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## ANNUAL REPORT

OF THE

# COMMISSIONER OF NAVIGATION

TO THE

# SECRETARY OF COMMERCE

FOR THE

FISCAL YEAR ENDED JUNE 30, 1917



WASHINGTON  
GOVERNMENT PRINTING OFFICE

1917



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REPORT  
OF THE  
COMMISSIONER OF NAVIGATION.

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DEPARTMENT OF COMMERCE,  
BUREAU OF NAVIGATION,  
*Washington, September 25, 1917.*

SIR: There is submitted herewith my annual report for the fiscal year ended June 30, 1917.

In compliance with your instructions, the detailed tables and summaries showing the rapid growth of the shipbuilding industry and of the merchant marine which have been reported to you as usual will be withheld from publication for the present. It will suffice to say that during the past fiscal year the tonnage built was by far the greatest in our history and that the plans and prospects at the date this report is completed promise to result during the 12 months following it in an output of merchant ships by our shipyards equal to or greater than the world's total output during any year before the war.

WORK OF SHIPPING COMMISSIONERS.

Summaries of the routine work of shipping commissioners for the past fiscal year are printed in Appendix A. The amount of this work has steadily increased since the outbreak of the war, but the routine statistics are far from indicating the amount of the increased work due to war conditions. The prompt dispatch of ships is more important than ever. The concern of relatives over the whereabouts of seamen who have joined ships passing through the German death zone has increased the amount of correspondence about individual seamen, and since the declaration of war on April 6 shipping commissioners have undertaken to keep spies, usually in neutral guise, from shipping as seamen on American ships. Passports or certificates of American citizenship are required of American seamen, and foreign seamen are now required to furnish certificates of nationality wherever practical. In this work the inspectors of the Immigration Service and the shipping commissioners are acting in concert or supplementing each other's work.

## MEN SHIPPED AND DISCHARGED.

During the past fiscal year 506,941 officers and men have been shipped and discharged by shipping commissioners, compared with 487,524 during the fiscal year 1916, 414,744 during the fiscal year 1915, and 378,772 during the fiscal year 1914. Shipping commissioners were provided for by Congress at 13 of our principal seaports, and at other ports collectors of customs shipped and discharged 18,439 officers and men. Of these, 3,453 were shipped and discharged at Newport News, Va. At least during the war a shipping commissioner's office should be established at that point, and the estimates this year again recommend the small sum needed for the purpose. The ports of the Chesapeake Bay are especially important in the prosecution of the war.

The following table shows the aggregate routine work and salaries of shipping commissioners and deputies for the past decade:

Year.	Seamen shipped, reshipped, and discharged.	Salaries.	Average cost per man.	Year.	Seamen shipped, reshipped, and discharged.	Salaries.	Average cost per man.
1908.....	307,299	\$63,585.16	\$0.21	1913.....	379,188	\$62,374.13	\$0.16
1909.....	341,980	62,944.79	.18	1914.....	378,772	63,475.20	.17
1910.....	356,448	65,539.19	.18	1915.....	414,744	63,755.47	.15
1911.....	367,023	67,155.90	.18	1916.....	487,524	62,637.45	.13
1912.....	374,783	63,373.53	.17	1917.....	506,941	66,211.83	

## DESERTION OF SEAMEN.

Under the abnormal conditions brought about by the war the reports of American consuls of seamen deserting from American ships in the ports of Europe, Asia, Africa, South America, Australia, and the foreign islands of the Pacific have little permanent value, and for this reason such reports as have been received have not been tabulated. The principal seaports of all belligerent nations are under military control, and seamen are allowed to land only upon compliance with strict military regulations.

The following statement shows the number of men who have failed to join American ships in American ports after signing contracts before shipping commissioners:

Year.	Shipped and reshipped.	Failed to join.	Percent.	Year.	Shipped and reshipped.	Failed to join.	Percent.
1908.....	163,192	3,101	1.90	1913.....	198,024	3,906	1.97
1909.....	181,032	2,114	1.17	1914.....	199,584	2,771	1.39
1910.....	185,721	2,690	1.45	1915.....	218,541	3,339	1.53
1911.....	192,191	3,082	1.60	1916.....	252,681	4,512	1.71
1912.....	198,225	3,849	1.94	1917.....	257,327	5,006	1.95

The seamen's act abrogated treaties providing for the arrest of seamen for desertion from foreign merchant ships in ports of the United States on and after July 1, 1916, and this provision of the act, as well as the provisions affecting the payment of part wages

of such deserting seamen, has, accordingly, been in effect throughout the fiscal year. Under war conditions, as was stated last year, the crews of belligerent merchant ships naturally stand by their colors as well as by their contracts, but in some instances, particularly in Gulf ports, complaint has been made that crews of foreign ships have been induced to desert, with resulting delays to commerce and embarrassment to the vigorous prosecution of the war.

#### ALLOTMENT NOTES.

The following table shows the number of allotment notes issued in recent years under section 24 of the seamen's act of December 21, 1898, and since November 4, 1915, under the seamen's act, to seamen on vessels of the United States:

Year.	Creditors.			Total.	Year.	Creditors.			Rela- tives.	Total.
	Square- rigged.	All other vessels.	Rela- tives.			Square- rigged.	All other vessels.	Rela- tives.		
1904.....	1,966	1,513	287	3,766	1911.....	505	241	57	803	
1905.....	1,595	919	304	2,818	1912.....	555	296	62	913	
1906.....	1,492	421	309	2,222	1913.....	419	135	64	668	
1907.....	1,323	490	239	2,052	1914.....	257	279	166	702	
1908.....	967	393	133	1,493	1915.....	400	595	682	1,677	
1909.....	660	114	84	858	1916.....	100	303	1,174	1,577	
1910.....	631	145	79	905	1917.....			1,650	1,650	

#### WAGES OF SEAMEN.

The customary tables showing the rates of monthly wages paid on merchant vessels of the United States during the past fiscal year for various ratings at various principal ports of the United States, as reported by shipping commissioners from articles of agreement signed before them, are published in Appendix B. In addition to the monthly wages, war bonuses are paid, as a rule, to seamen on ships bound through zones in which Germans deal death indiscriminately. These bonuses are usually 50 per cent of the wages. Furthermore, for over a year American shipowners in many instances have insured the lives and effects of their crews on ships passing through these zones, and such insurance is obligatory upon all shipowners under the extension of the war risk insurance act now in force.

#### NATIONALITY OF CREWS.

The table following shows the nationality of officers and crews of American merchant vessels shipped before United States shipping commissioners during the past fiscal year compared with recent years. War with Germany was not declared until April 6, 1917, and during most of the fiscal year, accordingly, Germans were at liberty to seek employment on American merchant ships. On June 12, 1917,

instructions were issued prohibiting the employment of alien enemies on American merchant ships, except in individual cases with the specific approval of the Department of Justice.

Nationality.	1910	1911	1912	1913	1914	1915	1916	1917
Americans (born).....	59,810	59,802	58,109	63,040	63,247	65,196	76,956	81,899
Americans (naturalized).....	31,736	31,810	35,562	32,780	31,417	29,965	31,877	26,826
British.....	21,047	23,674	21,033	24,031	24,745	29,395	29,523	28,947
Chinese.....	137	68	55	65	64	471	68	42
Japanese.....	480	380	290	193	98	200	245	368
Filipinos.....	126	126	184	258	472	482	528	650
Germans.....	6,832	7,673	7,185	9,185	9,497	9,466	12,415	10,254
Norwegians.....	9,190	9,889	9,394	8,679	8,194	9,891	11,383	9,819
Swedes.....	7,123	6,615	7,565	6,995	6,321	7,878	9,208	9,505
Danes.....	2,293	2,590	2,744	2,510	2,260	4,084	4,608	4,893
Russians.....	3,684	3,956	4,403	4,483	4,526	5,930	7,949	8,150
Austrians.....	1,513	1,838	2,240	2,980	3,363	3,536	3,474	1,894
French.....	517	610	614	615	617	716	892	783
Spanish.....	24,546	26,059	26,247	20,511	25,022	25,252	33,139	34,006
Italians.....	3,649	4,021	3,877	4,813	4,368	4,843	4,150	4,079
Portuguese.....	4,073	4,197	3,924	4,384	3,921	5,034	4,733	5,702
Others.....	8,952	8,766	11,762	12,434	11,442	16,196	21,533	25,322
Unknown.....	13	117	3,037	68	10	6	.....	2
Total.....	185,721	192,191	198,225	198,024	199,584	218,541	252,681	253,141
Per cent Americans.....	49.3	47.7	47.3	48.4	47.4	43.5	43.2	42.9

#### NAVIGATION RECEIPTS.

The receipts for the past four fiscal years from the three main sources of revenue from navigation are shown in the following table:

Source.	1914	1915	1916	1917
Tonnage duties.....	\$1,310,759.03	\$1,315,425.30	\$1,454,565.83	\$1,393,743.16
Navigation fees.....	152,694.19	142,446.37	158,518.08	159,808.03
Navigation fines.....	40,741.38	41,518.24	52,381.75	49,962.37
Total.....	1,504,194.60	1,499,389.91	1,665,465.66	1,603,513.56

#### TONNAGE DUTIES.

The receipts from tonnage duties during the year ended June 30, 1917, were \$1,393,743.16, including \$2,901.90 collected for the Philippine Islands fund and \$6,022.10 alien and penal tonnage duties. The year's receipts were \$60,822.67 less than during the previous fiscal year, when they were the largest for any year since the Civil War period. Under the German threat in February to sink without warning neutral ships, American ships ceased sailing for a brief period until they could be armed against piracy, and ships under other neutral flags also in some instances ceased operations. The reduction in this year's tonnage receipts, amounting to the average receipts for a fortnight, was due mainly to this cause. Details of the receipts of tonnage duties are stated in Appendix D.

#### RADIO COMMUNICATION.

Submarine assaults have required radio inspectors to give special attention to the radio equipment on vessels entering the war zone. During the past fiscal year there were 12,139 clearances of radio-

equipped vessels coming under the act of June 24, 1910, amended July 23, 1912, and 6,103 inspections were made of the radio equipment on these vessels as compared with 11,111 clearances and 6,125 inspections during the fiscal year 1916. These inspections disclosed 502 cases where the equipment did not comply with the requirements of the law or where no equipment at all had been provided. Of these cases, 278 were found on foreign vessels and 143 on American vessels. A great many minor defects were noted but were remedied by the inspectors at the time of inspections.

The small decrease in the number of inspections is due to the many changes in the inspection force, as all of the original inspectors in the field service voluntarily entered the service of the Army and Navy as reserve officers, necessitating the employment of new men unfamiliar with the duties. Two of the inspectors entered the service of the Army, one receiving the rank of major and one of captain; nine entered the service of the Navy, four receiving the rank of lieutenant, three of lieutenant junior grade, and two of ensign.

During the fiscal year many vessels equipped with radio apparatus have been sunk. The value of this apparatus is illustrated in the following extract from the log of an American vessel:

*July 4, 1917.*—Chased by submarine. Got into communication with British destroyer by wireless. Fired three shots at submarine. Destroyer to our assistance. Submarine disappeared.

*July 5, 1917.*—Heard shots being fired about 8 a. m. and picked up distress from British ship saying she was being shelled. 8.30 a. m., saw sailing ship blown up about 3 miles ahead of us. 9.45, chased by submarine. Got into communication with two British destroyers and French land station. They sent an aeroplane to our assistance in response to our distress call. Submarine submerged. Fog came up. 3.30 p. m., fog lifted. Submarine 2 miles from us opened fire upon us. Got into communication with land station and several destroyers answered, saying they were coming to our assistance. Battle lasted 55 minutes. Submarine sunk by our gun fire. Fragment of shell struck our stern plates, requiring 79 rivets when we reached France.

*July 27, 1917.*—Sailed for New York.

*July 30, 1917*—4.30 a. m.—Picked up 23 survivors of the torpedoed British ship \_\_\_\_\_. Sent code message asking a destroyer to relieve us of them, as we had only a sufficient number of lifeboats for our own crew. 10 a. m., relieved of \_\_\_\_\_ survivors by British patrol.

*August 1, 1917.*—Ship took fire. Burning oil for fuel. Sent distress call. All hands to lifeboats. Rescued by Greek ship \_\_\_\_\_. Taken to \_\_\_\_\_, \_\_\_\_\_. Returned to New York on American steamship \_\_\_\_\_.

The Navy Department, acting under authority of an Executive order, dated April 6, 1917, ordered the closing of the 6,089 licensed amateur transmitting radio stations and also all amateur receiving stations and such commercial radio stations as were not required for naval communication.

At the beginning of the war a heavy demand for commercial operators was made by the War and Navy departments, and the large reserve of amateur radio operators made it possible to supply the increased demand. By consulting the lists of licensed amateur radio stations it was possible to communicate with practically every available amateur radio operator in the United States within a short time.

All of the radio inspectors are making special efforts to supply the unusual demand for commercial operators. To accomplish this they

are acting as instructors in radio schools, lecturing in radio clubs, and canvassing their districts through correspondence, which is resulting in a large number of amateurs and those who have not heretofore been interested in radiotelegraphy obtaining the necessary knowledge to pass the commercial examinations. The Bureau is directing its radio inspectors to visit all of the important cities throughout the country whenever there is a class of students prepared to take its examinations. This has resulted in securing 680 new commercial operators between April 1 and June 30, or from the time this country entered the war to the end of the fiscal year.

Mr. Marconi, referring to amateur radio operators, says:

America is fortunate in having perfected its organization of the amateur field. \* \* \* American wireless men are exceptionally well qualified to take an active part in important signaling work. Much valuable material will be found in the amateur ranks, as these young men are accustomed to transmission on short wave lengths. A great deal of our communication is carried on with low power and wave lengths in the neighborhood of 200 meters—the exact type of communication to which they are most accustomed.

The number and grade of licenses issued to operators during the past year and previous four years is shown below.

Grade.	1913	1914	1915	1916	1917	Total.
Commercial extra first.....			18	18	8	44
Commercial first and second.....	1,932	339	1,635	1,260	1,674	6,840
Experiment and instruction.....	8	10	27	30	10	85
Cargo.....	1	26	112	173	113	425
Amateur first and second.....	1,841	1,172	3,067	4,199	3,302	13,581
Commercial emergency first and second.....					217	217
Total.....	3,782	1,547	4,859	5,680	5,324	21,192

During the past fiscal year 4,417 licenses to stations were issued, compared with 5,601 for the previous year. Classification of these stations is shown in the following table:

Class.	1916	1917	Class.	1916	1917
Commercial ship.....	444	484	Technical and training school.....	33	32
General public service land.....	51	44	Special amateur.....	67	54
Limited public service land.....	17	20	General and restricted amateur.....	4,875	3,687
Limited commercial land.....	57	46	Total.....	5,601	4,417
Experimental.....	57	50			

The decrease in the number of station licenses issued is due to the discontinuance of licensing land stations, including amateur stations, at the beginning of the war. The total number of station licenses issued for the fiscal years 1913 to 1917, inclusive, is as follows: 1913, 1,496; 1914, 2,309; 1915, 4,039; 1916, 5,601; 1917, 4,417; total, 17,862.

The statement following shows details of expenditures for this service during the fiscal years 1913, 1914, 1915, 1916, and 1917; the proposed distribution for the current fiscal year; and the estimates for 1919:

	1913	1914	1915	1916	1917	1918	1919
Total salaries:							
Field.....	\$15,673.58	\$24,092.50	\$27,844.49	\$28,379.51	\$27,784.66	\$31,880.00	\$31,880.00
Bureau.....	4,328.22	5,763.75	7,150.00	7,150.00	7,013.34	8,050.00	8,050.00
Total.....	20,001.80	29,856.25	34,994.49	35,529.51	34,798.00	39,930.00	39,930.00
General expenses:							
Travel.....	4,150.93	6,044.10	6,245.52	4,355.12	2,317.42	2,000.00	2,000.00
Telephone.....	126.84	364.71	399.84	401.81	565.88	600.00	600.00
Laundry.....	22.22	127.04					
Furniture.....	208.21		370.26	441.77	151.64	150.00	150.00
Supplies.....	923.51	636.91	517.49	331.90	558.76	500.00	500.00
Printing.....	2,124.12	20.81	78.10	116.60	68.79	75.00	75.00
New instruments.....	9,972.40	171.11	312.79	2,786.75	2,741.09	1,000.00	1,000.00
Repairs.....	20.80	46.93	1,455.65	109.78	83.05	78.00	78.00
Telegrams.....	74.23	34.87	111.51	33.47	24.33	25.00	25.00
Freight and cartage.....	210.49	234.59	124.84	89.34	63.23	65.00	65.00
Car fare.....			218.03	339.15	330.16	350.00	350.00
Technical books and papers, batteries, wire, and other small materials.....			168.38	57.00	47.30	50.00	50.00
Berne publications.....				198.91	13.74	15.00	15.00
Rent.....					98.75	162.00	162.00
Unexpended.....	44.45	342.68	3.10	208.89	3,137.86		
Grand total.....	37,880.00	37,880.00	45,000.00	45,000.00	45,000.00	45,000.00	45,000.00

The number of clearances of ships required to carry wireless and of the inspections of such ships is shown by the following statement:

CLEARANCES AND INSPECTIONS OF VESSELS SUBJECT TO THE SHIP ACT OF JUNE 24,  
1910, AS AMENDED JULY 23, 1912, DURING THE FISCAL YEAR 1917.

[District headquarters are indicated by small capitals.]

Dis-trict.	Port.	Clear-ances.	Inspec-tions.	Dis-trict.	Port.	Clear-ances.	Inspec-tions.
1st	BOSTON, MASS.....	990	721	5th	Port Arthur, Tex.....	58	0
	Portland, Me.....	151	8		SAN FRANCISCO, CAL.....	1,156	1,060
	Providence, R. I.....	134	1		Eureka, Cal.....	57	0
2d	NEW YORK, N. Y.....	3,065	2,296	6th	Honolulu, Hawaii.....	210	0
	Perth Amboy and New-ark, N. J.....	15	0		Los Angeles, Cal.....	316	0
3d	BALTIMORE, MD.....	454	430	7th	San Diego, Cal.....	161	0
	Newport News, Va.....	381	104		SEATTLE, WASH.....	487	507
4th	Norfolk, Va.....	1,036	360		Astoria, Oreg.....	131	0
	Philadelphia, Pa.....	232	40		Ketchikan, Alaska.....	335	0
5th	SAVANNAH, GA.....	385	4		Portland, Oreg.....	127	0
	Charleston, S. C.....	207	3		Tacoma, Wash.....	29	0
	Key West, Fla.....	289	3	8th	DETROIT, MICH.....	169	44
	Pensacola, Fla.....	7	0		Buffalo, N. Y.....	183	3
	San Juan, P. R.....	267	0		CHICAGO, ILL.....	89	66
	Tampa, Fla.....	202	0		Duluth, Minn.....	62	1
	NEW ORLEANS, LA.....	487	448	Total, 1917.....		12,139	6,103
	Galveston, Tex.....	232	4	Total, 1916.....		11,111	6,125
	Mobile, Ala.....	35	0				

The total number of ship inspections for the fiscal years 1913 to 1917, inclusive, is as follows: 1913, 3,201; 1914, 6,486; 1915, 6,152; 1916, 7,236; 1917, 7,137; total, 30,212.

The following is a classified list of the defects found during the fiscal year in radio stations on board ship for which official notices were served on the masters by radio inspectors, requiring that the deficiencies be remedied prior to the sailing of the vessels. In each

case the radio inspector took the necessary steps to place the station in proper condition before sailing, thus preventing a violation of the law.

