips and of gun No. 127, which, with the exception of 63 pounds from the head of gun 116, was melted from all chips. The analysis of the chips gave 9.45 per cent tin, and of gun 127, 9.85 per cent; the head of 116 was estimated to contain 9.44 per cent tin.

The chips when large were broken up and the steel picked out, and then they were run through a new magneto separator. The borings, which were very fine and oily, were run through twice; even then some small steel chips would stick to the bronze and be carried through the separator, but on the whole these chips were very free from steel. The analysis of the first chips referred to gave only .011 per cent iron, and gun 127 contained about .028 per cent iron. The chips after the first few times used were melted down into ingots before using in the guns, thus removing all the oil and dirt. Another reason for this was that the copper was melted down first, and if the chips were added and forced into the molten copper, much air would have been carried into the metal with them. A comparison of the analysis with the per cent of tin estimated shows that the estimate was from 0 to one-fourth per cent low.

The test specimens were always taken from the same place in each gun casting, and the method of taking these is as follows:

Seven inches of the casting just above the muzzle was cut off and a V-shaped piece slotted from this cylindrical block in such manner as to bring the test specimen, which was turned from this V piece, as near the outside of the casting as possible. This brought the center line of the test piece from eleven-sixteenths to three-fourths of an inch from the outside of the casting. The hardness test piece was turned from

the lower end of the V piece next to the muzzle. When the block was cut from the casting, the number was stamped on the muzzle end, the number reading toward the outside, and at the same time the Government inspector put his stamp near the number. This inspector was always present at the time the hardness test piece was cut from the tension specimen, and saw the number transferred to the end of the latter and at the same time re-marked his Government stamp on the end. Care was taken that the number when transferred should still read toward the outside of the casting, thereby designating which side of the test piece was nearest the chill. This marking also showed which was the muzzle end. The tension test pieces were turned with a straight cylindrical stem .798 of an inch in diameter and 3 inches long and the ends were threaded to fit the pair of 1¼-inch sockets of the testing machine.

The testing machine used was a Riehle machine, capacity 100,000 pounds. This was at the shops of the American Ordnance Company, and before starting the series of tests it was overhauled and standardized. To standardize it, five comparative tests were made with the Government machine at the Watertown Arsenal. A bar of three-fourths inch cold-rolled steel was cut up into ten pieces. These pieces were numbered from one end of the bar, and every other piece was sent to Watertown. The result of the five pieces tested on this Riehle machine were so close to the results of those made at Watertown that the inspecting officer agreed to accept the tests made by the American Ordnance Company on this machine if made in the presence of the Government inspector. This Riehle machine is provided with sockets for holding the test pieces. The bearings that these sockets have in the platen and top of the frame are ball joints, so that they center themselves, and the line of pull in the test piece is sure to be axial. The platen was always run at as slow speed as possible, until the elastic limit was passed; it was then speeded up a little.

The specific gravity of the tension test piece was first determined. The water used was city water, and was allowed to stand until its temperature was between 60° and 70° F. Two points 3 inches apart were marked on, the stem of the test piece. The distance between these was carefully gauged before testing and after fracturing, and the per cent of elongation calculated from their difference in terms of original length. The diameter of the stem was micrometered before and after breaking, the average of two readings at right angles being taken as the diameter at the fracture. The reduction of area or contraction was calculated from the difference in areas in terms of the original area. Stress strain curves were automatically drawn for every test piece by an indicator connected with the testing machine. These for about half the distance up to the elastic limit were always curved a little, owing to the back-lash in the driving device; from here up to the elastic limit they were approximately straight, and from this point the curve was regular but in steps, caused by the movement of the counterpoise. To find the elastic limit, a straight line was drawn through the straight part of the indicator curve just below the elastic limit, and a smooth curve drawn through the curve beyond the elastic limit; the elastic limit was taken at the point where this curve became tangent to the straight line, and was reduced to pounds to the square inch of area in

the original cross section. See Curves, page 458. The tensile strength was calculated from the breaking strength in pounds to the square inch of area in the original cross section.

The hardness test specimen, turned from the muzzle end of the tension specimen, was a cylinder 1 inch in length by 1 inch in diameter. This was tested by the Government at the Watertown Arsenal. The method of making this test was to press a hardened steel piece of diamond-shaped cross section, with one end tapered down to a point, into the end of the test cylinder with a pressure of 10,000 pounds. Care was taken that the point should always start at the center of the test block, so that the mass of metal on either side of the cut would be equal. The length of the cut made was carefully measured, and from it the hardness calculated by comparison to the cut that would be made in copper under identical conditions. The length of the cut if made in copper is 1 inch, and the hardness of copper being 3.33, this gives as a proportion—

$$y^3:1::3.33:x$$

where y is the length of the cut and x the hardness of the bronze. Take, for example, gun 145, the length of the cut is .840 inches, and if this is substituted for y and the equation solved x , the hardness is 5.62.

A complete list of the physical properties of all the test specimens taken is given in table, page 455. Table (on page 444) is a general one, giving the length of time between the different stages of melting and pouring the metal, and the heat at which the metal is poured. This heat was judged from its appearance, and from such tests as the jar that would be produced in an iron rod when thrust into the metal, and the manner in which it would string while dropping off the skimmer. Table, page 455, contains the numbers and the tests of the guns analyzed, together with the percentage of tin found by analysis. All the analyses except those starred were taken from the hardness test pieces, so that they can readily be compared, coming from the same place in each gun. Those starred have been referred to, and the analyses of these were made by a thoroughly reliable chemist in Bridgeport. The others were made by Booth, Garrett & Blair, chemists, Philadelphia, Pa.

The hardness of bronze increases with the per cent of tin up to 27.2 per cent tin, but since this variation in the per cent of tin in the guns is small, and as the hardness is greatly influenced by the number of times the old bronze has been remelted, a comparison of the per cent of tin and hardness can not fairly be made.

So far no one particular physical property has been considered as a general standard, representative as a quality of the metal as a whole. All the comparisons of results have been to show the effect of some particular thing, as that produced by the use of silicon or by remelting the bronze, where the particular property effected was the hardness. In these comparisons as the hardness increased the elongation and contraction diminished, so the hardness can not be taken as that property which fairly represents the bronze. In table, page 451, the tensile strength is assumed to be that property, and the guns have been classified according to their tensile strengths into three groups, and the average result of the tests of the guns in each group is calculated. A comparison of the averages shows plainly that this assumption is a fair one, for the other physical properties diminish with the tensile

strength. Class I contains all the guns whose tensile strength is 50,000 pounds or over. This group has been subdivided into four others, as follows:

- 1 contains all guns whose tensile strength is over 53,000 pounds.
- 2 contains all guns whose tensile strength is between 52,000 and 53,000 pounds.
- 3 contains all guns whose tensile strength is between 51,000 and 52,000 pounds.
- 4 contains all guns whose tensile strength is between 50,000 and 51,000 pounds.

Class II contains all of the guns whose tensile strength is between 45,000 and 50,000 pounds.

Class III contains all of the guns whose tensile strength is between 40,000 and 45,000 pounds.

The other two guns tested and not included in the above were below the specifications. Sixteen of the guns cast were not tested, as defects that would not turn out were discovered in the exterior before the test piece was made.

A comparison of these groups is given in the following table:

Class.	Number of guns.	Elastic limit.	Tensile strength.	Elongation.	Contraction.	Hardness.	Specific gravity.	
I.....	(1..	16	24,047	53,719	40.7	35.6	5.34	8.899
	(2..	12	22,085	52,513	43.9	37.0	4.91	8.896
	(3..	26	22,894	51,520	39.7	33.6	5.24	8.888
	(4..	21	22,184	50,364	39.6	35.7	4.95	8.889
I.....		75	22,715	51,830	40.5	35.2	5.11	8.895
II.....		53	22,190	48,080	30.7	30.6	4.89	8.88
III.....		4	20,000	43,300	26.8	30.9	.....	8.805

From the above table it is seen that 75 out of the 134 guns tested were in Class I, 53 in Class II, and only 4 in Class III. But one of the first guns cast fell below a tensile strength of 42,000 pounds, the other, not included in any class, was condemned because its elongation was a little below.

Of the 16 guns whose tensile strength was over 53,000 pounds six were cast from a little over one-half ingot metal, 1 of one-third and 1 of two-thirds, and the remaining 8 were cast from all old bronze. If the average of the 8 containing part ingot metal is compared with the 8 containing all old bronze, the comparison shows again very plainly the effect of remelting the bronze.

	Elastic limit.	Tensile strength.	Elongation.	Contraction.	Hardness.	Specific gravity.
First eight.....	23,075	53,850	46.25	38.1	4.89	8.902
Second eight.....	25,019	53,590	35.06	31.8	5.79	8.895

Several representative stress strain curves are shown on page 458.

No. 1 is the average of the curves for guns 2, 4, 6, 11, 21, and 34, which were the 6 of those analyzed that contained over two-thirds ingot metal.

No. 2 is the average of the curves for guns 35, 37, 47, 49, 52, 55, 60, 77, 106, 124, and 150, which were the 12 of those analyzed that contained about one-half ingot metal.

No. 3, a maximum curve, is the average of the curves for guns 121, 136, 138, 141, 142, and 144, which are all the guns with an elastic limit over 26,000 pounds.