Defects noted.	Number.
Inefficient auxiliary apparatus, inefficient auxiliary source of power supply, or lack of same.....	149
Inefficient main transmitter used as auxiliary transmitter.....	26
Inefficient means of communication between the radio room and the bridge or lack of same.....	211
Improper complement of radio operators.....	87
Inefficient receiving set or lack of same.....	21
Lack of radio equipment where required.....	8
Total number of defects noted.....	502

NATURE, AMOUNT, AND GEOGRAPHICAL DISTRIBUTION OF WORK PERFORMED DURING THE PAST FISCAL YEAR, AS COMPARED WITH THE FISCAL YEAR 1916, BY THE RADIO SERVICE, UNDER THE ACT (OF 1912) TO REGULATE RADIO COMMUNICATION.

[District headquarters are indicated by small capitals.]

Place of inspection or examination.	Stations inspected.					Operators examined.								Operators licensed.											
	Ship-Voluntary equipment.	Ship for license.	Land.	Land for license.	General and restricted amateur.	Amateur stations licensed.				Commercial.				Amateur.				Commercial.				Amateur.			
						Extra first.	First.	Second.	First.	Second.	First.	Second.	Cargo.	Experiment and instruction.	Extra first.	First.	Second.	First.	Second.	First.	Second.	Cargo.	Experiment and instruction.		
First district:																									
BOSTON, MASS.....	67	22	1	1	14	610	2	155	28	290	135	23	0	1	179	25	355	209	23	0					
Bridgeport, Conn.....							5	5	5						5	4									
Brockton, Mass.....																									
Fall River, Mass.....																									
Hartford, Conn.....																									
New Britain, Conn.....																									
Newport, R. I.....																									
Portland, Me.....																									
Providence, R. I.....		2																							
Salem, Mass.....																									
Tufts College, Mass.....																									
Waterbury, Conn.....																									
Total, 1917.....	67	25	1	4	45	610	2	183	69	295	135	23	0	1	<sup>a</sup> 203	<sup>b</sup> 58	360	209	23	0					
Total, 1916.....	27	14	17	7	194	744	0	58	12	367	180	11	0	0	54	10	349	249	10	0					
Second district: NEW YORK, N. Y.:																									
Total, 1917.....	44	82	10	1	12	583	3	192	92	110	189	56	0	0	<sup>c</sup> 286	<sup>d</sup> 99	129	189	49	0					
Total, 1916.....	186	185	15	12	10	690	0	0	0	0	149	0	3	0	69	0	17	149	0	3					
Third district:																									
BALTIMORE, MD.....	78	35	3	5	33	428	1	72	3	86	104	13	2	1	102	12	166	105	14	2					
Norfolk and Newport News, Va.....	173	5	1	1	24			21	7			3			23		2		3						
Philadelphia, Pa.....	3	7	6	3	7			18	3	50			2		6										
Total, 1917.....	254	47	10	9	64	428	1	111	6	143	104	16	4	1	<sup>e</sup> 131	<sup>f</sup> 12	168	105	17	2					
Total, 1916.....	45	33	25	6	53	783	0	39	2	119	95	5	2	0	30	2	123	191	0	3					

<sup>a</sup> Includes 35 emergency licenses.  
<sup>b</sup> Includes 33 emergency licenses.

<sup>c</sup> Includes 10 emergency licenses.  
<sup>d</sup> Includes 15 emergency licenses.

<sup>e</sup> Includes 14 emergency licenses.  
<sup>f</sup> Includes 2 emergency licenses.

NATURE, AMOUNT, AND GEOGRAPHICAL DISTRIBUTION OF WORK PERFORMED DURING THE PAST FISCAL YEAR, AS COMPARED WITH THE FISCAL YEAR 1916, BY THE RADIO SERVICE, UNDER THE ACT (OF 1912) TO REGULATE RADIO COMMUNICATION—Continued.

Place of inspection or examination.	Stations inspected.					Operators examined.						Operators licensed.							
	Ship—Voluntary equipment.	Ship for license.	Land.		General and restricted amateur.	Amateur stations licensed.	Commercial.			Amateur.			Cargo.	Experiment and instruction.	Commercial.				
			First.	Second.			First.	Second.	First.	Second.	First.	Second.			First.	Second.	Cargo.		
<b>Fourth district:</b>																			
SAVANNAH, GA.			1	1		76													
Charleston, S. C.			1	1															
Jacksonville, Fla.				2															
Key West, Fla.				1															
Miami, Fla.				7															
Tampa, Fla.			1																
<b>Total, 1917.</b>	2	5	3	4	9	76	1	4	2	5	74	0	0	0	1	5	74		
<b>Total, 1916.</b>	0	0	0	0	0	86	0	0	0	0	81	0	0	0	0	0	0		
<b>Fifth district:</b>																			
NEW ORLEANS, LA.	54	19	3	2	11	79	10	55	1	13	76	12		4	75	6	13	76	
Amesville, La.	1	1															9	1	
Beaumont, Tex.			3	1															
Burrwood, La.				1															
Galveston, Tex.	5	2																	
Meraux, La.		1																	
Mobile, Ala.			3																
Port Arthur, Tex.	7	1	1																
<b>Total, 1917.</b>	67	24	10	5	11	79	10	56	1	13	77	12	0	4	75	6	13	76	
<b>Total, 1916.</b>	65	33	3	18	2	101	4	43	0	16	106	15	1	2	47	5	17	106	
<b>Sixth district:</b>																			
SAN FRANCISCO, CAL.	159	51	5	6	2	402	1	209	14	68	197	9	0	0	237	24	70	197	
Douglas, Ariz.				1															
Hollister, Cal.																			
Los Angeles, Cal.		2	4	1					31	5	100						17	14	94
Phoenix, Ariz.				1					1										
San Diego, Cal.									5	3	7								
San Pedro, Cal.	2	2		1															
<b>Total, 1917.</b>	161	55	10	11	2	402	1	246	22	175	197	9	0	0	a 254	b 38	164	197	
<b>Total, 1916.</b>	93	39	8	3	22	524	3	211	44	227	271	12	1	2	171	40	201	267	

Seventh district:																			
SEATTLE, WASH.	100	47	10	3	2	184	0	96	16	28	125	7	1	1	132	22	43	125	6
Portland, Oreg.	2		2	2	2			21	14	21					132	22	43	125	1
Vancouver, Wash.			1	1	4										76	23	67	163	0
Total, 1917	102	47	13	6	6	184	0	117	30	49	125	7	1	1	c 132	22	43	125	6
Total, 1916	174	51	22	9	30	213	2	77	31	74	163	5	0	0	76	23	67	163	0
Eighth district:																			
DETROIT, MICH.	65	15	3	2		659		54	20	46	263		2		17	32	55	543	4
Buffalo, N. Y.	5	4	1					17	9	36					6	10	25		
Cincinnati, Ohio									11	12						16			
Cleveland, Ohio	6	1	2	1				1	40	3	29				1	7	18	27	
Frankfort, Mich.		1		1				2											
Grand Haven, Mich.				1															
Ludington, Mich.		2		1												4	21		
Pittsburgh, Pa.								22	11						3	8			
Toledo, Ohio								13	7										
Total, 1917	76	23	6	7	0	659	1	159	62	111	263	0	2	1	d 39	e 105	107	543	0
Total, 1916	150	15	6	2	30	973	0	55	28	226	493	0	12	0	43	25	198	726	0
Ninth district:																			
CHICAGO, ILL.	261	18	0	4	9	666	1	177	54	144	344	0	3	0	99	92	116	541	0
Calumet, Mich.				1															7
Davenport, Iowa		1							3	18						2	13		
Duluth, Minn.				1					5	3	17					1	3	9	
Indianapolis, Ind.					1				7	2	38					2	35		
Mackinac Island, Mich.				1															
Manistique, Mich.				1															
Manitowoc, Wis.	1			1					10	7	53					2	6	43	
Milwaukee, Wis.	1	1	1	3					2	6						2	1		
Minneapolis, Minn.																			
Rock Island, Ill.		1			*														
St. Louis, Mo.					3				4	2	39					3	37		
Total, 1917	261	20	3	10	16	666	1	205	77	309	344	0	3	0	f 104	g 109	253	541	0
Total, 1916	371	30	3	0	79	761	0	109	20	195	434	0	8	0	65	32	136	606	0
SUMMARY.																			
First district	67	25	1	4	45	610	2	183	69	295	135	23	0	1	203	58	360	209	23
Second district	44	82	10	1	12	583	3	192	92	110	189	56	0	0	286	99	129	189	49
Third district	254	47	10	9	64	428	1	111	6	143	104	16	4	1	131	12	168	105	17
Fourth district	2	5	3	4	9	76	1	4	2	5	74	0	0	0	0	1	5	74	0
Fifth district	67	24	10	5	11	79	10	56	1	13	77	12	0	4	75	6	13	77	9
Sixth district	161	55	10	11	2	402	1	246	22	175	197	9	0	0	254	38	164	197	9
Seventh district	102	47	13	6	6	184	0	117	30	49	125	7	1	1	132	22	43	125	6
Eighth district	76	23	6	7	0	659	1	159	62	111	263	0	2	1	39	105	107	543	0
Ninth district	261	20	3	10	16	666	1	205	77	309	344	0	3	0	104	109	253	541	0
Grand total, 1917	1,034	328	66	57	165	3,687	20	1,273	361	1,210	1,508	123	10	8	1,224	450	1,242	2,060	113
Grand total, 1916	1,111	400	98	57	420	4,875	9	592	137	1,224	2,072	48	27	4	555	137	1,108	2,538	44

<sup>a</sup> Includes 13 emergency licenses.<sup>b</sup> Includes 5 emergency licenses.<sup>c</sup> Includes 5 emergency licenses.<sup>d</sup> Includes 4 emergency licenses.<sup>e</sup> Includes 39 emergency licenses.<sup>f</sup> Includes 12 emergency licenses.<sup>g</sup> Includes 32 emergency licenses.<sup>h</sup> Includes 93 emergency licenses.<sup>i</sup> Includes 124 emergency licenses.

**ENFORCEMENT OF THE NAVIGATION LAWS.**

The enforcement of the navigation laws during the fiscal year 1917 proceeded as usual, although the work to a certain extent was affected by war conditions during the latter part. The Bureau employed the motor vessels *Dixie* and *Tarragon* in this work, together with 56 navigation inspectors and 14 radio inspectors.

During the year 7,569 violations of the navigation laws were acted on by the Department. This is a decrease of 256 cases from the number reported last year, which was the largest in the history of the Bureau.

The number of violations of the steamboat-inspection laws continues to increase, the total, 1,020, being 208 in excess of that for the previous year. This is due principally to the increased demand for licensed mates caused by the unusual increase in our foreign-going fleet, as well as the difficulty of securing at some of our ports properly certificated able seamen and lifeboat men. The decrease of 466 cases of violation of the motor-boat law undoubtedly is due to better compliance with the law by the owners of these vessels, as the number of inspections made during the year was about the same as on previous occasions.

The following table shows the work, by districts and laws violated, followed by comparison of the work in previous years:

## VIOLATIONS OF NAVIGATION LAWS REPORTED BY THE VARIOUS COLLECTORS OF CUSTOMS, SHOWING THE LAWS VIOLATED, FISCAL YEAR ENDED JUNE 30, 1917, COMPARED WITH PREVIOUS YEARS.

Headquarters port.	Total.	Steamboat laws (R. S., 4399-4500),	Motor-boat law "Rules of road."	Surrendered license (R. S., 4325-4326),	Bills of health (Feb. 15, 1893). <sup>a</sup>	Seamen's act (Mar. 4, 1915).	Anchorage and St. Marys River rules.	Passenger act (Aug. 2, 1882).	Enrollment and license (R. S., 4336).	Name on vessel (R. S., 4178).	Change of master (R. S., 4335).	Unloading.	Radio-communication laws.	Miscellaneous.
Baltimore	461	11	396	15	—	3	—	—	2	29	3	—	—	—
Boston	427	171	155	50	—	9	—	—	5	3	1	1	5	14
Bridgeton	89	5	53	15	—	—	—	—	—	—	—	16	—	—
Buffalo	87	36	50	—	—	1	—	—	—	—	—	—	—	—
Charleston	50	—	14	21	—	—	—	—	—	—	—	—	—	8
Chicago	283	18	246	3	—	5	—	—	3	1	6	—	—	2
Cleveland	161	128	7	16	—	9	—	—	—	4	2	—	1	—
Denver	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Des Moines	116	—	99	3	—	—	—	—	—	14	—	—	—	—
Detroit	163	27	105	8	—	2	—	—	4	9	2	2	1	3
Duluth	138	71	58	4	—	2	—	—	1	—	—	2	—	—
Eagle Pass	1	—	—	—	—	—	—	—	—	—	—	—	—	1
El Paso	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Galveston	105	50	35	10	—	—	—	—	—	1	5	2	—	2
Great Falls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Honolulu	18	1	6	2	—	2	—	—	2	—	—	4	1	—
Indianapolis	54	—	47	1	—	—	—	—	—	6	—	—	—	—
Juneau	40	3	2	24	—	—	—	—	1	2	4	1	1	2
Laredo	10	2	2	2	—	—	—	—	1	—	—	1	1	1
Los Angeles	137	3	95	25	—	—	—	—	—	7	1	1	1	—
Louisville	128	7	102	10	—	—	—	—	1	—	8	—	—	—
Memphis	84	21	33	17	—	—	—	—	—	9	1	3	—	—
Milwaukee	82	29	40	1	—	—	—	—	1	—	8	1	2	—
Mobile	109	15	18	47	—	2	—	1	2	—	3	4	2	15
New Orleans	315	45	147	71	—	4	—	—	4	—	28	2	4	6
New York	1,292	97	1,049	60	—	5	—	5	12	1	47	2	4	10
Nogales	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Norfolk	430	47	328	18	—	1	—	—	—	—	20	1	1	14
Ogdensburg	74	2	45	24	—	—	—	—	—	1	—	1	1	1
Omaha	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pembina	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Philadelphia	406	41	252	60	—	5	—	1	—	39	2	2	1	3
Pittsburgh	4	3	—	1	—	—	—	—	—	—	9	1	1	2
Port Arthur	93	53	7	20	—	—	—	—	—	—	4	—	—	—
Portland, Me.	145	19	101	20	—	1	—	—	2	—	2	1	—	2
Portland, Oreg.	130	2	119	3	—	1	—	—	1	1	8	—	1	2
Providence	94	10	65	6	—	—	—	—	—	3	3	—	—	—
Rochester	44	2	36	—	—	—	—	—	—	—	—	—	—	—
St. Albans	68	—	68	—	—	—	—	—	—	—	—	—	—	—
St. Louis	348	10	307	24	—	—	—	1	—	4	1	1	—	—
St. Paul	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Salt Lake City	—	—	—	—	—	—	—	—	—	—	—	—	—	—
San Francisco	196	33	70	22	—	5	—	6	5	6	17	2	4	22
San Juan	12	3	2	4	—	—	—	—	—	1	—	2	—	—
Savannah	48	12	16	1	—	12	—	—	—	—	6	—	1	—
Seattle	318	16	138	100	—	27	—	—	5	5	14	4	6	2
Tampa	547	24	134	56	—	192	—	—	2	—	55	5	6	—
Wilmington, N. C.	262	3	213	6	—	—	—	—	1	4	29	3	3	—
Total—	7,569	1,020	4,660	770	—	286	—	29	42	43	400	41	74	22
1917 (48 ports) <sup>b</sup>	—	—	—	—	—	271	—	1	19	59	28	331	35	67
1916 (48 ports) <sup>b</sup>	7,825	812	5,126	943	—	—	—	11	10	104	41	348	67	93
1915 (48 ports) <sup>b</sup>	6,868	671	4,462	982	—	—	—	8	25	41	26	153	59	90
1914 (49 ports) <sup>b</sup>	6,720	768	4,838	631	—	—	—	23	8	24	10	83	26	1
1913 (107 ports)	3,506	333	2,783	23	—	—	—	12	17	38	39	81	12	52
1912 (105 ports)	3,634	165	3,119	96	3	—	—	13	45	10	16	43	30	50
1911 (92 ports)	2,268	182	1,811	23	41	—	—	17	45	14	7	59	—	76
1910 (74 ports)	1,070	252	488	17	52	—	—	13	61	13	16	68	12	43
1909 (64 ports)	1,134	151	710	33	69	—	—	3	21	14	7	59	—	63
1908 (73 ports)	852	245	385	12	42	—	—	6	21	23	18	30	7	61
1907 (66 ports)	684	209	92	88	36	—	—	18	62	9	23	52	27	55
1906 (77 ports)	670	194	130	114	41	—	—	13	27	10	6	49	5	9
1905 (63 ports)	524	142	53	99	42	—	—	13	21	26	7	20	11	28
1904 (66 ports)	706	184	93	101	48	—	—	49	16	29	12	24	19	131

<sup>a</sup> Bills of health cases transferred to Treasury Department July 24, 1911.<sup>b</sup> Reports are now made by subports through the principal port of the district.<sup>c</sup> Included under "Miscellaneous" in 1904 report.

The following table shows the work done by the various branches of the services engaged in the enforcement of the navigation laws:

NUMBER OF VIOLATIONS OF THE NAVIGATION LAWS ON WHICH PENALTIES WERE IMPOSED AND SOURCES OF THE REPORTS FOR FISCAL YEAR 1917.

Headquarters port.	Total.	Coast guard.	Tar- ragon.	Dixie.	Local inspec- tors.	Radio inspec- tors.	Cus- toms officers.	Navigation inspec- tors.	Cases reported under allot- ments.
Baltimore.....	469	5	185	119	7		16	137	137
Boston.....	431	33		103	181	5	109		
Bridgeport.....	90	31		24	3		32		
Buffalo.....	87			4	36		1	46	46
Charleston.....	48	4	2				42		
Chicago.....	286	205			21		24	36	36
Cleveland.....	173	3			132		38		
Denver.....									
Des Moines.....	109	67					42		39
Detroit.....	173	112			30		31		
Duluth.....	133						104	29	29
Eagle Pass.....	1						1		
El Paso.....									
Galveston.....	103	24	1		2		76		
Great Falls.....									
Honolulu.....	20				1		19		
Indianapolis.....	54	8					12	34	34
Juneau.....	41	9			3		29		
Laredo.....	10	2					8		
Los Angeles.....	135				1		134		102
Louisville.....	131	12			13		62	44	44
Memphis.....	77				18		31	28	28
Milwaukee.....	84	48			27		9		
Mobile.....	109	5	17		13		74		
New Orleans.....	314	33	124		22	3	132		
New York.....	1,291	252	554	235	71		133	46	46
Nogales.....	1							1	
Norfolk.....	425	23	55	231	40		39	37	37
Ogdensburg.....	72				1		71		44
Omaha.....									
Pembina.....									
Philadelphia.....	396	3	7	46	9		187	144	144
Pittsburgh.....	4				3		1		
Port Arthur.....	91	1	13		7		70		
Portland, Me.....	145	7		99	15		24		
Portland, Oreg.....	126				1		125		118
Providence.....	95	22		3	6		22	42	42
Rochester.....	44						44		
St. Albans.....	68						68		68
St. Louis.....	334	80			10		213	31	31
St. Paul.....									
Salt Lake City.....									
San Francisco.....	194	116			3	4	71		8
San Juan.....	13						13		
Savannah.....	50	1	5		10		34		
Seattle.....	329	90			12	1	226		126
Tampa.....	549	15	79		13		442		
Wilmington, N. C.....	260	44	192		1		23		
Total—									
1917 (48 ports)....	7,565	1,255	1,234	864	712	13	2,833	654	1,159
1916 (48 ports)....	7,895	1,333	987	984	590	36	2,876	1,089	1,178
1915 (48 ports)....	6,860	1,380	1,425		361	34	2,661	999	1,401
1914 (49 ports)....	6,720	922	1,762		734	27	3,275		1,325

The foregoing statement of the work done by the various inspection services is based on reports made by collectors of customs on Catalogue 1078 and is approximately correct.