No. 4, a minimum curve, is the average of the curves for the guns 6, 7, 12, 23, 28, and 34, which are all the guns with an elastic limit under 20,000 pounds.

The average of the results of these four lots of guns are as follows:

	Per cent tin.	Elastic limit.	Tension strength.	Elongation.	Contraction.	Hardness.	Specific gravity.
No. 1	• 9.17	21,075	45,612	28.0	27.9	4.46	8.84
No. 2	9.63	21,933	48,746	35.9	33.1	4.80	8.88
No. 3		26,280	50,793	23.8	25.2	6.02	8.89
No. 4		19,435	45,912	31.2	33.7	^b 4.51	.....

* The per cent of tin in gun 2, used in computing the average, is 9.06, the actual amount used in the casting.

^b Average of 6 and 7. The hardness test of the others was omitted.

Two test pieces were taken from several of the guns where the elongation of the first did not come up to that specified. When the second test was made, the testing machine was run at a slower speed by putting in all the resistance of the starting rheostat, and then not speeded up when the elastic limit was passed. In two cases the elongation was increased, in the second test sufficiently to bring the average above 20 per cent. In gun 142 it was nearly doubled in the second test, but in gun 144 it was slightly less.

The fact that the tensile strength was much higher in the second tests, where the elongation had increased, shows that the piece was being stretched too rapidly in the first tests. In gun 2 the first test was made at Watertown, and the results compare very favorably with those of the second, which was made at the American Ordnance Company's shops.

Guns from which two tests were made.

	Elastic limit.	Ten. st.	Elong.	Reduction.	Hard.	Specific gravity.
Gun No. 1	{	37,550	13.6	10.13	.....	8.36
		36,300	9.78	8.40	.....	.....
Average .....	.....	36,925	11.69	9.26	.....	8.36
Gun No. 2	{	48,440	36.5	31.6	4.51	.....
		23,500	33.75	30.2	4.51	8.82
Average	23,500	48,275	35.12	30.9	4.51	8.82
Gun No. 127	{ 24,600	45,280	18.7	24.8	.....	8.86
	{ 25,600	47,380	22.6	26.1	.....	8.90
Average	25,100	46,330	21.3	25.45	.....	8.88
Gun No. 139	{ 26,280	49,230	15.62	17.8	5.64	8.93
	{ 25,550	54,250	34.60	29.1	.....	8.88
Average	25,915	51,740	25.11	23.45	5.64	8.905
Gun No. 142	{ 26,600	47,340	14.8	17.5	6.86	8.87
	{ 26,020	52,130	25.0	26.5	6.21	8.87
Average	26,310	49,735	19.9	22.0	6.535	8.87
Gun No. 144	{ 26,000	49,520	19.0	21.9	6.58	8.87
	{ 26,000	46,400	15.6	20.8	6.14	8.92
Average	26,000	47,960	17.3	21.35	6.36	8.895

The surface of the stem of the test pieces after stretched was covered with a kind of corrugations which ran lengthwise of the stem. These would commence to appear on the surface soon after the elastic limit was passed. If the elongation was excessive, and the metals alloyed well, they were small, regular, and well defined. In these the fracture was generally circular, even, a little cupped, and a regular fine bronze color. In others these corrugations were large and irregular, and often part of the fracture was a bronze color and the other part bronze with a grayish hue. In the hardest pieces, when the elongation was small and the metals not alloyed well, the corrugations were very small and the surface of the stem filled with fine cross cracks, which appeared soon after the elastic limit was passed, and which opened as the piece was stretched. Their fracture was circular, even, coarser grained than the others, and the color was like the last, the gray being more pronounced.

Bending tests were made by the Government from guns 6, 11, and 37. The test pieces measured 6 by 1 by $\frac{1}{2}$ inches and were slotted from the block next to the tension test piece, with the larger center line of the section radial. The method of bending was to rest the flat surface 1 inch wide on the supports and apply the load at the center. The results are as follows:

Deflection from horizontal before transverse rupture: No. 6, 96 degrees; No. 11, 91 degrees; No. 37, 105.

The load and distance between supports was not given. The fracture of No. 6 showed very porous metal; the tin and copper were mixed evenly but not alloyed well, as was apt to be the case when all ingot metals were used. The fracture of No. 11 showed the metals alloyed well, and a small cluster of black oxide spots in the center; these were undoubtedly the cause of the small deflection. The fracture of No. 37 was a steel-gray color, very different from that of the tension test piece. This leads to the belief that the gray color of the fracture is caused by the manner in which the metal gives away at the fracture.

Guns 63 and 64 were condemned for a small hole in the chase half way between the trunnions and the muzzle. As these were the only defects in these guns, an experiment was tried to see if bronze could not be burned in these holes. The guns were buried in the sand, with the exception of the place to be burned, and the bore filled. The sand was banked up around the spot in such a manner as to leave a hole three-fourths inch in diameter and $1\frac{1}{2}$ inches deep in the sand just over the spot. Molten bronze was then poured into this hole until the metal of the gun had commenced to melt. The burn itself took well in both guns, but in No. 64 the metal was poured for too long a time, and had melted through into the bore. Both guns had warped so badly that the 0.08 inch left on the diameter for finishing was not sufficient stock to turn this warp out. A test piece was taken from 64 to include the burn. The results were as follows:

Tensile strength.....	pounds..	41,620
Elastic limit.....	do.....	25,000
Elongation.....	per cent..	11
Contraction.....	do.....	17.4
Specific gravity.....	do.....	8.86

These results show that the metal was very brittle, this being caused by the sudden chilling of the small body of metal. The chilling was caused by the bronze of the gun itself.

New trunnions were burned on gun 37, the method being the same as that shown in the report of 1879, pl. 12. The first trunnions burned on had many small blowholes in them, and as these would not turn out a second burn was tried. This was successful, and after the gun was proof fired with five 8-ounce rounds, the bending of the trunnions was not noticeable.

The numbers of the condemned guns that were tested are given in table on this page.

Sixteen of these condemned guns are included in class 1 of the guns grouped according to tensile strength, and the tensile strength of 4 of these 16 was over 53,000 pounds. Ten of them are included in Class II, and only 2 in Class III.

Guns 1 and 144 were condemned for physical properties below the specifications, and gun 37 because the bore was bored too deep. The rest were condemned for very small imperfections, notwithstanding the fact that they had stood the proof test. At first the inspecting officer allowed the guns to pass if the imperfection was a hole in the outside of the gun, if it was not over one-sixteenth inch deep, but after the first few guns he would not accept them if there were any imperfections at all in the gun.

Guns condemned from which tests were made.

1. Physical tests below specifications.
7. Few very small holes in chase; excessive blooming.
9. Cold shot near trunnions, which opened in proof firing.
12. Several small holes on outside.
15. Black spots in bore.
16. Black spots in bore.
19. Black spots in bore.
22. One or two small holes in chase and end of trunnions.
28. One or two small holes in chase and end of trunnions.
30. Black spots; cold shots near muzzle.
32. Black spots in bore.
34. Cold shot in chase which opened in proof firing.
36. Two small blowholes forward of trunnions.
37. Bore too deep.
38. Sand holes in chase and bore.
41. Two sand holes in chase.
48. Small hole in chase (afterwards bronze peened in hole and gun accepted).
49. Shallow black hole in first reenforce between trunnions.
57. Small sand holes in chase and bore.
60. Shrink hole in rim base.
61. Small hole in chase; burned, but not accepted.
62. Blowhole in second reenforce, three-sixteenths diameter.
64. Small hole in chase; burned, but not accepted.
71. Many small sand holes in bore.
79. Several small shallow sand holes in chase near muzzle and several pin holes in bore.
80. One hole three-sixteenth inch deep in breech.
95. One sand hole one-sixteenth inch deep in second reenforce, small sand holes in chase.
144. Elongation below specifications.
145. Two small sand holes in chase (afterwards bronze peened in hole and gun accepted).

By small holes is meant holes not as large as the lead of a pencil.