The motor vessels *Tarragon* and *Dixie*, operated by the Bureau, reported 2,098 cases, as against 1,255 cases reported by the entire Coast Guard service. Since the declaration of war on April 6 the Coast Guard fleet, however, has operated with the Navy.

The following table shows the work of the various customs ports for 14 years:

## COMPARATIVE STATEMENT OF CASES OF VIOLATIONS OF THE NAVIGATION AND STEAMBOAT-INSPECTION LAWS REPORTED BY OFFICERS OF CUSTOMS, 1904-1917.

Port.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	Total.
Baltimore	65	30	14	34	21	43	49	114	129	294	219	396	312	461	2,181
Boston	27	33	40	15	8	18	34	132	327	67	949	440	412	427	2,929
Bridgeport	8	7	12	9	9	4	13	206	423	30	134	118	54	89	1,116
Buffalo	1	3	3	5	10	8	32	9	75	64	3	42	144	87	486
Charleston	2		5	21	3	2	4	1	4	13	154	91	39	50	389
Chicago	8	7	8	7	21	5	70	138	55	35	105	178	389	283	1,309
Cleveland	14	14	20	20	27	10	32	114	66	76	90	104	218	161	966
Des Moines	1		2	3	5	4			3		160	85	4	116	333
Detroit	33	23	41	48	28	86	161	69	251	221	112	233	441	163	1,970
Duluth	34	16	15	16	15	14	46	9	13	15	17	62	79	138	489
Eagle Pass									1	3	28	2		1	35
El Paso															
Galveston	7	5	8	15	5	9	1	6	2	39	49	49	50	105	350
Great Falls															1
Honolulu	6	2	8		7	17	20	14	14	11	15	14	18	18	164
Indianapolis						2		7	23	5	1	5	109	54	206
Juneau	18	21	10	22	9	8	17	113	67	27	41	43	33	40	469
Laredo	1								1	16	5	14	2	7	56
Los Angeles		8	5	5	52	4	26	65	36	23	79	182	172	137	794
Louisville		1	2	5				1	14	24	6	41	58	63	343
Memphis	3	3	7	4	4	3	8	10	12	9	10	52	94	84	298
Milwaukee	2	6	9	4	14	19	13	16	22	16	16	8	133	82	360
Mobile	21	35	32	23	6	9	41	36	40	30	157	107	106	109	752
New Orleans	11	15	38	21	21	16	24	51	71	73	218	173	177	315	1,224
New York	164	132	160	124	250	638	174	292	352	330	1,013	622	1,256	1,292	6,799
Nogales															
Norfolk	43	13	21	16	170	66	43	214	121	489	235	335	531	430	2,727
Ogdensburg	5	4	2	4	4	6	6	13	25	20	57	40	92	74	352
Omaha															
Pembina															8
Philadelphia	25	12	26	16	10	8	17	25	28	164	378	867	483	406	2,465
Pittsburgh						3	5	1	24	6	21	13	27	4	104
Port Arthur					6	4	3	5	28	35	10	126	33	68	93
Portland, Me.	7	9	5	7	14	13	26	86	157	51	78	566	241	145	1,405
Portland, Oreg.	7	7	11	5	2	3	6	7	125	331	354	273	229	130	1,490
Providence	1	2	14	9	9	13	7	79	70	20	130	21	125	94	594
Rochester				4	1	2	1	7	18	23	42	34	28	42	246
St. Albans										4	1	54	3	33	68
St. Louis			1		3	3	8	30	88	20	109	186	154	348	950
St. Paul	1	1	1			2		3			5	1	5		19
Salt Lake City															
San Francisco	6	20	11	73	25	20	70	103	64	107	260	446	276	196	1,677
San Juan	11	4	4	3	13	3	9	9	25	18	28	28	11	12	178
Savannah	5	1	7	1	6	2	1	2	7	6	98	78	82	48	344
Seattle	138	54	72	87	33	29	19	74	108	59	381	306	409	318	2,087
Tampa	27	33	46	54	29	27	80	135	682	364	669	314	570	547	3,577
Wilmington, N. C.	4	3	5	1	8	11	5	23	20	373	104	206	137	262	1,162
Total (47 ports)	706	524	670	684	852	1,134	1,070	2,268	3,634	3,506	6,720	6,868	7,825	7,569	44,030

## MOTOR VESSEL "DIXIE."

This vessel, which went into commission July 1, 1915, and since that time patrolled the waters of the New England coast as far south as New York during the summer and Chesapeake Bay and adjacent waters in the winter in connection with the supervision of the oyster fleet, has been equipped with two new standard 150-horsepower engines and at present is in use by the Navy Department as a dispatch boat. With her new engines she has developed a speed of about 18 miles an hour and is especially suited for naval work.

## MOTOR VESSEL "KILKENNY."

To replace the motor vessel *Dixie*, turned over to the Navy Department for the period of the war, the Bureau arranged to purchase the motor boat *Kilkenny*, of 52 gross and 45 net tons. She is 79.4 feet on the water line with a beam of 14.4 feet. Although the owner, Mr. Edward Crozer, of Philadelphia, had a cash offer of \$15,000 for the vessel, through patriotic desire to assist the Government, he offered her for \$8,700 and later canceled the voucher giving the vessel and her equipment to the Department entirely without cost.

**MOTOR VESSEL "TARRAGON."**

The *Tarragon* has continued her work of inspection of motor boats and larger vessels, reporting during the year 1,234 violations of the law, nearly one-sixth of the entire number of violations reported during the year from all sources. The vessel does much work in preventing the overcrowding of passenger vessels, seeing that the rules of the road are complied with, proper lights carried, etc., in addition to her motor-boat work.

**REGULATION OF MOTOR BOATS.**

The Bureau has continued to bring to the attention of motor-boat owners the act of June 9, 1910, encouraging voluntary compliance with the law, as the work of inspection and imposition of penalties alone is not sufficient to accomplish the purpose. Motor-boat publications, clubs, and organizations are cooperating with the Department, and the reduction in the number of violations discovered is evidence that the work is securing results.

**MOTOR-BOAT LEGISLATION.**

The following recommendations in the report for last year are renewed, the excise motor-boat tax under the war revenue act of October 3, 1917, requiring enactment of the numbering bill already passed by the Senate:

It does not seem feasible or necessary to apply in their entirety the laws and regulations governing steam vessels (of which there are about 8,000 subject to the inspection laws), to thirty times that number of motor boats. The cost of administration would be very large and the need does not, to my mind, justify the expenditure. At the same time it does not seem right that there should be no restriction whatever upon the number of passengers that can be carried upon the motor boat beyond the requirement that there must be a life preserver for each person carried. That requirement in itself is a reasonable regulation in the case of small boats. When, however, as is frequently the case, 25, 50, or as many as 100 persons are crowded on these small boats, serious risks are incurred, which it is the part of prudence to diminish by legislation.

The passage of a law is suggested providing that motor boats shall not carry passengers in excess of an arbitrary fixed number, unless they have been subject to the inspection prescribed for the like type of steam vessels and unless those in charge of them have been licensed after examination in the same manner as the corresponding officers on steam vessels are licensed. Such legislation should not take tonnage as its basis but should be based on the length of the vessel over all, which is much more readily ascertained. Legislation along these lines should consider also the nature of the waters on which the boat is employed. After consultation with those competent to express correct and disinterested opinions on the subject, it is hoped to submit a draft of a bill for your consideration.

The advantages of a Federal system of numbering motor boats were presented at some length in last year's report by the officers more directly concerned with the administration of the motor-boat law. The States have found it necessary to establish systems of numbering automobiles, and for some reasons a Federal system of numbering motor boats may be necessary. The following measure seems as simple as can be devised, if Congress shall deem it necessary to take up the subject:

**A BILL To require numbering and recording of undocumented vessels.**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That every undocumented vessel, operated in whole or in part, by machinery, owned in the United States and found on the navigable waters thereof, except public vessels and vessels not exceeding sixteen feet in length measured from end to end over the deck, excluding sheer, equipped with detachable motors, shall be numbered. Such numbers shall be not less in size than three inches and painted

or attached to each bow of the vessel in such manner and color as to be distinctly visible and legible.

SEC. 2. The said numbers, on application of the owner or master, shall be awarded by the collector of customs of the district in which the vessel is owned and a record thereof kept in the customhouse of the district in which the owner or managing owner resides. No numbers not so awarded shall be carried on the bows of such vessel.

SEC. 3. Notice of destruction or abandonment of such vessels or change in their ownership shall be furnished within ten days by the owners to the collectors of customs of the districts where such numbers were awarded. Such vessels sold into another customs district may be numbered anew in the latter district.

SEC. 4. The penalty for violation of any provision of this Act shall be ten dollars, for which the vessel shall be liable and may be seized and proceeded against in the district court of the United States in any district in which such vessel may be found. Such penalty on application may be mitigated or remitted by the Secretary of Commerce.

SEC. 5. The Secretary of Commerce shall make such regulations as may be necessary to secure proper execution of this Act by collectors of customs and other officers of the Government.

This Act shall take effect six months after its passage.

Without regulation certain motor-boat owners carry more passengers for hire than their vessels will accommodate with safety. The number of people that may be carried on motor boats is now restricted only by the rule that such boats must have a life preserver for every person on board. The following bill is intended to require every motor boat, carrying 20 or more passengers for hire, to have its hull and machinery inspected and the operator in charge licensed under circumstances which will establish the fact that he is qualified to navigate properly such a vessel. Perhaps the most beneficial feature of the bill, however, is that part which enables the local inspectors of steam vessels to limit the number of passengers over 20 which such boats may carry with prudence and safety.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section forty-four hundred and twenty-six of the Revised Statutes as amended by the Act of May sixteenth, nineteen hundred and six, is hereby amended so as to read:*

“SEC. 4426. (a) The hull and boilers of every ferryboat, canal boat, yacht, or other small craft of like character propelled by steam, shall be inspected under the provisions of this title. Such other provisions of law for the better security of life as may be applicable to such vessel shall, by the regulations of the Board of Supervising Inspectors, also be required to be complied with before a certificate of inspection shall be granted, and, UNLESS OTHERWISE PROVIDED FOR BY LAW, no such vessel shall be navigated without a licensed engineer and a licensed pilot: *Provided, however, That in open steam launches of ten gross tons and under, one person, if duly qualified, may serve in the double capacity of pilot and engineer.*

“(b) All vessels above fifteen gross tons carrying freight or passengers for hire, but not engaged in fishing as a regular business, propelled by MACHINERY OTHER THAN BY STEAM, shall be, and are hereby, made subject to all the provisions of PARAGRAPH (A) OF THIS SECTION, relating to the inspection of hulls and boilers and requiring engineers and pilots, and to the rules and regulations established thereunder.

“(c) THAT EVERY VESSEL PROPELLED BY MACHINERY OTHER THAN BY STEAM AND EVERY STEAM VESSEL NOT MORE THAN SIXTY-FIVE FEET IN LENGTH FROM END TO END OVER THE DECK, EXCLUDING SHEER, WHILE CARRYING TWENTY OR MORE PASSENGERS FOR HIRE, IN ADDITION TO THE INSPECTION ALREADY PROVIDED BY LAW, SHALL BE INSPECTED AS TO THE HULL AND GENERAL CONDITION OF THE OPERATING MACHINERY, AND THE LOCAL INSPECTORS, WHERE CERTIFICATES OF INSPECTION ARE NOT NOW PROVIDED FOR BY LAW, SHALL ISSUE TO SUCH VESSELS CERTIFICATES OF APPROVAL, IN ACCORDANCE WITH THE FORM AND REGULATIONS PRESCRIBED BY THE BOARD OF SUPERVISING INSPECTORS. ALL CERTIFICATES OF INSPECTION AND OF APPROVAL ISSUED UNDER AUTHORITY OF THIS SECTION SHALL STATE THE NUMBER OF PASSENGERS SUCH INSPECTED OR APPROVED VESSELS CAN CARRY WITH PRUDENCE AND SAFETY.

“(d) THE OPERATORS OF SUCH VESSELS, EXCEPT VESSELS PROPELLED BY MACHINERY OTHER THAN BY STEAM ABOVE FIFTEEN GROSS TONS AND OVER SIXTY-FIVE FEET IN LENGTH FROM END TO END OVER THE DECK, EXCLUDING SHEER, WHILE CARRYING TWENTY OR MORE PASSENGERS FOR HIRE, SHALL BE LICENSED BY THE LOCAL

INSPECTORS OF STEAM VESSELS AFTER AN EXAMINATION COVERING KNOWLEDGE OF THE RULES OF THE ROAD, ABILITY TO DISTINGUISH COLORS, GENERAL KNOWLEDGE OF MOTOR ENGINES AND MACHINERY, AND OF THE NAVIGATION OF WATERS IN WHICH THE VESSEL IS TO BE USED.

"(E) THE CERTIFICATES OF APPROVAL AND THE LICENSES OF SUCH OPERATORS SHALL BE KEPT ON BOARD WHILE SUCH VESSELS ARE CARRYING TWENTY OR MORE PASSENGERS, AND SHALL BE EXHIBITED ON REQUEST OF ANY OFFICER CONCERNED IN THE ENFORCEMENT OF THE NAVIGATION LAWS.

"(F) IF ANY VESSEL SUBJECT TO THIS SECTION IS NAVIGATED WITHOUT COMPLYING WITH THE REQUIREMENTS THEREOF, OR CARRIES PASSENGERS FOR HIRE IN EXCESS OF THE NUMBER ALLOWED BY HER CERTIFICATE OF INSPECTION OR OF APPROVAL, SUCH VESSEL SHALL BE LIABLE TO THE UNITED STATES IN A PENALTY OF FIVE HUNDRED DOLLARS FOR EACH OFFENSE, FOR WHICH SUM SUCH VESSEL MAY BE SEIZED AND PROCEEDED AGAINST, BY WAY OF LIBEL, IN THE DISTRICT COURT OF THE UNITED STATES OF THE DISTRICT WHERE THE OFFENSE OCCURRED, OR WHERE SUCH VESSEL MAY BE FOUND.

"(G) ALL COLLECTORS OR OTHER CHIEF OFFICERS OF THE CUSTOMS AND ALL INSPECTORS WITHIN THE SEVERAL DISTRICTS SHALL ENFORCE, UNDER THE DIRECTION OF THE SECRETARY OF COMMERCE, THE PROVISIONS OF THIS SECTION."

The portions of the above bill printed in small capitals are new.

#### PREVENTION OF OVERCROWDING OF PASSENGER VESSELS.

During the fiscal year this work continued with little change from that of the previous year. There were 11,958 counts of 5,172,348 passengers going on vessels. This is an increase of about 58,000 passengers over last year. These inspectors also reported 654 violations of the navigation laws other than overcrowding of vessels.

The following table shows by ports 331 occasions on which our inspectors prevented more passengers going on board after the capacity had been reached. The safety of 267,017 passengers was involved, as undoubtedly on most of these occasions there would have been an overcrowding of the vessel had the inspectors not been present.

SHUT-OFFS, BY MONTHS, DURING THE FISCAL YEAR 1917.

Port.	July.		August.		Septem- ber.		Novem- ber.		Decem- ber.		March.		May.		June.		Total.		
	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	
Baltimore.....	28	23,226	6	4,750	3	3,050	1	500	.....	.....	2	1,538	.....	.....	2	2,384	42	35,448	
Boston.....	.....	.....	17	15,083	4	1,856	.....	.....	.....	.....	.....	.....	.....	.....	21	16,939	.....	.....	
Buffalo.....	2	1,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1,300	.....	.....	
Charleston, S. C. ....	1	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	300	.....	.....	
Chicago.....	71	30,898	24	8,066	1	202	.....	.....	.....	.....	.....	.....	.....	3	616	99	39,782	.....	
Cleveland.....	40	36,156	17	12,611	2	1,915	.....	.....	.....	.....	.....	.....	59	50,682	.....	.....	.....	.....	
Detroit.....	22	50,883	11	26,568	.....	.....	.....	.....	.....	.....	.....	.....	11,800	34	79,251	5	3,196	.....	
Duluth.....	5	3,196	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	900	.....	.....	.....	
Indianapolis.....	1	900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	356	4	1,337	.....	.....	
Louisville.....	2	625	1	356	.....	.....	.....	.....	.....	.....	.....	.....	1,000	3	1,872	9	4,413	.....	
Memphis.....	1	600	.....	.....	1	272	.....	.....	.....	.....	.....	.....	1,000	1	1,189	2	700	.....	
Norfolk.....	2	956	6	3,011	1	416	.....	.....	.....	.....	.....	.....	1,000	1	1,202	26	22,206	.....	
Ogdensburg.....	2	700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	1	670	1	670	.....	
Philadelphia.....	1	1,189	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	1	1,202	1	1,202	.....	
Portland, Me. ....	1	400	4	802	.....	.....	.....	.....	.....	.....	.....	.....	1,000	1	1,202	1	1,202	.....	
Providence.....	8	4,394	15	13,202	3	4,610	.....	.....	.....	.....	.....	.....	1,000	1	1,202	26	22,206	.....	
Rochester.....	1	670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	1	670	1	670	.....	
Seattle.....	11	3,655	.....	1	280	.....	.....	.....	.....	.....	1,230	21,538	31,435	8,6,156	12	3,965	1	230	.....
Tampa.....	.....	.....	.....	.....	.....	.....	.....	.....	1	230	.....	.....	1	725	1	725	2	710	.....
St. Albans.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	710	2	710	.....	.....	.....
Total...	199	160,108	101	84,449	16	12,601	1	500	1	230	21	538	31,435	8,6,156	331	267,017	.....	.....	.....

The above totals do not include the report from New York, which shows that during the fiscal year 22,144 intending passengers were shut off on a total of 82 trips.

The following table shows the work in detail by both the navigation and customs officers:

NUMBER OF COUNTS AND THE NUMBER OF PASSENGERS INVOLVED IN PREVENTING  
OVERCROWDING OF PASSENGER VESSELS DURING FISCAL YEAR 1917.

Port.	Navigation.		Customs.		Total.	
	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.
Baltimore.....	1,719	838,469	5	1,733	1,724	840,202
Boston.....	2	2,154	875	648,744	877	650,898
Bridgeport.....			5	3,861	5	3,861
Buffalo.....			3,023	829,053	3,023	829,053
Charleston, S. C.....			26	11,218	26	11,218
Chicago.....	897	269,633	127	45,425	1,024	315,058
Cleveland.....	1,376	259,534	389	318,960	1,765	578,494
Detroit.....	674	891,171	69	87,990	743	979,161
Des Moines.....			1	1,242	1	1,242
Duluth.....	87	15,616	142	43,998	229	59,614
Galveston.....			90	6,935	90	6,935
Indianapolis.....	128	41,010	2	854	130	41,864
Louisville.....	158	36,838	119	59,442	277	96,280
Memphis.....	177	63,916	4	2,515	181	66,431
Mobile.....			10	2,342	10	2,342
New Orleans.....			3	1,132	3	1,132
Norfolk.....	68	22,667	28	10,090	96	32,757
Ogdensburg.....			33	12,686	33	12,686
Philadelphia.....	242	151,998	71	34,724	313	186,722
Port Arthur.....			31	307	31	307
Portland, Me.....	487	73,318	1	112	488	73,430
Portland, Oreg.....			14	2,388	14	2,388
Providence.....	607	282,975	38	9,563	645	292,538
St. Albans.....			46	17,987	46	17,987
Seattle.....			182	69,303	182	69,303
Tampa.....			2	445	2	445
Total.....	6,622	2,949,299	5,336	2,223,049	11,958	5,172,348
Total for fiscal year 1916.....	8,359	3,244,953	5,451	1,867,814	13,810	5,114,351

The above totals do not include the report from New York, which shows a total number of counts for the fiscal year of 3,608, the number of passengers involved being 1,624,093.