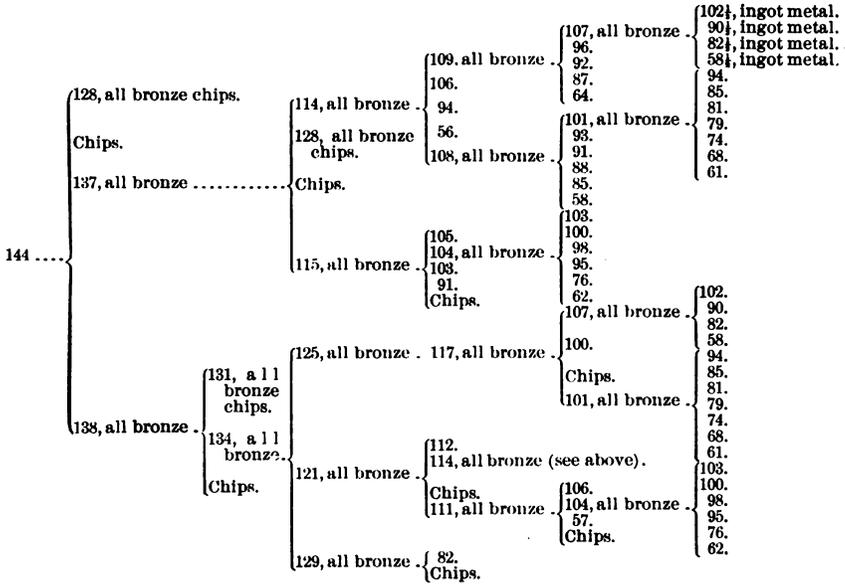
Casting number.	Per cent of tin by analysis.	Average maximum enlargement of the bore.	Elastic limit.	Tensile strength.	Elongation.	Contraction.	Hardness.	Specific gravity.
1				36,925	11.69	9.26		8.36
2	7.61	1,260	23,000	48,100	33.75	30.20	4.51	8.82
4		1,151	21,600	46,680	47.60	36.1	3.74	8.71
5		460	20,000	52,400	47.0	35.7	5.60	8.88
6	8.93	1,120	19,400	42,340	21.7	19.7	4.39	8.70
7		1,260	19,400	47,250	41.4	39.5	4.63	8.85
8		1,100	22,200	51,940	46.0	17.3		8.89
9		1,150	20,000	47,630	26.0	25.9		8.88
10		1,390	20,000	49,620	33.3	30.55		8.87
11	10.01	850	22,000	46,800	18.4	19.20	5.20	8.91
12		1,280	19,200	47,440	28.3	34.70		8.88
13		1,330	22,600	49,380	31.3	27.00		8.89
14		1,210	21,420	48,510	32.4	34.60		8.93
15		1,200	21,000	47,300	24.0	27.20		8.83
16			22,050	51,460	31.7	28.7		8.93
19		1,290	20,600	51,940	47.7	37.9		8.91
20		1,330	23,800	49,570	36.2	37.2		8.95
21	9.47	1,180	20,600	47,650	23.0	27.0		8.95
22			20,800	48,000	40.4	36.8		8.88
23		1,190	19,000	51,220	43.0	38.1		8.935
24		1,060	21,400	51,580	46.6	36.5		8.92
25		1,490	20,400	50,780	52.0	41.2		8.92
26		1,380	20,200	51,650	53.8	39.6		8.91
27		1,280	21,500	50,200	41.0	35.7		8.87
28			19,760	43,920	30.0	34.9		8.77
29		1,560	20,000	46,540	36.6	32.2		8.75
30			22,200	47,120	25.6	29.7		8.90
31		1,290	22,200	50,650	37.9	36.3		8.90
32		1,470	21,700	51,300	46.25	36.87		8.90
33		1,480	21,000	43,640	29.9	34.0		8.92
34	8.50	1,510	19,850	43,300	25.6	35.1		8.92
35	10.21	1,150	21,000	49,340	38.6	39.0	4.76	8.81
36			21,200	51,680	34.9	31.1	5.35	8.96
37	9.70	740	24,170	52,760	31.2	26.1	6.09	8.905
38			22,000	50,000	25.3	23.7	5.30	8.95
39		950	22,600	51,500	34.7	29.7	5.17	8.94
40		1,040	24,400	50,820	26.7	25.8	5.62	8.91
41			21,600	50,080	46.3	39.1	5.01	8.90