PASSENGER ACT OF 1882.

The number of ships of the American trade subject to the passenger act of 1882 continues to decline with the decrease in the ocean passenger trade and the heavy increase in exports on cargo boats.

During the past fiscal year passenger ships on 630 voyages brought 147,493 steerage passengers to the United States, compared with 720 voyages carrying 154,057 passengers in the fiscal year 1916; 956 voyages carrying 211,057 passengers in 1915; and 1,797 voyages carrying 1,016,453 passengers in 1914.

ADMEASUREMENT OF VESSELS.

The unprecedented increase in shipbuilding in the United States renders the accurate measurement of the tonnage of vessels building even more important than hitherto. At present, under laws administered by the Department of Commerce, employees of the Treasury Department at the customs ports measure vessels. Except at a very few ports, these men are primarily customs inspectors detailed as occasion requires to measure vessels. This system does not

secure uniformity and accuracy of measurement, which is necessary. By cooperation with the Treasury Department it is hoped that at a later date a system devised to secure more satisfactory results may be put into operation.

Respectfully,

EUGENE TYLER CHAMBERLAIN,  
*Commissioner.*

To Hon. WILLIAM C. REDFIELD,  
*Secretary of Commerce.*

## APPENDIXES.

### APPENDIX A.

#### REPORTS OF SHIPPING COMMISSIONERS FOR THE FISCAL YEAR ENDED JUNE 30, 1917.

The following statements are based on the annual reports of United States shipping commissioners for the fiscal year ended June 30, 1917. Shipping commissioners are appointed by the Secretary of Commerce at each port of entry which is also a port of ocean navigation and for which Congress has made necessary appropriation.

The reports cover:

1. Shipments, discharges, and expenditures.
2. Shipments and reshipments.
3. Discharges.
4. Nationality of seamen.
5. Failures to join.
6. Men shipped to be discharged abroad.
7. Allotments of wages.
8. Seamen shipped and discharged by collectors.

#### 1. SHIPMENTS, DISCHARGES, AND EXPENDITURES.

The following table shows the seamen shipped and discharged by each commissioner, the total cost to the Government of each office, and the number of employees authorized:

Port.	Discharged.	Shipped and re-shipped.	Total.	Total amount of salaries paid.	Average cost per man.	Employees.
Baltimore.....	7,189	9,359	16,548	\$2,122.50	\$0.13	1
Bath.....	92	773	865	771.00	.89	-----
Boston.....	14,120	17,143	31,263	6,420.00	.21	3
New Bedford.....	172	618	790	866.00	1.10	-----
New Orleans.....	20,724	21,784	42,508	3,132.50	.07	2
New York.....	148,884	139,621	288,505	19,401.50	.07	12
Norfolk.....	2,338	4,186	6,524	1,692.50	.26	-----
Philadelphia.....	8,956	11,217	20,173	6,000.00	.30	3
Portland, Me.....	1,419	3,072	4,491	2,045.83	.45	1
Providence.....	215	3,505	3,720	2,400.00	.64	1
Rockland.....	376	1,251	1,627	1,021.00	.63	-----
San Francisco.....	20,404	19,990	40,394	9,780.00	.24	5
Seattle.....	24,725	24,808	49,533	10,553.00	.21	7
Total.....	249,614	257,327	506,941	66,211.83	.13	35

## 2. SHIPMENTS AND RESHIPMENTS OF SEAMEN.

The following table, compiled by shipping commissioners from articles of agreement, shows the number of men shipped and reshipped on vessels of the types and in the trades named. Half-rate foreign ports are those in British North America, the West Indies, and Mexico. Seamen reshipped are those who at the end of a voyage engaged to serve on the next voyage of the same vessel.

Port.	Foreign ports.						Domestic ports.				Total shipments and reshipments.	
	Shipped.				Reshipped.		Shipped.		Reshipped.			
	Full-rate ports.		Half-rate ports.		Steam.	Sail.	Steam.	Sail.	Steam.	Sail.		
	Steam.	Sail.	Steam.	Sail.	Steam.	Sail.	Steam.	Sail.	Steam.	Sail.		
Baltimore.	1,450	122	1,289	70	1,082	5	2,610	227	2,467	37	9,359	
Bath.			82				243	389		59	773	
Boston.	2,264	187	545	148	2,517	33	2,706	814	7,897	32	17,143	
New Bedford.	169						172	276		1	618	
New Orleans.	4,280	89	1,620	107	10,466	2	569	13	4,621	17	21,784	
New York.	23,038	1,215	10,053	674	57,263	34	6,825	210	40,299	10	139,621	
Norfolk.					1,005		2,147		1,034		4,186	
Philadelphia.	1,679	246	1,059	229	2,046	45	2,293	251	3,291	78	11,217	
Portland, Me.	68	14	342	59	234	1	1,220	399	653	82	3,072	
Providence.	38	43					1,909	914	371	230	3,505	
Rockland.	3		30	48	17	9	296	547	109	192	1,251	
San Francisco.	4,974	547	644	88	4,263	108	2,196	139	7,008	23	19,990	
Seattle.	462	714	72		107	20	11,718	737	10,968	10	24,808	
Total.	38,253	3,349	15,736	1,423	79,000	257	34,904	4,916	78,718	771	257,327	

## 3. NUMBER OF MEN DISCHARGED.

The following table, compiled by shipping commissioners from articles of agreement, shows the number of men discharged and paid off by commissioners from vessels of the types and in the trades named:

Port.	Foreign ports.				Domestic ports.				Total discharged.	
	Full-rate ports.		Half-rate ports.		Steam.		Sail.			
	Steam.	Sail.	Steam.	Sail.	Steam.	Sail.	Steam.	Sail.		
Baltimore.	2,552	84	2,358	28	2,058		79		7,189	
Bath.							92		92	
Boston.	4,033	88	966	49	8,839		145		14,120	
New Bedford.			148				24		172	
New Orleans.	14,541	38	4,713	58	1,374				20,721	
New York.	47,855	1,051	38,518	258	61,100		102		148,884	
Norfolk.	1,494						844		2,338	
Philadelphia.	2,409	344	2,115	126	3,790		172		8,956	
Portland, Me.	25	22	403	8	719		242		1,419	
Providence.		13					171	31	215	
Rockland.					8		150	218	376	
San Francisco.	8,063	926	1,049	127	10,020		219		20,404	
Seattle.	179	519	255		23,406		366		24,725	
Total.	81,151	3,233	50,407		662	112,471	1,690		249,614	

## 4. NATIONALITY OF SEAMEN.

The following table, compiled by shipping commissioners from articles of agreement, shows the nationality of men shipped and reshipped. During the past fiscal year commissioners have indicated the fact of naturalization on the articles.

Port.	American.								British.			
	Native.				Naturalized.							
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.
Baltimore.....	3,519	18	204	3,741	486	2	10	498	530	16	38	584
Bath.....	82	...	389	471	...	...	10	10	...	...	15	15
Boston.....	6,471	9	495	6,975	1,201	3	113	1,317	1,808	8	189	2,005
New Bedford.....	50	...	102	152	29	6	176	211	...	...	...	...
New Orleans.....	8,157	...	58	8,215	2,185	...	32	2,217	3,323	9	3,332	...
New York.....	38,437	67	404	38,908	10,507	24	140	10,671	17,304	35	220	17,559
Norfolk.....	...	...	...	...	...	...	...	...	...	...	...	...
Philadelphia.....	3,508	26	229	3,763	1,023	6	77	1,106	561	3	62	626
Portland, Me.....	980	...	261	1,241	142	...	14	156	162	...	52	214
Providence.....	835	...	420	1,255	152	...	38	190	48	...	38	86
Rockland.....	92	...	675	767	23	...	6	29	16	...	144	160
San Francisco.....	7,537	50	49	7,636	3,305	77	142	3,524	1,675	23	22	1,720
Seattle.....	8,513	100	162	8,775	6,581	97	219	6,897	2,577	27	42	2,646
Total.....	78,181	270	3,448	81,899	25,634	215	977	26,826	28,004	112	831	28,947

Port.	German.					French.				Norwegian.			
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	
Baltimore.....	301	3	5	309	7	...	4	11	438	8	8	454	
Bath.....	...	...	4	4	...	5	5	5	...	45	45	...	
Boston.....	489	1	15	505	22	...	10	32	525	4	70	599	
New Bedford.....	5	...	5	5	...	...	...	...	20	...	6	26	
New Orleans.....	324	...	11	335	112	...	1	113	705	...	20	725	
New York.....	6,899	4	28	6,931	444	2	14	460	3,673	35	177	3,885	
Norfolk.....	...	...	...	...	...	...	...	...	...	...	...	...	
Philadelphia.....	441	3	31	475	25	...	3	28	548	4	86	638	
Portland, Me.....	93	...	3	96	2	...	2	4	132	...	25	157	
Providence.....	75	...	24	99	...	...	...	...	450	...	110	560	
Rockland.....	44	...	3	47	...	...	3	3	21	...	65	86	
San Francisco.....	958	15	30	1,003	82	1	3	86	676	73	77	826	
Seattle.....	366	20	59	445	32	4	5	41	1,637	51	130	1,818	
Total.....	9,995	46	213	10,254	726	7	50	783	8,825	165	819	9,819	

Port.	Swedish.				Danish.				Spanish.			
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.
Baltimore.....	404	8	11	423	265	7	8	280	868	5	3	876
Bath.....			40	40			40	40		20		20
Boston.....	549	5	67	621	304	6	36	346	1,433	1		1,434
New Bedford.....			15	15					44			44
New Orleans.....	544		25	569	652		15	667	2,464		10	2,474
New York.....	3,986	46	256	4,288	2,213	23	97	2,333	26,350	7	8	26,365
Norfolk.....												
Philadelphia.....	663	17	83	763	273	6	37	316	1,257		7	1,264
Portland, Me.....	150		17	167	56		18	74	222			222
Providence.....	391		182	573	10			10	208			208
Rockland.....	25		25	50	4		3	7	5			5
San Francisco.....	734	42	71	847	308	40	22	370	442	1		443
Seattle.....	979	41	129	1,149	378	35	37	450	650		1	651
Total.....	8,425	159	921	9,505	4,463	117	313	4,893	13,943	14	49	34,006
<hr/>												
Port.	Italian.				Portuguese.				Russian.			
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.
Baltimore.....	43			43	175		65	240	296		4	300
Bath.....			15	15			45	45		5		5
Boston.....	90		2	92	1,538	3	79	1,620	540	1	48	589
New Bedford.....					24	18	109	151			8	8
New Orleans.....	485		3	488	285		6	291	606		18	624
New York.....	3,189	1	3	3,193	2,192	41	81	2,314	4,231	31	221	4,483
Norfolk.....												
Philadelphia.....	78	1	5	84	124	1	34	159	588	16	42	646
Portland, Me.....	13			13	198		86	284	135		13	148
Providence.....	11			11	90		375	465	8			8
Rockland.....									12		5	17
San Francisco.....	70			70	31	6	1	38	614	40	31	685
Seattle.....	68	1	1	70	84	1	10	95	541	25	71	637
Total.....	4,047	3	29	4,079	4,741	70	891	5,702	7,571	113	466	8,150
<hr/>												
Port.	Chinese.				Japanese.				Filipinos.			
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.
Baltimore.....					33			38				
Bath.....			2	2			2	2				
Boston.....	1			1					13			13
New Bedford.....												
New Orleans.....												
New York.....	13			13	188		1	188	134	3		16
Norfolk.....												
Philadelphia.....												
Portland, Me.....	1		1	2	16	4		20			1	1
Providence.....											3	3
Rockland.....												
San Francisco.....	16	1	2	18	10	4	21	35	355	2	3	360
Seattle.....	1	4	1	6	13	6	61	80	114	2	4	120
Total.....	32	4	6	42	268	14	86	368	632	7	11	650

Port.	Austrian.				Other.				Grand total.			
	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.	Steamers.	Square-rigged.	Schooners, barges, etc.	Total.
Baltimore.....	81	11	92	1,423	12	35	1,470	8,874	79	406	9,359	
Bath.....		5	5	-----		49	49	82		691	773	
Boston.....	64	7	71	878		45	923	15,926	41	1,176	17,143	
New Bedford.....		6	6	-----				172	24	422	618	
New Orleans.....	90	90	1,607	-----	19	1,626	21,556	-----	228	21,784		
New York.....	1,031	1,031	16,687	23	152	16,862	137,478	342	1,801	139,621		
Norfolk.....		1	59	769	45	55	869	23,361	460	987	24,808	
Philadelphia.....	269	8	277	994	7	50	1,051	10,368	94	755	11,217	
Portland, Me.....	25	25	204	-----	59	263	2,517	-----	555	3,072		
Providence.....	40	40	40	-----			2,318	-----	1,187	3,505		
Rockland.....	4	9	13	17		50	67	263		988	1,251	
San Francisco.....	182	3	185	2,088	17	39	2,144	19,083	391	516	19,990	
Seattle.....	58	1	59	769	45	55	869	23,361	460	987	24,808	
Total.....	1,844	1	49	1,894	24,667	104	553	25,324	241,998	1,431	9,716	257,327

## 5. FAILURES OF SEAMEN TO JOIN AMERICAN VESSELS.

The following table, compiled by shipping commissioners from articles of agreement, shows the number of men who failed to join American vessels in the United States after they had made contracts to serve thereon. There is virtually no penalty imposed on the seaman who violates his written contract by deserting or failing to join in the United States an American vessel on which he has contracted to work. Since 1898 the punishment provided by law is the forfeiture of all or any part of the wages or effects he leaves on board and of all or any part of the wages or emoluments which he has then earned. The greater number of failures to join are after articles are signed but before the voyage has been begun, when usually no wages have been earned subject to forfeiture.

Port.	Foreign.				Coasting.				Total.			
	Steam.		Sail.		Steam.		Sail.					
	Men.	Fail- ures.	Men.	Fail- ures.	Men.	Fail- ures.	Men.	Fail- ures.	Men.	Fail- ures.	Per cent of failures.	
Baltimore.....	3,821	164	197	16	5,077	83	264	31	9,359	294	0.31	
Bath.....	82	-----	243	-----	448	-----	773	-----				
Boston.....	5,326	321	368	41	10,603	62	846	46	17,143	470	2.74	
New Bedford.....		169	169	172	-----	277	-----	618	-----			
New Orleans.....	16,366	229	198	4	5,190	37	30	-----	21,784	270	1.24	
New York.....	90,354	2,955	1,923	139	47,124	179	220	-----	139,621	3,273	2.35	
Norfolk.....		4	520	65	5,584	64	329	22	4,186	-----		
Philadelphia.....	4,784	183	74	1,873	75	481	29	11,217	334	2.97		
Portland, Me.....	644	43	2,280	35	1,144	50	3,072	104	3,072	104	.34	
Providence.....	38	43	60	405	6	739	26	1,144	50	3,505	85	2.42
Rockland.....	47	60	9	9,204	24	162	3	1,251	32	1,251	32	2.56
San Francisco.....	9,881	78	743	2	22,686	27	747	1	19,990	114	.57	
Seattle.....	641	734	1894	104	5,687	208	24,808	30	257,327	5,006	.12	
Total.....	131,984	3,930	5,029	276	110,441	592	5,687	208	257,327	5,006	1.95	

## 6. MEN SHIPPED TO BE DISCHARGED IN FOREIGN PORTS.

The following table, compiled by shipping commissioners from articles of agreement, shows the number of men shipped on vessels of various types to be discharged in foreign ports:

Port.	Steamers.	Square-rigged.	Schooners.	Total.
New Bedford.....		10	59	69
New York.....	138	-----	11	149
San Francisco.....	39	-----	12	51
Seattle.....	12	-----	-----	12
Total.....	189	10	82	281

## 7. ALLOTMENTS OF WAGES.

The following table, compiled by shipping commissioners from articles of agreement, shows the number of allotment notes issued for seamen on the types of vessels named in the foreign trade. Allotments are prohibited in trade to foreign ports in Canada, Newfoundland, Mexico, and the West Indies. They are prohibited in the coasting trade except between Atlantic and Pacific ports or vice versa. Allotment notes to relatives are in favor of a seaman's grandparents, parents, wife, sister, or children. They must be signed and approved by a shipping commissioner, and are payable from wages earned on the vessel.

Port.	Steamers.	Square-rigged.	Schooners.	Total.	Port.	Steamers.	Square-rigged.	Schooners.	Total.
Baltimore.....	135	2	7	144	San Francisco.....	283	12	6	301
Boston.....	3	1	9	13	Seattle.....	22	2	8	32
New Orleans.....	43	.....	3	46	Total.....	1,505	26	119	1,650
New York.....	934	6	59	999					
Philadelphia.....	85	3	27	115					

## 8. SEAMEN SHIPPED AND DISCHARGED BY COLLECTORS.

By section 4503 of the Revised Statutes, at any port in which no shipping commissioner has been appointed, the collector or deputy collector of customs acts as shipping commissioner.

The following table shows the number of seamen shipped and discharged by collectors of customs and deputy collectors of customs in charge, acting as shipping commissioners, during the fiscal year ended June 30, 1917:

Port.	Shipped.	Discharged.	Port.	Shipped.	Discharged.
Bangor, Me.....	19	.....	Orange, Tex.....	31	25
Boothbay, Me.....	3	.....	Beaumont, Tex.....	68	1
Castine, Me.....	1	2	Galveston, Tex.....	199	95
Cutler, Me.....	5	4	Freeport, Tex.....	95	204
Eastport, Me.....	.....	12	Port Aransas, Tex.....	749	97
Jonesport, Me.....	26	.....	Los Angeles, Cal.....	756	755
Machias, Me.....	119	.....	San Diego, Cal.....	756	910
Mount Desert Ferry, Me.....	4	.....	Eureka, Cal.....	154	51
Stonington, Me.....	1	2	Astoria, Oreg.....	249	50
Portsmouth, N. H.....	20	23	Portland, Oreg.....	190	103
Gloucester, Mass.....	91	58	Aberdeen, Wash.....	186	178
Vineyard Haven, Mass.....	.....	2	Anacortes, Wash.....	75	69
Fall River, Mass.....	.....	4	Bellingham, Wash.....	35	19
Provincetown, Mass.....	23	.....	Blaine, Wash.....	17	22
Bridgeport, Conn.....	.....	2	Everett, Wash.....	16	45
New London, Conn.....	13	7	Port Angeles, Wash.....	168	114
Perth Amboy, N. J.....	273	553	Roche Harbor, Wash.....	9	10
Newport News, Va.....	1,962	1,491	South Bend, Wash.....	108	62
Wilmington, N. C.....	37	38	Ketchikan, Alaska.....	73	46
Charleston, S. C.....	89	163	Nome, Alaska.....	21	6
Brunswick, Ga.....	26	25	Honolulu, Hawaii.....	359	378
Savannah, Ga.....	181	167	Hilo, Hawaii.....	5	10
Apalachicola, Fla.....	5	1	San Juan, P. R.....	180	228
Fernandina, Fla.....	10	.....	Ponce, P. R.....	8	15
Jacksonville, Fla.....	18	189	Mayaguez, P. R.....	33	.....
Key West, Fla.....	290	51	Guanica, P. R.....	86	97
Pensacola, Fla.....	222	183	Arecibo, P. R.....	.....	1
St. Andrews, Fla.....	2	2	Arroyo, P. R.....	10	1
Tampa, Fla.....	4	254	Aguadilla, P. R.....	1	2
Mobile, Ala.....	1,821	1,609	Total.....	9,778	8,661
Sabine, Tex.....	213	196			
Port Arthur, Tex.....	419	26			

## APPENDIX B.

### WAGES OF SEAMEN.

The following statements show the average monthly wages paid to seamen generally on American vessels, compiled from the reports of the United States shipping commissioners:

First. The average monthly wages paid during the past fiscal year on American steam and sailing vessels to seamen shipped in various positions for voyages in various branches of the foreign and coasting trade, compiled from reports of the United States shipping commissioners of this Bureau.

Second. Average monthly wages paid to able seamen on American vessels (steam and sail), 1895-1917.

Third. Average monthly wages paid to first mates on American vessels, 1895-1917.

Fourth. Average monthly wages paid to firemen and first engineers on American steam vessels, 1895-1917.

NOTE.—Since January 1, 1916, the crews on vessels bound to ports in the war zone have received a bonus of 25 to 50 per cent in addition to the regular wages; engineers have received as much as 50 per cent bonus.

TABLE 1.—AVERAGE MONTHLY WAGES PAID IN THE AMERICAN MERCHANT MARINE FOR FISCAL YEAR ENDED JUNE 30, 1917.

Destination, size, and port of departure of vessels.	Sail.					Steam.								
	Able seamen.	Boat- swains.	Carpen- ters.	First mates.	Second mates.	Able seamen.	Boat- swains.	Carpen- ters.	First mates.	Second mates.	Fire- men.	Trim- mers.	First engineers.	Second engineers.
<i>To Great Britain.</i>														
Under 500 tons:														
New Bedford.	\$60.00					\$60.00								
New York.	45.00	\$55.00		\$80.00		45.00			\$125.00	\$110.00	\$50.00		\$120.00	\$110.00
Portland, Me.	60.00	65.00	\$70.00	100.00	\$85.00	60.00	\$65.00	\$70.00	115.00	105.00	55.00	\$50.00	115.00	105.00
Rockland	35.00			45.00		50.00			100.00	80.00	50.00		125.00	110.00
From 500 to 1,500 tons:														
Baltimore.	50.00	60.00	65.00	125.00	115.00	90.00	110.00	120.00	175.00	150.00	90.00	75.00	175.00	150.00
New Bedford.	60.00					60.00								
New Orleans.	80.00	125.00	100.00	150.00		45.00	50.00	55.00	125.00	115.00	50.00	40.00	150.00	110.00
New York.						60.00	65.00	70.00	125.00	115.00	55.00	50.00	125.00	115.00
Portland, Me.	60.00	65.00	70.00	125.00	90.00	60.00	65.00	70.00	125.00	115.00	55.00	50.00	125.00	115.00
Rockland	35.00			50.00	45.00									
Over 1,500 tons:														
Baltimore.						90.00	110.00	120.00	175.00	150.00	90.00	75.00	175.00	150.00
New York.						45.00	55.00	65.00	150.00	120.00	50.00	40.00	225.00	150.00
Philadelphia.						60.00	73.52	73.03	171.81	154.27	67.50	55.21	238.30	171.67
Portland, Me.	60.00	65.00	70.00	150.00	100.00	60.00	70.00	75.00	135.00	120.00	55.00	50.00	135.00	120.00
San Francisco.						55.00	60.00	140.00	120.00	55.00	55.00	185.00	130.00	
<i>To Continent of Europe.</i>														
Under 500 tons:														
New York.	45.00	55.00		80.00		45.00			125.00	110.00	50.00		120.00	110.00
Portland, Me.	60.00	65.00	70.00	100.00	85.00	60.00	65.00	70.00	115.00	105.00	55.00	50.00	115.00	105.00
From 500 to 1,500 tons:														
Baltimore.						90.00	110.00	120.00	175.00	150.00	90.00	75.00	175.00	150.00
Boston.	{ 40.00 to 60.00 }	{ 60.00 to 75.00 }	{ 60.00 to 75.00 }	{ 50.00 to 60.00 }	{ 50.00 to 60.00 }									
New Bedford.														
New Orleans.	71.06	103.33		94.38	75.00									
New York.	45.00	55.00		80.00		45.00	50.00	55.00	125.00	115.00	50.00	40.00	150.00	110.00
Philadelphia.	60.00	100.00		96.25	81.46									
Portland, Me.	60.00	65.00	70.00	125.00	90.00	60.00	65.00	70.00	125.00	115.00	55.00	50.00	125.00	115.00
Over 1,500 tons:														
Baltimore.	{ 45.00 to 60.00 }	{ 70.00 to 100.00 }	{ 55.00 to 80.00 }	{ 40.00 to 50.00 }	{ 50.00 to 60.00 }	90.00	110.00	120.00	175.00	150.00	90.00	75.00	175.00	150.00
Boston.													225.00	150.00
New Orleans.	70.00	110.00		54.57	67.08	75.00	150.00	120.00	60.00	55.00	60.80	54.58	258.33	168.33

New York.....	45.00	55.00	.....	95.00	65.00	45.00	55.00	65.00	150.00	120.00	50.00	40.00	185.00	135.00
Philadelphia.....	60.00	65.00	70.00	150.00	100.00	60.00	70.00	75.00	135.00	120.00	55.00	50.00	270.98	187.80
Portland, Me.....													135.00	120.00
<i>To South America.</i>														
Under 500 tons:														
New York.....	40.00	55.00	.....	65.00	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia.....	45.00	.....	70.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portland, Me.....	55.00	60.00	65.00	100.00	85.00	60.00	65.00	70.00	115.00	105.00	55.00	50.00	115.00	105.00
San Francisco.....	40.00	.....	85.00	65.00	55.00	.....	.....	.....	120.00	100.00	55.00	.....	160.00	120.00
From 500 to 1,500 tons:														
Baltimore.....	50.00	60.00	65.00	125.00	115.00	50.00	60.00	65.00	125.00	115.00	55.00	50.00	125.00	115.00
Bath.....	60.00	65.00	.....	85.00	75.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boston.....	40.00	.....	50.00	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	60.00	.....	100.00	65.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford.....	60.00	.....	.....	60.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Orleans.....	52.50	.....	95.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York.....	45.00	55.00	.....	75.00	55.00	45.00	50.00	50.00	120.00	110.00	50.00	40.00	160.00	110.00
Philadelphia.....	47.50	.....	72.14	56.67	56.25	55.00	.....	.....	143.75	125.00	53.33	.....	167.50	121.87
Portland, Me.....	55.00	60.00	65.00	125.00	90.00	60.00	65.00	70.00	125.00	115.00	55.00	50.00	125.00	115.00
San Francisco.....	40.00	.....	97.50	65.00	55.00	.....	.....	.....	124.37	103.75	55.00	.....	165.00	112.50
Seattle.....	50.00	70.00	.....	100.00	70.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 1,500 tons:														
Baltimore.....	.....	.....	.....	50.00	60.00	65.00	125.00	115.00	55.00	50.00	125.00	115.00	.....	.....
Boston.....	.....	.....	.....	45.00	55.00	55.00	115.00	105.00	45.00	40.00	165.00	115.00	.....	.....
	60.00	70.00	80.00	60.00	70.00	75.00	125.00	115.00	60.00	50.00	175.00	125.00	.....	.....
New Orleans.....	.....	.....	46.25	55.50	55.83	131.50	120.50	52.00	45.50	185.50	131.00	.....	.....	.....
New York.....	45.00	55.00	80.00	60.00	45.00	55.00	135.00	120.00	.....	.....	175.00	125.00	.....	.....
Philadelphia.....	46.66	65.00	128.33	70.00	49.24	57.81	57.68	139.30	121.17	54.58	49.66	193.69	148.90	.....
Portland, Me.....	55.00	60.00	65.00	150.00	100.00	60.00	70.00	75.00	135.00	120.00	55.00	50.00	135.00	120.00
San Francisco.....	.....	.....	56.31	61.66	61.42	129.20	110.91	56.40	55.41	182.92	127.00	.....	.....	.....
Seattle.....	.....	.....	55.00	.....	.....	.....	.....	55.00	55.00	.....	.....	.....	.....	.....
<i>To West Indies, Mexico, and Central America.</i>														
Under 500 tons:														
Boston.....	40.00	.....	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	60.00	70.00	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford.....	60.00	.....	.....	60.00	.....	.....	90.00	.....	.....	.....	.....	.....	.....	.....
New Orleans.....	35.00	.....	45.00	.....	50.56	.....	137.50	115.97	49.45	43.33	157.08	120.55	.....	.....
New York.....	45.00	55.00	65.00	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia.....	45.50	54.00	61.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portland, Me.....	55.00	60.00	65.00	90.00	75.00	60.00	65.00	70.00	115.00	105.00	55.00	50.00	115.00	105.00
Providence.....	50.00	.....	.....	45.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland.....	35.00	.....	45.00	.....	55.75	.....	118.16	103.16	55.75	.....	163.08	110.00	.....	.....
San Francisco.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 1.—AVERAGE MONTHLY WAGES PAID IN THE AMERICAN MERCHANT MARINE FOR FISCAL YEAR ENDED JUNE 30, 1917—Continued.

Destination, size, and port of departure of vessels.	Sail.					Steam.									
	Able seamen.	Boat- swains.	Carpen- ters.	First mates.	Second mates.	Able seamen.	Boat- swains.	Carpen- ters.	First mates.	Second mates.	Fire- men.	Trim- mers.	First engineers.	Second engineers	
<i>To West Indies, Mexico, and Central America—Contd.</i>															
From 500 to 1,500 tons:															
Baltimore.....	\$50.00	\$60.00	\$65.00	\$125.00	\$115.00	\$50.00	\$60.00	\$65.00	\$125.00	\$115.00	\$55.00	\$50.00	\$125.00	\$115.00	
Boston.....	{ 40.00	{ 60.00	{ 50.00	{ 75.00	{ 60.00	{ 50.00	{ 60.00	{ 50.00	{ 136.71	{ 120.99	{ 60.29	{ 45.00	{ 177.57	{ 122.04	
New Orleans.....	60.00	56.67	60.00	75.00	60.00	51.84	62.64	50.00	120.00	110.00	50.00	40.00	160.00	110.00	
New York.....	50.00	55.00	55.00	75.00	55.00	45.00	50.00	50.00	153.75	132.50	56.00	50.00	206.67	162.08	
Philadelphia.....	45.00	55.00	55.00	71.54	60.00	54.00	65.00	65.00	70.00	125.00	115.00	55.00	50.00	125.00	115.00
Portland, Me.....	55.00	60.00	65.00	115.00	110.00	60.00	65.00	65.00	122.91	107.58	55.66	55.00	162.50	110.66	
Providence.....	50.00	60.00	60.00	80.00	60.00	50.00	55.00	55.00	125.00	115.00	55.00	50.00	125.00	115.00	
Rockland.....	40.00	40.00	40.00	50.00	45.00	40.00	45.00	45.00	125.00	115.00	55.00	50.00	125.00	115.00	
San Francisco.....	50.00	60.00	65.00	93.33	75.00	55.59	60.45	61.13	128.18	107.72	55.59	55.00	173.89	122.69	
<i>Atlantic and Gulf coasting trade.</i>															
Under 500 tons:															
Bath.....	45.00	45.00	45.00	60.00	50.00	40.00	45.00	50.00	50.00	50.00	100.00	100.00	90.00	90.00	
Boston.....	{ 40.00	{ 60.00	{ 50.00	{ 75.00	{ 60.00	{ 50.00	{ 60.00	{ 55.00	{ 80.00	{ 70.00	{ 45.00	{ 130.00	{ 80.00	{ 100.00	
New Bedford.....	60.00	60.00	60.00	90.00	60.00	60.00	60.00	60.00	125.00	100.00	60.00	60.00	135.00	100.00	
New York.....	45.00	55.00	55.00	65.00	50.00	45.00	55.00	55.00	105.00	95.00	50.00	50.00	125.00	100.00	
Philadelphia.....	49.29	70.00	65.00	65.00	50.00	41.25	60.00	60.00	115.62	88.75	48.75	48.75	142.50	100.00	
Portland, Me.....	55.00	60.00	65.00	90.00	70.00	60.00	65.00	70.00	115.00	105.00	55.00	50.00	115.00	105.00	
Providence.....	50.00	50.00	50.00	80.00	60.00	50.00	50.00	50.00	100.00	80.00	50.00	50.00	125.00	110.00	
Rockland.....	35.00	35.00	35.00	45.00	45.00	50.00	50.00	50.00	100.00	80.00	50.00	50.00	125.00	110.00	

From 500 to 1,500 tons:																
Baltimore.	50.00	60.00	65.00	125.00	115.00	50.00	60.00	65.00	125.00	115.00	55.00	50.00	125.00	125.00	115.00	
Bath.						50.00	50.00	45.00								
Boston.		40.00				50.00	to	to					40.00			
New Bedford.	60.00			100.00												
New Orleans.	45.00	75.00	75.00	60.00		58.13	71.88	71.88	156.25	131.25	67.13	50.00	203.12	150.00		
New York.	45.00	55.00		75.00	55.00	45.00	50.00	55.00	125.00	115.00	50.00	40.00	165.00	115.00		
Philadelphia.	49.23	55.00		75.00	68.75	49.09			117.50	105.08	52.72	45.00	158.18	115.59		
Portland, Me.	55.00	60.00	65.00	100.00	85.00	60.00	65.00	70.00	125.00	115.00	55.00	50.00	120.00	115.00		
Providence.	50.00			100.00	60.00	50.00			125.00	115.00	50.00		160.00	125.00		
Rockland.	40.00			50.00	45.00											
Over 1,500 tons:																
Bath.	60.00			90.00	80.00											
Boston.		45.00		60.00	50.00	45.00	55.00	55.00	100.00	80.00	45.00	40.00	150.00	105.00		
Boston.		to			to		to		to	to	to	to				
New Orleans.	60.00			75.00	60.00	60.00	70.00	75.00	125.00	115.00	60.00	50.00	175.00	125.00		
New York.	45.00	55.00		80.00	60.00	45.00	50.00	55.00	125.00	115.00	50.00	40.00	165.00	115.00		
Philadelphia.	47.15	65.00		85.71	58.33	43.64	53.31	57.43	119.21	101.52	50.78	43.72	170.30	120.27		
Portland, Me.	55.00	60.00	65.00	100.00	95.00	60.00	65.00	70.00	125.00	115.00	55.00	50.00	125.00	120.00		
Providence.	50.00			100.00	60.00	50.00	60.00	75.00	125.00	115.00	50.00	45.00	175.00	125.00		
Seattle.							55.00						55.00	55.00		
<i>To Asia and Australia.</i>																
Under 500 tons: San Francisco.	48.58			91.08	65.20											
From 500 to 1,500 tons:																
Baltimore.																
San Francisco.	44.37		75.00	64.00	97.03	60.00	70.00	80.00	125.00	115.00	55.00	50.00	125.00	115.00		
Seattle.	50.00			90.00	80.00	55.41	60.41	60.83	115.00	100.00	55.00	55.00	165.00	115.00		
Over 1,500 tons:																
Baltimore.																
New York.	25.00	45.00	45.00	75.00	60.00	45.00	50.00	55.00	135.00	115.00	50.00	40.00	175.00	125.00		
Philadelphia.																
San Francisco.	45.00	65.00	65.00	103.75	75.00	55.20	60.51	61.16	137.18	115.08	55.30	55.25	187.75	134.50		
Seattle.						55.41	60.41	60.83	115.00	100.00	55.00	55.00	165.00	115.00		
<i>Pacific coasting trade.</i>																
Under 500 tons:																
San Francisco.	50.00	60.00		79.06	67.50											
Seattle.																
From 500 to 1,500 tons:																
Baltimore.																
San Francisco.	51.25			97.50	75.00	55.00	60.00		121.92	107.48	55.00		125.00	111.33		
Seattle.	55.41			100.00	80.00	55.41	60.41	60.83	115.00	100.00	55.00	55.00	167.00	115.83		
Over 1,500 tons:																
Baltimore.																
San Francisco.	54.64	55.00	70.00	105.62	74.28	55.53	60.55	61.25	138.74	116.61	55.61	55.00	221.38	144.71		
Seattle.						55.41	60.41	60.83	115.00	100.00	55.00	55.00	175.83	115.83		

TABLE 1.—AVERAGE MONTHLY WAGES PAID IN THE AMERICAN MERCHANT MARINE FOR FISCAL YEAR ENDED JUNE 30, 1917—Continued.

Destination, size, and port of departure of vessels.	Sail.					Steam.							
	Able seamen.	Boat- swains.	Carpen- ters.	First mates.	Second mates.	Able seamen.	Boat- swains.	Carpen- ters.	First mates.	Second mates.	Fire- men.	Trim- mers.	First engineers.
<i>To Africa.</i>													
Under 500 tons:													
New Bedford.....	\$35.00			\$60.00	\$45.00	\$35.00	\$35.00		\$60.00	\$40.00			
New York.....	45.00	\$55.00		65.00	55.00								
From 500 to 1,500 tons:													
Baltimore.....	90.00	110.00	\$120.00	175.00	150.00	60.00	70.00	\$80.00	125.00	115.00	\$55.00	\$50.00	\$125.00
Boston.....	40.00			75.00	55.00								\$115.00
New Orleans.....	60.00			125.00	70.00								
New York.....	45.00	55.00		75.00	60.00	45.00	55.00	55.00	135.00	105.00	50.00	45.00	165.00
Philadelphia.....	60.00			100.00	100.00								115.00
Seattle.....	50.00			100.00	80.00								
Over 1,500 tons:													
Baltimore.....						60.00	70.00	80.00	125.00	115.00	55.00	50.00	125.00
New York.....						45.00	55.00	55.00	135.00	105.00	50.00	45.00	165.00
Philadelphia.....						56.25	62.50		156.25	137.50	62.50	56.25	231.25
San Francisco.....	40.00			102.50	67.50								156.25
<i>Atlantic to Pacific ports and vice versa.</i>													
From 500 to 1,500 tons:													
Baltimore.....	50.00	60.00	65.00	125.00	115.00	60.00	70.00	80.00	125.00	115.00	55.00	50.00	125.00
San Francisco.....						55.00			120.66	105.55	55.00		164.16
Over 1,500 tons:													
Baltimore.....						60.00	70.00	80.00	125.00	115.00	55.00	50.00	125.00
Boston.....						60.00	70.00	75.00	125.00	115.00	60.00	50.00	175.00
New York.....						45.00	55.00	55.00	135.00	115.00	50.00	45.00	185.00
Philadelphia.....	45.00		66.00	110.00									130.00
San Francisco.....	56.00	61.00		90.00		56.15	61.26	63.66	127.94	107.61	55.67	55.08	188.91
Seattle.....									150.00			225.00	128.65

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895-1917.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>To Great Britain.</i>														
Under 500 tons:														
Boston								\$45.00						
New Bedford									\$60.00					
New York									37.50	45.00				
Philadelphia														
Portland, Me.														
Rockland														
From 500 to 1,500 tons:														
Baltimore														
Boston									25.00					
New Bedford														
New Orleans														
New York														
Norfolk														
Philadelphia														
Portland, Me.														
Rockland														
San Francisco														
Over 1,500 tons:														
Baltimore														
Boston														
New Orleans														
New York														
Norfolk														
Philadelphia														
Portland, Me.														
Rockland														
San Francisco														
Seattle														
<i>To Continent of Europe.</i>														
Under 500 tons:														
New York	18.50	20.00							37.50	45.00				
Philadelphia	21.35	20.00												
Portland, Me.										60.00				

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895-1917—Continued.



TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895-1917—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>To West Indies, Mexico, and Central America—Continued.</i>														
From 500 to 1,500 tons:														
Baltimore.....	\$16.00	\$25.00	\$30.00	\$25.00	\$25.00	\$30.00	\$50.00	\$16.00	-----	\$25.00	-----	-----	-----	\$50.00
Boston.....	20.00	25.00	30.00	25.00	30.00	25.00	40.00	30.00	\$25.00	25.00	-----	-----	-----	-----
New Bedford.....			25.00		25.00	35.00								
New Orleans.....	25.00					35.00	50.00	35.00	30.00	30.00	\$30.00	\$37.50	51.84	
New York.....	17.77	25.00	23.50	25.00	30.00	37.50	45.00	22.50	25.00	30.00	\$30.00	35.00	45.00	
Norfolk.....	17.00	25.00		25.00	30.00	40.00					30.00	45.00		
Pascagoula.....	18.00	25.00	25.00		25.00									
Philadelphia.....	17.88	24.95	24.40	23.21	27.21	32.07	45.00	25.00	25.00	33.33	37.50	54.00		
Portland, Me.....	16.56	25.00	27.00	25.00			55.00				45.00	60.00		
Providence.....	25.00		30.00		30.00	40.00	50.00					40.00		
Rockland.....		30.00	30.00	30.00	30.00	35.00	40.00							
San Francisco.....	19.67	35.00	35.00		40.00					45.79	49.75	50.66	55.16	
Seattle.....	22.50	30.00	35.00	40.00	40.00					45.00	50.00	50.00		
Over 1,500 tons:														
Baltimore.....		25.00			25.00	35.00				25.00	30.00	45.00	50.00	
Boston.....		25.00		30.00	25.00	45.00				25.00	25.00	30.00	30.00	45.00
New Orleans.....					25.00	35.00	60.00				45.00	60.00		
New York.....					30.00	45.00		30.00	35.00	30.00	35.00	37.50	49.39	
Norfolk.....					30.00	37.50	45.00	25.00	25.00	30.00	30.00	35.00	45.00	
Philadelphia.....		30.00	20.00	25.00	25.00	27.50	46.25	25.00	25.00	25.00	25.14	32.55	35.69	49.68
Portland, Me.....		30.00			25.00	40.00	55.00					40.00		
Providence.....						40.00	50.00							
Rockland.....			35.00											
San Francisco.....		20.00	30.00		50.00	51.00	55.00				33.54	31.49	40.83	55.59
Seattle.....											35.00			
<i>Atlantic and Gulf coasting trade.</i>														
Under 500 tons:														
Baltimore.....	18.00	25.00	25.00	25.00	25.00	45.00		25.00	25.00	30.00	35.00	40.00		
Bath.....		25.00	30.00	25.00	25.00	40.00		25.00	25.00	30.00	30.00	45.00		
Boston.....	20.00	25.00	25.00		25.00	30.00	60.00	25.00	25.00	30.00	30.00	45.00	60.00	

Gloucester										27.50	27.00	35.00	35.00	60.00	
New Bedford	20.00	25.00	25.00	25.00	25.00	30.00	60.00	30.00	30.00						
New Orleans		25.00	25.00	20.00	25.00										
New York	17.59	25.00	27.50	25.00	30.00	37.50	45.00		30.00			30.00	30.00	45.00	
Norfolk	18.00	25.00		25.00		45.00			25.00		28.75				
Pascagoula	15.25	18.37	25.00	25.00	25.00										
Philadelphia	20.90	26.41	26.60	25.28	28.82	32.50	49.29		25.00		28.86	30.83	31.25	41.25	
Portland, Me.	20.97	25.00	25.00	25.00		40.00	55.00		25.00		30.00	30.00	40.00	60.00	
Providence	20.00	25.00	25.00	25.00	30.00	40.00	50.00								
Rockland	20.00	25.00	27.50	25.00	30.00	30.00	35.00	25.00			30.00	30.00	40.00	50.00	
From 500 to 1,500 tons:															
Baltimore	18.00	25.00	30.00	25.00		30.00	50.00		25.00	25.00		35.00	50.00		
Bath	22.00	30.00	32.50	30.00	30.00				25.00		30.00		60.00		
Boston	20.00	30.00	30.00			25.00	30.00	40.00		25.00	30.00		30.00	45.00	
New Bedford	23.00	25.00	30.00			30.00	45.00	60.00			30.00		35.00		
New Orleans	25.00	25.00	25.00	20.00			45.00	39.00	30.00	30.00	30.00			58.13	
New York	17.59	25.00	27.50	27.50	30.00	37.50	45.00		25.00		30.00	35.00	45.00		
Norfolk	20.00	29.00			30.00	30.00	45.00				25.00	30.00	45.00		
Pascagoula	18.00	25.00			30.00										
Philadelphia	20.90	27.37	27.75	25.60	28.52	30.39	49.23	22.25	30.00	25.00		30.00	31.54	49.09	
Portland, Me.	22.29	30.00	28.00	28.00	30.00	40.00	55.00		30.00	25.00		30.00	40.00	60.00	
Providence	25.00	30.00	30.00	30.00	30.00	40.00	50.00	25.00	25.00	25.00		30.00	40.00	50.00	
Rockland	20.00	30.00	30.00	30.00	30.00	35.00	40.00	25.00							
Over 1,500 tons:															
Baltimore		25.00			30.00	25.00		35.00			25.00	25.00	25.00	45.00	
Bath			30.00				45.00		60.00			35.00			
Boston		30.00				25.00	30.00	45.00			25.00	30.00	30.00	45.00	
Gloucester						30.00	45.00								
New Bedford												25.00			
New Orleans												30.00		56.88	
New York						20.00									
Norfolk						30.00	30.00	30.00			35.00	30.00	35.00	45.00	
Pascagoula															
Philadelphia		21.65	29.20	30.60	29.86	32.20	40.91	47.15	22.00		26.81	26.00	31.04	32.83	43.64
Portland, Me.		22.60	30.00	31.00	30.00	30.00	40.00	55.00				27.50	30.00	40.00	60.00
Providence						30.00	30.00	30.00	40.00	50.00		25.00	30.00	40.00	50.00
Rockland						35.00									
Seattle														55.00	
<i>To Asia and Australia.</i>															
Under 500 tons:															
San Francisco			24.00	25.00	30.00			34.49	48.58		45.00				
From 500 to 1,500 tons:															
Baltimore														60.00	
New York		15.21	18.00												
Philadelphia									35.00						
San Francisco		18.32	21.28	26.00	33.12	28.75	35.43	44.37		35.00	42.50		20.00	45.00	
Seattle		17.50	20.00	21.61	26.74	25.00	37.50	50.00				50.00		55.41	

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895–1917—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>To Asia and Australia—Continued.</i>														
Over 1,500 tons:														
Baltimore.			\$18.00											
New York.	\$16.00	18.00	\$18.00	\$18.00				\$25.00	\$25.00					
Philadelphia.	16.25	18.00	18.00					\$20.00						
San Francisco.	19.00	22.00	25.00					27.50	35.00	45.00	\$28.75	\$32.03	\$35.53	
Seattle.			20.00	20.00						26.25			35.00	
<i>Pacific coasting trade.</i>														
Under 500 tons:														
San Francisco.	23.88	39.67	39.50	42.60	45.00	45.35	50.00	30.00	45.00	45.00	\$50.00	50.00		55.00
Seattle.	30.00	40.00	40.00	42.50					40.00	45.00	55.96	50.00	57.50	55.41
From 500 to 1,500 tons:														
Baltimore.														60.00
San Francisco.	25.48	38.40	37.20	41.55	44.28	45.00	51.25	35.00	45.00	44.85	50.00	50.00	50.91	55.00
Seattle.	30.50	40.00	40.00	48.25	45.00	40.00	55.41		40.00	45.00	50.00	50.00	57.50	55.41
Over 1,500 tons:														
Baltimore.														60.00
Norfolk.													30.00	
San Francisco.	25.00	35.87	36.11	45.00	50.00	50.33	54.64	35.00	44.00	38.29	45.00	47.53	50.45	55.53
Seattle.		40.00	40.00	50.00					40.00	45.00	50.00	50.00	57.50	55.41
<i>To Africa.</i>														
Under 500 tons:														
Boston.	18.00	20.00	20.00					40.00						
Gloucester.								22.50						
New Bedford.	15.00	20.00	20.00	15.00	22.00	20.00	35.00					15.00		35.00
New York.		20.00	20.00		25.00	30.00	45.00							
Philadelphia.					25.00									
From 500 to 1,500 tons:														
Baltimore.														60.00
Boston.	18.00	20.00	20.00	20.00	20.00			40.00						
New Bedford.								15.00	25.00					
New Orleans.												15.00		
New York.	15.51	20.00	20.00	20.00	25.00	37.50	45.00						35.00	55.00
Norfolk.						30.00	30.00							



TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895–1917.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>To Great Britain.</i>														
Under 500 tons:														
Boston...								\$55.00						
New York...								75.00	\$80.00					
Philadelphia...	\$40.00	\$40.00												
Portland, Me...														
Rockland...			40.00	\$40.00	\$35.00	\$35.00	40.00		100.00					
From 500 to 1,500 tons:														
Baltimore...									125.00					
Boston...	40.00	45.00												
New Orleans...								50.00						
New York...			37.50	45.00				45.00						
Norfolk...									60.00					
Philadelphia...									68.33					
Portland, Me...									125.00					
Rockland...			50.00	47.50	45.00	45.00	50.00		50.00					
San Francisco...			57.50											
Seattle...			55.00											
Over 1,500 tons:														
Baltimore...										\$80.00				
Boston...											125.00	175.00		
New Orleans...											135.00			
New York...			45.00							\$75.00	\$120.00	105.00	\$115.00	115.00
Norfolk...											90.00		125.00	150.00
Philadelphia...										70.00		90.00		
Portland, Me...												135.50	171.81	
Rockland...												125.00		135.00
San Francisco...			60.00	55.00	70.00							123.33	140.00	
Seattle...			55.00		67.50									
<i>To Continent of Europe.</i>														
Under 500 tons:														
New Orleans...			40.00											
New York...	40.00	40.00						75.00	80.00					
Philadelphia...	40.00	40.00												
Portland, Me...									100.00					
From 500 to 1,500 tons:														
Baltimore...										175.00				
Boston...										60.00				
New Orleans...										to				
										75.00				
										94.38				
											115.00			
											to			
											135.00			

New York.....	40.00	50.00			125.00	75.00	80.00					115.00	125.00	125.00
Norfolk.....					50.00	55.00								
Philadelphia.....	42.50	35.00			50.00	66.67	72.14							
Portland, Me.....						125.00								125.00
San Francisco.....		55.00												
Seattle.....							75.00							
Over 1,500 tons:														
Baltimore.....									80.00			125.00	130.00	175.00
Boston.....						60.00	70.00	to 225.00			100.00	130.00	150.00	
New Orleans.....										75.00		115.00	130.25	167.08
New York.....						125.00	90.00	95.00				110.00	125.00	150.00
Norfolk.....							55.00					120.00	125.00	
Philadelphia.....	50.00					60.00		70.00				103.75	122.75	189.97
Portland, Me.....							150.00					100.00	110.00	135.00
San Francisco.....	55.00					70.00	95.00					100.00		
Seattle.....	50.00													
<i>To South America.</i>														
Under 500 tons:														
Baltimore.....	40.00	40.00	40.00											
Boston.....		35.00					50.00							
New Bedford.....		35.00												
New Orleans.....			40.00											
New York.....	37.50	40.00	35.00	40.00		45.00	55.00	65.00					85.00	
Norfolk.....		40.00		40.00										
Philadelphia.....									70.00	65.00			150.00	
Portland, Me.....	42.50	40.00	43.33						65.00	100.00			110.00	115.00
Providence.....							50.00	50.00						
San Francisco.....	45.00	47.50	60.00						85.00				120.00	
Seattle.....		52.50	55.00											
From 500 to 1,300 tons:														
Baltimore.....	45.00	45.00	45.00			60.00		125.00						125.00
Bath.....						50.00	to 60.00		85.00					
Boston.....	40.00	40.00	50.00	50.00			50.00	50.00					100.00	
New Orleans.....	40.00						65.00	100.00						
New York.....	41.09	45.00	42.50			55.00	60.00	75.00	75.00	75.00		95.00		120.00
Norfolk.....	40.00					40.00	55.00							
Philadelphia.....	41.66	46.00	50.00	50.00		48.00	55.88	72.14						143.75
Portland, Me.....	40.21	45.00	50.00	50.00			65.00	125.00					110.00	125.00
Providence.....						40.00	75.00						100.00	
San Francisco.....	45.50	51.25	55.00					97.50	80.00	100.00			100.00	124.37
Seattle.....	47.00	55.00	59.29	66.25		70.00		100.00					100.00	
Over 1,500 tons:														
Baltimore.....			45.00				75.00	75.00				100.00	135.00	125.00
Boston.....				50.00		60.00	60.00	to 80.00				115.00	125.00	
												100.00	100.00	

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895-1917—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.							
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917	
<i>To South America—Continued.</i>															
Over 1,500 tons—Continued.															
New Orleans.....	\$45.00				\$65.00	\$75.00	\$80.00	\$78.33	\$80.00	\$80.00	\$100.00	\$115.00	\$120.00	\$131.50	
New York.....		\$50.00			60.00	70.00						100.00	110.00	135.00	
Norfolk.....					60.00							115.00			
Pascagoula.....					60.00										
Philadelphia.....					107.50	128.33							116.82	139.30	
Portland, Me.....					55.00	65.00	150.00						110.00	135.00	
Providence.....						75.00							100.00		
San Francisco.....								96.67	100.00	100.00	100.00	105.20	106.17	129.20	
Seattle.....		55.00	\$55.00												
<i>To West Indies, Mexico, and Central America.</i>															
Under 500 tons:															
Baltimore.....	40.00	30.00	45.00	50.00				50.00							
Bath.....															
Boston.....	35.00	35.00	40.00	{ 35.00 to 40.00 }	40.00	80.00	50.00		70.00	70.00					
New Bedford.....					45.00	50.00		50.00				45.00		90.00	
New Orleans.....		40.00	40.00	40.00	50.00	40.00	45.00		75.00			102.00		137.50	
New York.....	37.00	40.00	40.00	40.00	45.00	55.00	65.00					85.00	90.50		
Norfolk.....	37.50	36.75							53.33			75.00			
Pascagoula.....		37.13	40.00	38.46	40.00										
Philadelphia.....	37.65	38.57	41.67	40.00	42.22	46.87	61.25		60.00		60.00				
Portland, Me.....	39.09	37.50	40.00					90.00					110.00	115.00	
Providence.....	35.00			40.00		50.00									
Rockland.....	35.00	40.00	40.00	35.00	35.00	40.00	45.00								
San Francisco.....	42.78	48.93	57.19	70.00								100.00	100.00	118.16	
Seattle.....				55.00											
From 500 to 1,500 tons:															
Baltimore.....	42.00	45.00	47.50	50.00		65.00	125.00	55.00		70.00				125.00	
Boston.....		40.00	40.00	{ 45.00 to 50.00 }	45.00	50.00	50.00	{ 55.00 to 60.00 }	75.00	70.00	70.00				
New Bedford.....					50.00	50.00	60.00	75.00							
New Orleans.....		40.00			40.00	60.00	60.00	60.00	75.00	75.00	75.00	85.00	112.50	136.71	

New York.....	41.82	50.00	45.00	45.00	55.00	65.00	75.00	.....	60.00	65.00	90.00	90.00	100.00	120.00
Norfolk.....	40.00	45.00			40.00	60.00				65.00			115.00	
Pascagoula.....	37.50	40.00	45.00		40.00									
Philadelphia.....														
Portland, Me.....	40.15	42.33	48.52	48.00	48.75	52.90	71.54	57.50		64.65		83.33	105.00	153.75
Providence.....	40.94	46.70	50.00	48.00			115.00						110.00	125.00
Rockland.....														
San Francisco.....	46.94	53.33	60.00			70.00						100.00	100.00	100.41
Seattle.....	50.00	55.00	57.50	65.00	70.00	75.00	100.00					100.00	100.00	128.18
Over 1,500 tons:														
Baltimore.....		45.00				75.00	75.00			75.00		100.00	115.00	125.00
Boston.....		45.00				50.00	50.00			60.00		100.00	100.00	115.00
New Orleans.....						60.00	60.00			60.00		125.00	125.00	
New York.....						60.00	75.00			75.00		90.00	100.00	132.08
Norfolk.....						55.00	55.00			75.00		100.00	100.00	115.00
Philadelphia.....						60.00	77.50	75.00	70.00	71.74	89.90	100.34	111.64	136.20
Portland, Me.....						55.00	65.00	125.00					100.00	135.00
Providence.....							75.00	100.00						
Rockland.....														
San Francisco.....												100.00	113.11	118.08
Seattle.....												100.00	100.00	129.20
<i>Atlantic and Gulfcoasting trade.</i>														
Under 500 tons:														
Baltimore.....	35.00	37.50	40.00	40.00								90.00		
Bath.....		30.00	37.50	35.00	35.00								75.00	
Boston.....	35.00	35.00	40.00			40.00							75.00	80.00
Gloucester.....						45.00	45.00	50.00					100.00	125.00
New Bedford.....	30.00	30.00	35.00	45.00		50.00	60.00	90.00	50.00		75.00	45.00		80.00
New Orleans.....			40.00	40.00										90.00
New York.....	34.59	35.00	40.00	40.00		45.00	55.00	65.00						
Norfolk.....	30.00	35.00					60.00						63.50	
Pascagoula.....	35.00	35.00	40.00	43.33									75.63	
Philadelphia.....	37.40	37.30	38.30	40.22	41.25	50.00	65.00		64.00				77.50	85.00
Portland, Me.....	32.80	35.00	37.50	40.00		65.00	90.00		70.00				70.00	110.00
Providence.....	30.00	30.00	40.00	40.00		40.00	50.00	80.00					75.00	115.00
Rockland.....	35.00	35.00	40.00	35.00		35.00	40.00	45.00	75.00				75.00	85.00
From 500 to 1,500 tons:														
Baltimore.....	40.00	45.00	50.00	50.00			75.00	125.00		70.00	70.00			105.00
Bath.....	40.00	40.00	50.00	50.00		60.00			60.00			50.00		125.00
Boston.....	40.00	45.00				45.00	50.00	50.00				65.00		
New Bedford.....	40.00	35.00	45.00			50.00		100.00				80.00		
New Orleans.....	40.00	40.00	40.00					60.00	75.00	75.00	75.00	85.00	90.00	156.25

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895–1917—Continued.