42		1,060	20,300	49,870	48.9	41.7	4.91	8.91
43		900	20,800	51,760	49.3	40.0	4.86	8.91
44		1,140	21,000	50,090	46.7	40.8	4.42	8.94
45		1,380	22,800	50,040	52.5	41.0	4.22	8.92
46		1,080	22,600	52,640	36.3	33.6	5.33	8.93
47	9.77	1,210	21,900	47,680	32.1	32.2	4.88	8.92
48		300	20,800	50,020	29.7	28.4	4.83	8.88
49	9.72	1,060	21,000	46,440	22.9	21.7	4.95	8.91
50		830	22,000	51,220	39.3	35.6	5.22	8.92
52	9.92	840	21,600	46,100	19.3	17.5	5.33	8.90
53		1,130	22,100	48,150	27.3	30.1	4.78	8.88
55	9.60	1,480	21,300	48,980	45.8	36.8	4.17	8.78
56		1,270	21,800	50,260	38.0	34.5	4.47	8.93
57		1,020	22,000	52,540	52.0	38.6	4.78	8.88
59		960	21,820	48,890	29.5	30.6	4.95	8.90
60	9.79	1,060	21,600	53,150	56.0	43.5	4.93	8.91
61			21,300	51,840	50.0	40.8	4.73	8.90
62		940	22,000	53,710	56.9	41.9	4.59	8.88
63		1,180	22,000	50,750	39.6	39.6	4.85	8.93
64			22,600	51,540	33.0	24.6	5.26	8.90
65	9.61	880	24,700	54,280	33.0	35.5	4.56	8.90
66		970	23,800	51,000	37.5	38.4	4.99	8.89
67		950	22,000	50,420	43.9	35.3	5.58	8.93
68		1,090	22,000	52,180	55.1	41.2	4.47	8.89
69		910	22,200	49,620	35.3	35.1	4.54	8.88
70		1,150	21,200	52,940	59.5	45.9	4.37	8.93
71		1,190	22,400	48,530	25.0	27.4	4.77	8.89
72		1,040	21,600	49,680	39.0	37.9	4.45	8.94
73		1,450	22,100	50,600	51.7	42.3	4.54	8.82
74		960	21,800	52,180	46.3	38.8	4.52	8.81
75		1,340	21,000	48,400	34.9	35.5	4.21	8.91
77	9.53	1,280	22,000	45,940	24.1	27.4	4.50	8.87
78		1,040	21,900	53,540	46.3	39.9	4.76	8.88
79		1,090	23,000	53,000	41.0	32.8	5.10	8.91
80			23,900	54,600	45.7	39.6	5.01	8.92
81		1,240	22,400	52,500	38.7	32.5	4.88	8.92
82		980	22,000	48,360	28.7	29.7	4.50	8.86
83		1,040	22,000	50,300	37.8	35.7	4.73	8.87
84	9.84	980	28,600	48,360	22.9	24.1	5.19	8.91
85		1,180	22,000	48,510	29.5	34.1	4.60	8.90
86		990	23,600	54,080	43.5	37.1	4.72	8.89

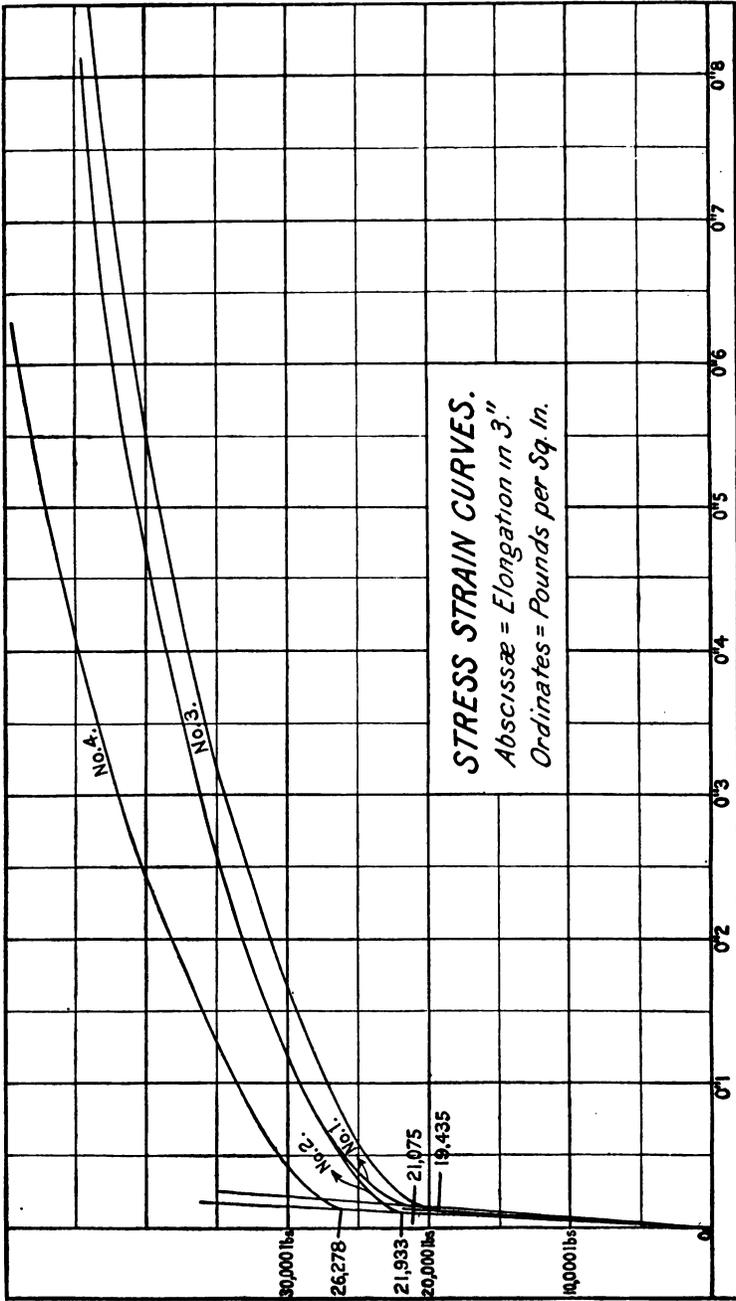
Casting number.	Per cent of tin by analysis.	Average maximum enlargement of the bore.	Elastic limit.	Tensile strength.	Elongation.	Contraction.	Hardness.	Specific gravity.
87		1,280	22,000	50,520	43.5	38.5	4.41	8.85
88		480	22,400	52,690	43.3	37.5	4.78	8.92
89		1,250	22,300	51,020	39.0	37.5	4.59	8.89
90	9.73	900	23,800	51,060	32.8	33.3	5.28	8.92
92		1,190	22,000	52,200	29.7	38.3	4.69	8.91
94		1,200	21,800	51,880	45.3	43.5	6.07	8.88
95		1,250	23,600	51,080	32.8	33.4	4.88	8.91
96		1,100	23,200	48,220	35.3	38.3	4.47	8.89
98	9.34	1,360	21,800	50,540	41.1	33.6	4.72	8.89
100		420	22,000	46,420	27.8	35.7	4.56	8.96
101		630	22,250	52,950	50.7	40.4	4.34	8.84
102		570	20,400	50,020	35.6	35.7	4.69	8.89
103		1,180	21,600	51,500	55.0	42.9	4.48	8.93
104		1,200	22,000	53,100	56.0	41.6	4.19	8.875
105		1,090	22,400	48,060	30.5	35.1	4.54	8.94
106	9.29	490	21,000	49,600	34.6	29.5	4.60	8.92
107	9.55	1,100	20,800	51,080	44.0	33.8	4.56	8.84
108		1,080	20,000	48,460	49.5	39.1	5.05	8.85
109		1,360	20,000	46,520	42.8	36.3	4.84	8.80
110		950	23,200	51,920	39.4	32.8	5.06	8.88
111		870	23,900	48,360	28.7	33.0	5.12	8.88
112		700	23,900	54,440	47.6	44.4	5.45	8.93
114		510	26,000	51,360	30.0	31.2	5.56	8.83
115		1,290	22,600	51,880	46.0	35.9	5.13	8.85
116		750	22,100	49,280	29.0	31.6	4.73	8.90
118		670	22,200	52,180	38.0	35.5	5.13	8.94
119		610	23,000	53,100	33.25	38.7	4.98	8.90
120		560	26,000	53,640	28.4	29.5	6.61	8.90
121		390	26,200	53,240	29.0	29.3	5.89	8.91
122		520	24,200	48,260	33.3	33.9	5.08	8.86
123	9.52	310	25,800	54,220	34.3	34.3	7.02	8.875
124	8.98	1,030	21,000	50,360	48.0	53.0	4.14	8.91
125		550	26,000	49,900	24.3	29.1	6.30	8.90
126		270	25,800	51,620	25.9	28.5	6.41	8.88
127	9.85	590	25,100	46,350	21.3	25.45		8.88
128		460	26,000	53,560	31.67	23.5	6.09	8.91
129		800	22,800	45,520	34.3	18.4	4.56	8.75
131	9.72	720	23,200	46,860	23.7	21.9	5.22	8.82
132		1,010	25,000	49,320	23.3	19.72		8.89
133		1,050	24,000	46,640	21.8	22.6	5.64	8.85
134		540	25,600	53,600	33.3	28.66	5.91	8.91
135		540	26,000	50,880	24.0	24.14	6.64	8.91
136		460	26,300	51,860	23.8	25.7	6.09	8.90
138		830	26,130	50,000	24.7	26.7	6.18	8.895
139	9.89	580	25,920	51,740	25.1	23.45	5.64	8.905
140		970	25,250	49,570	23.98	25.58	5.85	8.88
141		560	26,200	51,620	25.1	20.4	5.79	8.89
142	8.95	730	26,310	49,735	19.9	22.0	6.535	8.87
143		900	24,450	49,220	23.9	27.2		8.87
144		540	26,000	47,960	17.3	21.35	6.36	8.895
145	9.28	650	26,530	48,300	20.4	27.3	5.62	8.90
147		650	21,910	49,990	38.9	38.6	4.88	8.90
148		1,020	22,010	46,860	28.8	29.6	5.22	8.88
149		1,300	20,100	47,640	43.9	33.2	5.13	8.91
150	9.43	1,090	21,930	50,320	45.3	37.95	4.67	8.85