San Francisco	47.50	53.00	57.50	75.00	80.00	103.75	105.88	103.02	120.90	125.00	126.64	122.04	137.18
Seattle		55.00	55.62						96.25	125.00			115.00
<i>Pacific coasting trade.</i>													
Under 500 tons:													
Boston		50.00											
San Francisco			59.07	62.02	70.00	68.75	79.06						
Seattle	43.54	51.29	60.00	66.00				62.50	82.92	90.00	103.17		115.00
From 500 to 1,500 tons:													
Baltimore													
San Francisco		50.91	53.46	59.83	71.03	73.00	77.50	97.50	75.00	86.25	90.93	100.00	125.00
Seattle		50.00	60.00	60.00	70.50	80.00	72.50	100.00		90.00	126.05	100.00	121.92
Over 1,500 tons:													
Baltimore													
San Francisco		51.64	55.40	60.53	63.33	92.56	87.00	105.62	75.00	92.57	92.59	102.80	115.00
Seattle		60.00	57.83	57.83	86.67					90.00	127.22	118.35	138.74
<i>To Africa.</i>													
Under 500 tons:													
Boston		35.00	35.00	40.00									
Gloucester			35.00										
New Bedford		35.00	30.00	40.00	30.00	50.00	60.00	60.00				30.00	60.00
New Orleans			40.00										
New York			40.00	40.00		50.00	75.00	65.00					
From 500 to 1,500 tons:													
Baltimore								175.00					125.00
Boston	40.00	40.00	50.00	45.00 to 50.00	40.00 to 50.00			75.00					
New Bedford				30.00	60.00							30.00	
New Orleans													
New York	47.50	45.00	45.00	50.00	55.00	75.00	75.00		125.00			125.00	125.00
Norfolk					60.00								
Pascagoula			45.00										
Philadelphia									100.00				
San Francisco		40.00	50.00	57.50		70.00							
Seattle		50.00	55.00	56.67		75.00	75.00	100.00					
Over 1,500 tons:													
Baltimore													
New Orleans			45.00										
New York												115.00	135.00
Norfolk												150.00	
Philadelphia												95.00	105.00
San Francisco		53.33	56.25	65.00			102.50						
Seattle		55.00		63.33									
<i>Atlantic to Pacific ports, and vice versa.</i>													
Under 500 tons:										75.00			
Baltimore													
Seattle											90.00	107.50	

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895-1917—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>Atlantic to Pacific ports, and vice versa—Continued.</i>														
From 500 to 1,500 tons:														
Baltimore.....	\$55.00	\$50.00	\$60.00	.....			\$125.00							\$125.00
New Orleans.....														
New York.....	50.00	45.00	52.50	\$52.50					\$75.00					\$100.00
Norfolk.....														115.00
Philadelphia.....	52.50									90.00				
San Francisco.....			50.00	.....							\$100.00	100.00		120.66
Seattle.....	55.00	55.00	.....	65.00							100.00	107.50		
Over 1,500 tons:														
Baltimore.....		50.00	60.00	.....	\$75.00					80.00	.....	100.00	.....	125.00
Boston.....											100.00			125.00
New York.....	55.83	50.00	60.00	70.00						80.00	\$100.00	100.00	110.00	135.00
Norfolk.....													115.00	
Philadelphia.....	50.00	52.00	55.00	65.00	75.00				75.00	120.00	.....	103.89	107.50	110.00
San Francisco.....	54.03	55.83	60.62	68.33	75.00			90.00			100.00	102.40	113.69	127.94
Seattle.....		55.00	.....	60.00							125.00	100.00	107.50	150.00

TABLE 4.—AVERAGE MONTHLY WAGES PAID TO FIREMEN AND FIRST ENGINEERS ON AMERICAN STEAM VESSELS, 1895–1917.

Destination, size, and port of departure of vessels.	Firemen.							First engineers.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>To Great Britain.</i>														
Under 500 tons:														
Portland, Me.						\$50.00	\$55.00						\$125.00	\$115.00
Rockland						50.00								125.00
From 500 to 1,500 tons:														
Baltimore						\$45.00	45.00	90.00						175.00
New York							45.00	50.00					\$150.00	150.00
Portland, Me.							50.00	55.00					125.00	125.00
Over 1,500 tons:														
Baltimore						\$30.00		50.00	90.00				175.00	175.00
Boston							50.00						190.00	
New Orleans							45.00						206.25	
New York	\$37.00	\$40.00	40.00	\$40.00	40.00	40.00	40.00	50.00	\$150.00	\$150.00	180.00	\$200.00	200.00	225.00
Norfolk							52.50							
Philadelphia							46.00	67.50	112.50				150.00	187.50
Portland, Me.							50.00	55.00					125.00	135.00
San Francisco							40.00	55.00					183.33	185.00
Seattle							40.00						140.00	
<i>To Continent of Europe.</i>														
Under 500 tons:														
New York								50.00						120.00
Portland, Me.								55.00						115.00
From 500 to 1,500 tons:														
Baltimore						35.00		90.00					90.00	175.00
Boston														
New York														
Portland, Me.							40.00	40.00	50.00				170.00	150.00
Over 1,500 tons:														
Baltimore						30.00		50.00	90.00				150.00	175.00
Boston														
New Orleans														
New York							50.00	45.00	60.80				150.00	110.00
Norfolk							40.00	40.00	50.00				180.00	165.00
Philadelphia							40.00	100.00					150.00	110.00
Portland, Me.							41.18	42.95	73.37	112.50			158.75	179.50
San Francisco							40.00	55.00	55.00				150.00	125.00
							38.50						150.00	135.00

TABLE 4.—AVERAGE MONTHLY WAGES PAID TO FIREMEN AND FIRST ENGINEERS ON AMERICAN STEAM VESSELS, 1895-1916—Continued.

Destination, size, and port of departure of vessels.	Firemen.							First engineers.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>To South America.</i>														
Under 500 tons:														
New Orleans.		\$50.00												
New York.								\$40.00						
Philadelphia.								40.00						
Portland, Me.								55.00						
San Francisco.								55.00						
From 500 to 1,500 tons:														
Baltimore.								55.00						
Boston.								40.00						
New Orleans.	50.00	50.00	\$50.00					125.00	125.00	\$135.00				
New York.								50.00						
Philadelphia.								55.33						
Portland, Me.								55.00	55.00					
Providence.								45.00						
San Francisco.	45.00	45.00						55.00	55.00	150.00	150.00			
Seattle.								55.00	55.00					
Over 1,500 tons:														
Baltimore.								35.00	45.00	55.00	45.00			
Boston.										45.00				
New Orleans.										65.00				
New York.	40.00	40.00	40.00	\$40.00	40.00	45.00	52.00	120.89	125.00	142.50	\$150.00	110.00	182.50	175.00
Norfolk.								40.00	40.00			157.50	160.00	175.00
Philadelphia.								44.58	54.58				140.00	
Portland, Me.								55.00	55.00				167.73	193.69
Providence.								45.00					125.00	135.00
San Francisco.	45.00	45.00	45.00	55.00	47.29	49.99	56.40	150.00	150.00	152.00	165.00	161.66	150.00	
Seattle.								55.00					161.24	182.92
<i>To West Indies, Mexico, and Central America.</i>														
Under 500 tons:														
Baltimore.	35.00								100.00					
Boston.		35.00							125.00					
New Bedford.	35.00								85.00					
New Orleans.		50.00						47.50	49.45					
New York.								40.00	40.00					
Norfolk.		33.33						40.00						
Pascagoula.										86.67				
Portland, Me.								55.00	55.00					
													125.00	115.00

Philadelphia.....		35.00	30.00	55.00	55.00	55.75		100.00		115.00	125.00	148.61	163.08
San Francisco.....													
From 500 to 1,500 tons:													
Baltimore.....		35.00	35.00	35.00	35.00	35.00		100.00		135.00			125.00
Boston.....		35.00	35.00	35.00	35.00	35.00		100.00	125.00	135.00			
New Orleans.....		50.00	50.00	50.00	40.00	55.00	60.29	125.00	125.00	135.00	150.00	177.57	
New York.....				35.00	40.00	40.00	40.00	50.00	100.00	115.00	150.00	140.00	160.00
Norfolk.....						40.00	50.00						
Philadelphia.....		35.00	34.85	34.85	40.00	47.14	56.00	100.00		116.18		128.33	141.43
Portland, Me.....						55.00	55.00					125.00	206.67
Providence.....						45.00						150.00	
San Francisco.....						52.89	55.00	54.72	55.66		145.79	148.50	147.61
Seattle.....						55.00	55.00					150.00	162.50
Over 1,500 tons:													
Baltimore.....			40.00	35.00	35.00	45.00	55.00			135.00	100.00	165.00	125.00
Boston.....		35.00	35.00	35.00	35.00	40.00	40.00	45.00	50.00	125.00	135.00	150.00	150.00
New Orleans.....			50.00	50.00	50.00	50.00	50.00	60.00				175.00	175.00
New York.....		40.00		40.00	40.00	40.00	40.00	40.00	125.00	125.00	150.00	175.00	187.63
Norfolk.....						40.00	50.00	50.00	125.00	125.00	150.00	175.00	225.00
Philadelphia.....		40.00	30.20	35.00	39.51	42.24	42.50	53.20	125.00	125.00	135.35	150.00	156.20
Portland, Me.....						40.00	50.00	50.00				161.94	189.71
Providence.....						45.00	55.00					125.00	135.00
San Francisco.....						47.96	45.91	50.09	55.59			150.00	165.31
Seattle.....						50.00					150.00		173.89
<i>Atlantic and Gulf coasting trade.</i>													
Under 500 tons:													
Baltimore.....				35.00	35.00	45.00				100.00		140.00	
Bath.....		35.00	35.00	50.00		50.00	50.00		75.00	75.00	100.00		100.00
Boston.....		35.00				40.00	45.00		110.00			100.00	130.00
Gloucester.....				40.00		45.00				120.00	70.00	95.00	140.00
New Bedford.....						40.00						130.00	
New Orleans.....		50.00				40.00	40.00	50.00		125.00			
New York.....						35.00	40.00	40.00				130.00	125.00
Norfolk.....						50.00	50.00				112.00		125.00
Philadelphia.....		35.00		39.44	44.17	45.00	48.75		104.00		122.78	122.50	130.00
Portland, Me.....		35.00		40.00	40.00	50.00	55.00		95.00		90.00	115.00	125.00
Providence.....						45.00	45.00	50.00			125.00	130.00	115.00
Rockland.....													125.00
From 500 to 1,500 tons:													
Baltimore.....		35.00	35.00			45.00	55.00		110.00	135.00		165.00	125.00
Bath.....		35.00		35.00		40.00			100.00		110.00	100.00	135.00
Boston.....		35.00	35.00	35.00	40.00	40.00	50.00		110.00	135.00	125.00	150.00	

TABLE 4.—AVERAGE MONTHLY WAGES PAID TO FIREMEN AND FIRST ENGINEERS ON AMERICAN STEAM VESSELS, 1895-1917—Continued.

Destination, size, and port of departure of vessels.	Firemen.							First engineers.						
	1895	1900	1905	1910	1915	1916	1917	1895	1900	1905	1910	1915	1916	1917
<i>Atlantic and Gulf coasting trade—Continued.</i>														
From 500 to 1,500 tons—Continued.														
New Bedford.														
New Orleans.	\$50.00	\$50.00	\$50.00	\$40.00	\$50.00		\$40.00	\$67.13	\$125.00	\$125.00	\$135.00	\$100.00	\$150.00	\$150.00
New York.		35.00			40.00	40.00	50.00		100.00			150.00	150.00	\$203.12
Norfolk.				30.00	40.00	50.00						115.00	125.00	165.00
Philadelphia.	33.13	40.00	35.00		40.00	40.38	52.72	90.00	125.00	100.00		138.00	133.21	158.18
Portland, Me.		35.00	40.00		40.00	50.00	55.00		135.00			135.00	125.00	120.00
Providence.	40.00	40.00			45.00	45.00	50.00	125.00	115.00			150.00	150.00	160.00
Over 1,500 tons:														
Baltimore.		35.00	40.00	35.00	35.00	45.00		110.00	135.00	135.00	100.00	165.00		
Bath.												135.00		130.00
Boston.		35.00		35.00	40.00		45.00		110.00	135.00	150.00	150.00	150.00	150.00
				to 40.00		to 45.00				to 60.00	to 60.00			
Gloucester.														
New Orleans.		50.00		50.00	50.00		67.38		125.00		150.00	100.00		217.58
New York.	40.00	40.00	38.00	40.00	40.00	40.00	50.00	125.00	125.00	150.00	165.00	155.00	160.00	165.00
Norfolk.							50.00							
Philadelphia.		35.00		37.74	37.16	39.89	42.07	50.78	125.00		139.87	145.00	144.22	152.86
Portland, Me.					37.00	40.00	50.00	55.00				150.00	150.00	125.00
Providence.					40.00	45.00	45.00	50.00				140.00	150.00	175.00
Seattle.							55.00							
<i>To Asia and Australia.</i>														
Under 500 tons:														
San Francisco.		50.00										120.00		
From 500 to 1,500 tons:														
Baltimore.														125.00
San Francisco.		50.00	50.00		30.00	55.00			125.00	142.50		150.00	158.25	
Seattle.						55.00	55.00						150.00	165.00
Over 1,500 tons:														
Baltimore.								55.00						125.00
New York.								40.00	50.00					175.00
Philadelphia.									50.00					190.00
San Francisco.	45.00	48.24	50.00		53.33	52.35	55.30	155.88	156.61	171.53	175.00	186.20	177.74	187.75
Seattle.					22.00		55.00			162.50	200.00	166.67		175.00

*Pacific coasting trade.*

Under 500 tons:														
San Francisco.	47.50	50.00	50.00	55.00	65.00	52.50	55.00	110.00	121.25	124.33	150.00	150.00	162.50	
Seattle.		50.00	50.00	55.28	55.00				90.00	150.00	136.29	150.00	162.50	
From 500 to 1,500 tons:														
Baltimore.								55.00						125.00
San Francisco.	50.00	50.00	50.00	55.00	55.00	52.50	55.00	125.00	131.15	134.81	139.47	108.00	149.16	162.94
Seattle.		50.00	50.00	55.00	55.00				90.00	150.00	150.00	150.00	162.50	167.00
Over 1,500 tons:														
Baltimore.								55.00						125.00
San Francisco.	50.00	50.00	50.00	54.76	54.82	54.50	55.61	150.00	150.00	150.00	152.92	164.29	189.74	221.38
Seattle.		50.00	50.00	55.00	55.00	52.50	55.00		90.00	150.00	150.00	167.50	162.50	175.00

*To Africa.*

From 500 to 1,500 tons:														
Baltimore.								55.00						125.00
New York.								45.00	65.00				150.00	140.00
Over 1,500 tons:														
Baltimore.									55.00					125.00
New Orleans.									50.00					185.00
New York.								40.00	50.00				175.00	165.00
Norfolk.								40.00	45.00				100.00	
Philadelphia.								40.00	40.00	62.50			157.50	158.33

*Atlantic to Pacific ports and vice versa.*

Under 500 tons:														
Baltimore.				35.00										
Seattle.								52.50					162.50	
From 500 to 1,500 tons:														
Baltimore.									55.00					125.00
New Orleans.								40.00						
New York.				50.00				40.00			150.00			150.00
Norfolk.								40.00					115.00	
Philadelphia.										125.00				
San Francisco.								51.66	55.00	55.00			150.00	150.00
Seattle.								55.00	52.50				150.00	162.00
Over 1,500 tons:														
Baltimore.				30.00				35.00			150.00		100.00	
Boston.								40.00					175.00	
New York.								45.00						175.00
Norfolk.								40.00	40.00	50.00			165.00	180.00
Philadelphia.				35.00	40.00			40.00	40.00		160.00	200.00		115.00
San Francisco.								41.50	43.35	43.84	55.67		164.44	158.33
Seattle.								30.00	55.00	52.50			150.00	162.50

## APPENDIX D.

### TONNAGE TAX—LAW AND COLLECTIONS.

Tonnage tax is levied on every vessel engaged in trade upon her arrival by sea from a foreign port unless she is in distress, at the rate of 2 or 6 cents for each net ton. It is not levied on more than 5 entries *at the same rate* during any one year <sup>a</sup> nor on vessels arriving otherwise than by sea from foreign ports at which equivalent taxes or dues are not imposed on vessels of the United States.

Section 36 of the act of August 5, 1909, which went into effect October 5, 1909, is as follows:

“A tonnage duty of two cents per ton, not to exceed in the aggregate ten cents per ton in any one year, is hereby imposed at each entry on all vessels which shall be entered in any port of the United States from any foreign port or place in North America, Central America, the West India Islands, the Bahama Islands, the Bermuda Islands, or the coast of South America bordering on the Caribbean Sea, or Newfoundland, and a duty of six cents per ton, not to exceed thirty cents per ton per annum, is hereby imposed at each entry on all vessels which shall be entered in any port of the United States from any other foreign port, not, however, to include vessels in distress or not engaged in trade.

“This section shall not be construed to amend or repeal section twenty-seven hundred and ninety-two of the Revised Statutes as amended by section one of chapter two hundred and twelve of the laws of nineteen hundred and eight, approved May twenty-eighth, nineteen hundred and eight, or section five of the said chapter two hundred and twelve of the laws of nineteen hundred and eight, or section twenty-seven hundred and ninety-three of the Revised Statutes.

“Section forty-two hundred and thirty-two of the Revised Statutes, and sections eleven and twelve of chapter four hundred and twenty-one of the laws of eighteen hundred and eighty-six, approved June nineteenth, eighteen hundred and eighty-six, and so much of section forty-two hundred and nineteen of the Revised Statutes as conflicts with this section, are hereby repealed.”

The act of March 8, 1910, concerning tonnage duties on vessels entering otherwise than by sea, is as follows:

“Vessels entering otherwise than by sea from a foreign port at which tonnage or lighthouse dues or other equivalent tax or taxes are not imposed on vessels of the United States shall be exempt from the tonnage duty of two cents per ton, not to exceed in the aggregate ten cents per ton in any one year, prescribed by section thirty-six of the act approved August fifth, nineteen hundred and nine, entitled ‘An act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes.’”

The following tables show the tonnage taxes collected for the fiscal year.

#### 1. TONNAGE TAX COLLECTIONS, 1884-1917.

Year ended June 30—	American vessels.	Foreign vessels. <sup>b</sup>	Total.
1884.....	\$272,113.50	\$1,023,659.00	\$1,295,772.50
1885.....	59,325.29	331,549.86	390,875.15
1886.....	74,558.08	432,824.39	507,382.47
1887.....	76,529.07	485,657.38	562,187.45
1888.....	67,285.67	423,920.07	491,205.74
1889.....	70,034.44	406,998.46	477,032.90
1890.....	75,208.41	490,266.44	565,474.85
1891.....	75,208.41	490,263.44	565,471.85
1892.....	79,029.77	556,982.67	636,012.44
1893.....	70,019.56	469,213.58	539,233.14
1894.....	72,848.69	466,179.78	539,028.47
1895.....	69,316.21	454,028.40	523,344.61
1896.....	68,868.61	477,386.36	544,254.97
1897.....	70,882.04	660,887.57	731,769.61
1898.....	63,334.92	783,436.14	846,771.06
1899.....	65,815.00	768,272.81	834,087.81
1900.....	68,639.83	811,842.39	880,482.32
1901.....	67,703.87	835,435.01	903,138.88
1902.....	68,172.62	800,611.29	868,783.91
1903.....	71,970.20	813,841.37	885,841.37
1904.....	70,741.65	755,281.36	826,023.01
1905.....	79,578.54	778,958.05	858,536.59

<sup>a</sup> The tonnage year begins with the date of the first payment and ends on the day preceding the corresponding day of the following year.

<sup>b</sup> All alien tonnage tax and light money collections are included in this column prior to 1916, but beginning with that year these collections from American vessels are entered in the first column.