Old bronze in gun 142.

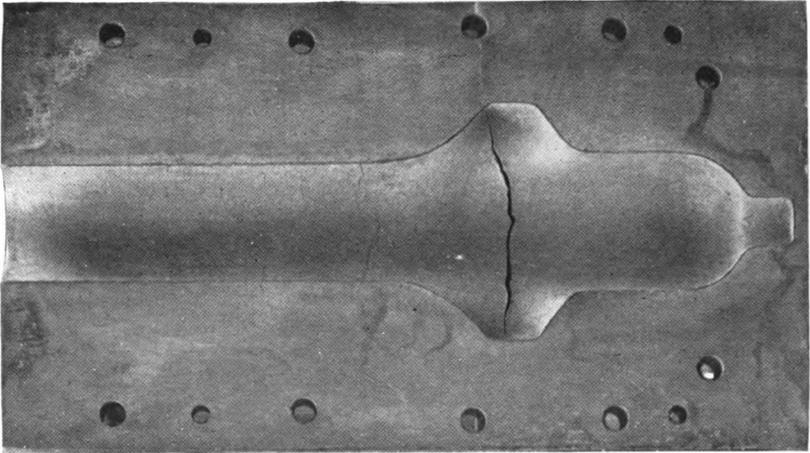
				96½, ingot metal.	
				87½, ingot metal.	
			109, all bronze	92½, ingot metal.	
				64½, ingot metal.	102½, ingot metal.
				107, all bronze	90½, ingot metal.
				Chips.	82½, ingot metal.
					58½, ingot metal.
					85½, ingot metal.
		114, all bronze		91½, ingot metal.	94½, ingot metal.
				93½, ingot metal.	74½, ingot metal.
			108, all bronze	101, all bronze	81½, ingot metal.
			94½, ingot metal.	58½, ingot metal.	79½, ingot metal.
			106½, ingot metal.	88½, ingot metal.	61½, ingot metal.
			56½, ingot metal.	85½, ingot metal.	68½, ingot metal.
			Chips.	100½, ingot metal.	
142	Chips			98½, ingot metal.	
				103½, ingot metal.	
				95½, ingot metal.	
		115, all bronze	104, all bronze	76½, ingot metal.	
			105½, ingot metal.	62½, ingot metal.	
		103½, ingot metal.	103½, ingot metal.		
		128, all chips.	91½, ingot metal.		

Old bronze in gun 144.

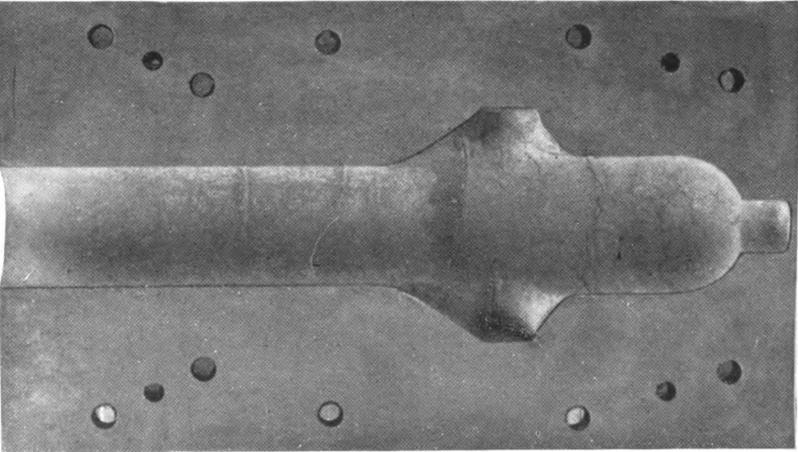




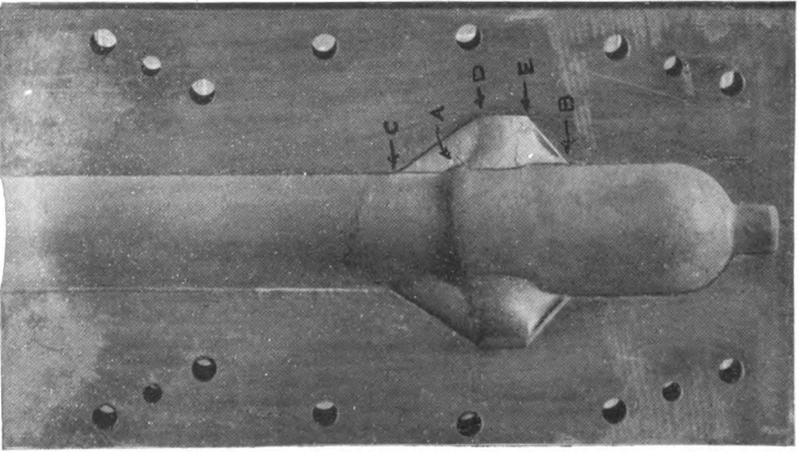
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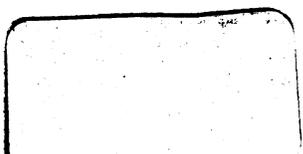
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