## 1. TONNAGE TAX COLLECTIONS, 1884-1917—Continued.

Year ended June 30—	American vessels.	Foreign vessels.	Total.
1906.	\$84,902.67	\$882,419.81	\$967,322.48
1907.	80,064.19	964,716.94	1,044,781.13
1908.	82,880.48	993,891.21	1,076,571.69
1909.	80,397.11	971,977.26	1,052,374.37
1910.	77,812.01	1,003,714.69	1,081,526.70
1911.	55,143.92	1,028,111.42	1,083,255.34
1912.	64,745.60	1,091,265.15	1,156,010.75
1913.	73,281.14	1,200,508.29	1,273,789.43
1914.	77,445.06	1,233,313.99	1,310,759.03
1915.	104,736.73	1,210,688.57	1,315,425.30
1916.	171,164.52	1,283,401.31	1,454,565.83
1917.	208,796.16	1,184,947.00	1,393,743.16

## 2. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1917, BY CUSTOMS DISTRICTS.

District.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
Alaska.	612	\$2,867.18	10	\$118.56	622	\$2,985.74
Buffalo.	39	603.98			39	603.98
Connecticut.	50	306.00	5	226.38	55	532.38
Duluth and Superior.	1	22.58			1	22.58
Florida.	529	4,358.00	179	16,433.64	708	20,791.64
Galveston.	129	3,752.92	226	34,890.02	355	38,642.94
Georgia.	40	543.44	179	18,211.74	219	18,755.18
Hawaii.	10	1,175.64	132	25,453.14	142	26,628.78
Laredo.	15	277.16			15	277.16
Maine and New Hampshire.	712	3,686.96	93	18,137.88	805	21,824.84
Maryland.	167	6,749.50	799	117,533.40	966	124,282.90
Massachusetts.	497	5,312.46	349	65,391.30	846	70,703.76
Michigan.	13	174.56			13	174.56
Mobile.	311	3,440.54	136	12,251.70	447	15,692.24
New Orleans.	401	12,144.92	397	62,938.98	798	75,083.90
New York.	1,214	34,427.26	2,537	462,256.00	3,751	496,683.26
North Carolina.	2	23.10	19	2,115.24	21	2,138.34
Ohio.	199	3,570.38			199	3,570.38
Oregon.	21	589.36	12	815.64	33	1,405.00
Philadelphia.	284	8,987.76	661	98,764.08	945	107,751.84
Porto Rico.	275	2,986.88	75	10,297.68	350	13,284.56
Rhode Island.	20	448.40	4	690.00	24	1,138.40
Rochester.	134	1,750.44			134	1,750.44
Sabine.	103	2,389.04	245	48,931.08	348	51,320.12
St. Lawrence.	1,040	3,686.20			1,040	3,686.20
San Francisco.	155	5,827.40	290	42,342.36	445	48,169.76
South Carolina.	19	282.76	52	6,939.30	71	7,222.06
Southern California.	235	903.66	32	6,462.72	267	7,366.38
Vermont.	68	134.00			68	134.00
Virginia.	90	2,975.96	1,099	173,983.02	1,189	176,958.98
Washington.	1,576	12,287.02	205	32,949.84	1,781	45,236.86
Total.	8,961	126,685.46	7,736	1,258,133.70	16,697	1,384,819.16
<i>Philippine Islands fund.</i>						
Massachusetts.			2	432.60	2	432.60
Philadelphia.			1	248.10	1	248.10
San Francisco.			8	946.92	8	946.92
Washington.			8	1,274.28	8	1,274.28
Total.			19	2,901.90	19	2,901.90
<i>Alien tonnage tax and light money.</i>						
Florida.					a 5	912.20
Michigan.					b 1	14.40
Mobile.					c 2	341.50
New York.					b 2	430.50
San Francisco.					b 1	973.50
Southern California.					d 964	3,330.00
Washington.					5	20.00
Total.					980	6,022.10
Grand total.					e 17,696	1,393,743.16

<sup>a</sup> Includes 4 entries, amounting to \$712.20, on which regular rates were also collected.

<sup>b</sup> Regular rate also collected.

<sup>c</sup> Includes 1 entry, amounting to \$169, on which regular rate was also collected.

<sup>d</sup> Includes 28 entries, amounting to \$112.50, on which regular rate was also collected.

<sup>e</sup> Includes 980 entries, amounting to \$6,022.10, on which tax at the rate of 50 cents or \$1 per ton was collected.

## 3. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1917, BY NATIONALITY OF VESSELS.

Flag.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
American.....	5,142	\$64,781.78	1,003	\$142,292.28	6,145	\$207,074.06
Argentinian.....			8	1,005.48	8	1,005.48
Austrian.....	33	4.56			33	4.56
Belgian.....	1	19.38	123	16,833.60	124	16,852.98
Brazilian.....	1	24.06	45	4,529.64	46	4,553.70
British.....	2,393	27,373.52	3,175	627,402.06	5,568	654,775.58
Chilean.....	3	29.86	17	2,263.26	20	2,293.12
Cuban.....	63	1,111.24	2	164.16	65	1,275.40
Danish.....	165	3,521.16	322	32,505.72	487	36,026.88
Dominican.....	77	160.94			77	160.94
Dutch.....	60	1,038.04	390	63,807.24	450	64,845.28
French.....	18	562.18	168	34,176.60	186	34,738.78
German.....			2	49.68	2	49.68
Greek.....	2	28.20	130	17,829.48	132	17,857.68
Haitian.....	2	16.24			2	16.24
Honduran.....	62	753.94			62	753.94
Italian.....	8	137.12	455	79,777.14	463	79,914.26
Japanese.....	29	1,388.26	296	58,821.84	325	60,210.10
Mexican.....	70	1,235.20	1	93.48	71	1,328.68
Nicaraguan.....	16	244.38			16	244.38
Norwegian.....	666	18,289.30	985	109,372.00	1,651	127,661.30
Panaman.....	9	22.10			9	22.10
Peruvian.....			6	571.44	6	571.44
Portuguese.....	7	50.72	59	3,970.14	66	4,020.86
Russian.....	1	37.82	94	11,009.04	95	11,046.86
Spanish.....	57	3,029.20	317	38,870.94	374	41,900.14
Swedish.....	67	2,744.82	114	10,732.82	181	13,477.64
Uruguayan.....	5	75.96	24	2,055.66	29	2,131.62
Venezuelan.....	4	5.48			4	5.48
Total.....	8,961	126,685.46	7,736	1,258,133.70	16,697	1,384,819.16
<i>Philippine Islands fund.</i>						
British.....			1	255.00	1	255.00
Japanese.....			12	1,795.38	12	1,795.38
Norwegian.....			5	734.70	5	734.70
Philippine.....			1	116.82	1	116.82
Total.....			19	2,901.90	19	2,901.90
<i>Alien tonnage tax and light money.</i>						
American.....					16	1,722.10
Austrian.....					40	159.50
Italian.....					37	129.50
Japanese.....					846	2,910.00
Philippine.....					1	973.50
Portuguese.....					5	35.00
Russian.....					35	92.50
Total.....					<i>a</i> 980	6,022.10
Grand total.....					<i>b</i> 17,696	1,393,743.16

*a* Includes 36 entries, amounting to \$1,493.60, on which the regular rate of 2 or 6 cents was also collected.

*b* Includes 980 entries, amounting to \$6,022.10, on which tax at the rate of 50 cents or \$1 per ton was collected.

## 4. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1917, BY COUNTRIES FROM WHICH THE VESSELS ENTERED.

Country.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
Africa:						
Algeria (French).....	148	\$20,033.58	148	\$20,033.48		
Angola (Portuguese).....	1	38.58	1	38.58		
Beira (Portuguese).....	9	1,246.44	9	1,246.44		
Canary Islands (Spanish).....	53	4,120.68	53	4,120.68		
Cape of Good Hope (British).....	10	1,509.72	10	1,509.72		
Cape Verde Islands (Portuguese).....	37	2,406.18	37	2,406.18		
Egypt.....	30	6,122.22	30	6,122.22		
Gold Coast (British).....	14	1,189.98	14	1,189.98		
Guinea (British).....	1	42.18	1	42.18		
Ivory Coast (French).....	1	62.52	1	62.52		
Madagascar (French).....	2	236.94	2	236.94		
Morocco.....	5	117.96	5	117.96		
Mozambique (Portuguese).....	8	1,275.90	8	1,275.90		
Natal (British).....	7	924.72	7	924.72		
Nigeria (British).....	6	281.88	6	281.88		
St. Thomas (Portuguese).....	2	126.24	2	126.24		
Senegal (French).....	33	4,663.50	33	4,633.50		
Sierra Leone (British).....	11	1,458.66	11	1,458.66		
Togoland (German).....	1	34.92	1	34.92		
Tunis.....	10	1,327.44	10	1,327.44		
Total.....	389	47,220.24	389	47,220.24		
Asia:						
China.....	114	25,314.18	114	25,314.18		
Formosa (Japanese).....	1	139.74	1	139.74		
India (British).....	89	16,650.84	89	16,650.84		
Japan.....	184	36,939.16	184	36,939.16		
Java (Dutch).....	38	9,480.24	38	9,480.24		
Manchuria (Japanese).....	8	1,624.14	8	1,624.14		
Siam.....	1	192.84	1	192.84		
Siberia (Russian).....	16	1,264.26	16	1,264.26		
Straits Settlements (British).....	6	1,196.82	6	1,196.82		
Turkey.....	1	117.78	1	117.78		
Total.....	458	92,970.00	458	92,970.00		
Europe:						
Azores (Portuguese).....	37	3,033.12	37	3,033.12		
Denmark.....	151	21,284.46	151	21,284.46		
France.....	957	148,803.42	957	148,803.42		
Germany.....	2	49.68	2	49.68		
Gibraltar (British).....	99	12,194.88	99	12,194.88		
Greece.....	49	7,960.02	49	7,960.02		
Iceland (Danish).....	11	423.60	11	423.60		
Italy.....	864	145,624.44	864	145,624.44		
Madeira Islands (Portuguese).....	11	899.46	11	899.46		
Malta (British).....	18	3,029.64	18	3,029.64		
Netherlands.....	374	58,928.58	374	58,928.58		
Norway.....	143	\$6,802.80	11	1,267.68	154	8,070.48
Portugal.....			157	13,712.34	157	13,712.34
Russia.....	13	2,422.26	13	2,422.26		
Spain.....			628	75,325.86	628	75,325.86
Sweden.....	71	3,156.68	25	3,034.86	96	6,191.54
United Kingdom.....			2,372	468,876.26	2,372	468,876.26
Total.....	214	9,959.48	5,779	966,870.56	5,993	976,830.04
North America:						
Bahamas (British).....	125	1,281.34			125	1,281.34
Barbados (British).....	33	578.72			33	578.72
Bermuda (British).....	53	1,033.60			53	1,033.60
British Columbia.....	2,294	21,000.74			2,294	21,000.74
British Honduras.....	40	785.20			40	785.20
Canal Zone.....	3	143.20			3	143.20
Costa Rica.....	69	3,753.36	1	23.10	70	3,776.46
Cuba.....	1,285	28,660.34			1,285	28,660.34
Danish West Indies.....	68	516.78			68	516.78
Dominican Republic.....	190	2,471.58			190	2,471.58
Dutch West Indies.....	64	578.14			64	578.14
French West Indies.....	34	334.28			34	334.28
Guatemala.....	37	1,331.42			37	1,331.42

## 4. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1917, BY COUNTRIES FROM WHICH THE VESSELS ENTERED—Continued.

Country.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
North America—Continued.						
Haiti.....	87	\$1,155.42	.....	.....	87	\$1,155.42
Honduras.....	95	1,030.16	.....	.....	95	1,030.16
Jamaica (British).....	146	2,283.56	.....	.....	146	2,283.56
Leeward Islands (British).....	6	85.64	.....	.....	6	85.64
Mexico.....	746	19,850.46	.....	.....	746	19,850.46
New Brunswick.....	582	3,160.80	.....	.....	582	3,160.80
Newfoundland.....	120	558.12	.....	.....	120	558.12
Nicaragua.....	59	1,002.84	.....	.....	59	1,002.84
Northwest Territory (British).....	1	.64	1	\$0.42	2	1.06
Nova Scotia.....	816	8,099.16	.....	.....	816	8,099.16
Ontario.....	20	240.50	.....	.....	20	240.50
Panama.....	22	1,006.42	.....	.....	22	1,006.42
Quebec.....	1,538	10,739.78	.....	.....	1,538	10,739.78
Salvador.....	7	261.90	.....	.....	7	261.90
Trinidad (British).....	38	680.64	1	133.80	39	814.44
Virgin Islands (American).....	1	2.48	.....	.....	1	2.48
Windward Islands (British).....	9	121.94	.....	.....	9	121.94
Yukon (British).....	44	346.90	.....	.....	44	346.90
Total.....	8,632	113,096.06	3	157.32	8,635	113,253.38
South America:						
Argentina.....	.....	.....	205	30,617.34	205	30,617.34
Brazil.....	.....	.....	271	35,088.06	271	35,088.06
British Guiana.....	.....	.....	53	5,931.00	53	5,931.00
Chile.....	.....	.....	292	49,856.40	292	49,856.40
Colombia.....	59	1,892.20	.....	.....	59	1,892.20
Dutch Guiana.....	.....	.....	8	627.78	8	627.78
Ecuador.....	.....	.....	11	1,071.30	11	1,071.30
French Guiana.....	.....	.....	1	48.70	1	48.70
Peru.....	.....	.....	41	5,075.58	41	5,075.58
Uruguay.....	.....	.....	15	1,894.44	15	1,894.44
Venezuela.....	56	1,737.72	.....	.....	56	1,737.72
Total.....	115	3,629.92	897	130,210.60	1,012	133,840.52
Oceania:						
Australia.....	.....	.....	128	13,999.98	128	13,999.98
Fanning Islands (British).....	.....	.....	12	91.38	12	91.38
Fiji Islands (British).....	.....	.....	13	691.38	13	691.38
Gilbert Islands (British).....	.....	.....	1	37.86	1	37.86
New Caledonia (French).....	.....	.....	7	1,447.14	7	1,447.14
New Zealand (British).....	.....	.....	28	3,914.46	28	3,914.46
Samoa (German).....	.....	.....	7	197.22	7	197.22
Society Islands (French).....	.....	.....	6	141.00	6	141.00
Tahiti (French).....	.....	.....	7	150.36	7	150.36
Tongo Islands (British).....	.....	.....	1	34.20	1	34.20
Total.....	.....	.....	210	20,704.98	210	20,704.98
Grand total.....	8,961	126,685.46	7,736	1,258,133.70	16,697	1,384,819.16

## APPENDIX F.

### THE WORLD'S TONNAGE, MOTIVE POWER, AND MATERIALS OF CONSTRUCTION.

The following tables give the latest information available as to the tonnage of the merchant marine of the world:

Table 1 is a compilation from the annual report of the British Board of Trade, received December, 1913. These reports, containing later figures for 1912, have not been received recently on account of the European war. The figures are based on the official figures (some gross, some net) of the various Governments. It shows the tonnage of principal nations, and tonnage added annually for a term of years.

Tables 2 and 3 are from the annual volumes of the great classification societies—Lloyd's and the Bureau Veritas. The minimum tonnage recognized by these societies is considerably higher than the legal basis of official returns of any Government. Neither society takes any cognizance in its statistics of steam vessels of less than 100 tons. Gross and net tonnage are stated by both, and comparison of Table 1 with Tables 2 or 3 will indicate where net tonnage is employed in Table 1. Both societies consider only net tonnage in the case of sailing vessels, Lloyd's taking cognizance of those over 100 net tons, the Bureau Veritas of those over 50 tons. The gross tonnage of sailing vessels generally is only about 5 per cent greater than their net tonnage. The promptitude of these large private companies brings their figures down to a much more recent date than Government reports. The volume of the *Répertoire Général*, published by the Bureau Veritas, is dated August, 1917; the current volume of Lloyd's Register, July 1, 1916.<sup>a</sup>

Table 4 is compiled from Lloyd's Register for 1916-17 and 11 recent years, and shows the motive power and chief materials of construction of the world's merchant navies as recorded by Lloyd's. The increase of gross tonnage with the nearly stationary number of vessels gives a rough measure of the increasing size of vessels due to the increasing use of steel. The steady increase in the number of steam vessels and marked increase in their tonnage with a decrease in both number and tonnage of sailing vessels will be noted. The wooden steam tonnage is decreasing; wooden sailing tonnage shows a decrease of over three-fourths. Iron vessels, both for steam and sail, show a steady decrease, iron no longer being used, while steel sailing vessels are practically five times in excess of those of 1890, and steam tonnage of steel has increased from about 4,000,000 tons in 1890 to over 40,000,000 tons in 1916. Like figures for Great Britain, the British colonies, France, Germany, and Japan have been compiled from Lloyd's.

Table 5 gives the total tonnage tables of the Bureau Veritas for a period of years, with a table of potential tonnage, obtained by the Bureau of Navigation by multiplying the steam net tonnage by 4 and adding to it the sailing tonnage, the ratio of 4 to 1 being the present measure of the efficiency of steam tonnage compared with sail tonnage. In an estimate of the carrying power of the world's ocean tonnage it is necessary to take cognizance of the factor of efficiency.

Table 6 shows the vessels of over 100 tons built during each of 10 recent years, according to returns received by Lloyd's. On account of the European war these tables for later years are not published in Lloyd's Register.

Table 7 contains the essential parts of Lloyd's annual summary of shipbuilding returns for the calendar year 1915.

Table 8 gives Lloyd's report of the world's construction in progress on June 30, 1916. On account of the European war this report this year excludes warships and is confined to merchant tonnage in the United Kingdom.

Table 9 gives Lloyd's report of vessels lost or broken up during 1914, with the causes of loss. The data for this table have not been received for 1915 and 1916.

<sup>a</sup> In view of the exigencies arising from the war, Lloyd's Register for 1917-18 does not carry the usual statistical tables.

## THE WORLD'S MERCHANT MARINE.

## 1. WORLD'S TONNAGE, BASED ON OFFICIAL RETURNS, 1850-1911 (FROM RETURN ON PROGRESS OF BRITISH SHIPPING FOR 1912).

[There is no uniformity in these returns, some nations resting statistics on gross, but the majority on net, tonnage. The minimum tonnage recognized by the laws of each nation is stated.]

Country and class.	1850	1860	1870	1880	1890	1900	1910	1911
Russia (25 tons and upward):	<i>Tons.</i>							
Sail.....				378,894		269,460	260,116	254,330
Steam.....				88,990		364,361	463,446	488,472
Total.....					467,884		633,821	723,562
Finland (all tonnages):								
Sail.....					276,877		287,154	321,200
Steam.....					11,431		53,561	71,594
Total.....						288,308	340,715	392,794
Norway (4 tons and upward):								
Sail.....			1,008,800	1,460,596	1,502,594	1,002,675	630,287	738,197
Steam.....			13,715	58,062	203,115	505,443	897,440	987,832
Total.....	298,315	558,927	1,022,515	1,518,658	1,705,699	1,508,118	1,527,727	1,646,030
Sweden (20 tons and upward): <sup>a</sup>								
Sail.....				461,593	369,680	288,687	175,916	154,968
Steam.....				81,049	141,267	325,105	596,763	610,100
Total.....					346,862	542,642	510,947	772,679
Denmark (4 tons and upward):								
Sail.....			168,193	197,509	189,406	158,303	131,342	124,510
Steam.....			10,453	51,957	112,788	250,137	415,496	414,353
Total.....					178,646	249,466	302,194	546,838
Germany (17.50 tons and upward):								
Sail.....			900,361	965,767	709,761	593,770	506,837	510,059
Steam.....			81,994	215,758	723,652	1,347,875	2,396,733	2,513,666
Total.....					982,355	1,181,525	1,433,413	1,941,645
Holland:								
Sail.....	289,870	423,790	370,159	263,887	127,200	78,493	45,936	42,312
Steam.....	2,706	10,132	19,455	64,394	128,511	268,430	488,339	523,301
Total.....	292,576	433,922	389,614	328,281	255,711	346,923	534,275	565,613
Belgium (50 tons and upward):								
Sail.....	33,315	28,857	20,648	10,442	4,393	741	3,402	5,905
Steam.....	1,604	4,254	9,501	65,224	71,553	112,518	187,730	160,515
Total.....	34,919	33,111	30,149	75,666	75,946	113,259	191,132	166,420
France (2 tons and upward):								
Sail.....	674,228	928,009	917,633	641,539	444,092	510,175	636,081	624,521
Steam.....	13,925	68,025	154,415	277,759	499,921	527,551	815,567	835,118
Total.....	688,153	996,124	1,072,048	919,298	944,013	1,037,726	1,451,648	1,462,639
Portugal (15 tons and upward):								
Sail.....							57,925	43,844
Steam.....							51,506	70,193
Total.....							109,431	114,037
Spain (50 tons and upward):								
Sail.....				326,438	210,247	95,187	44,940	44,325
Steam.....				233,695	407,935	679,392	744,517	750,081
Total.....					560,133	618,182	774,579	789,457
								794,406

<sup>a</sup> Prior to 1895 steam vessels of all tonnages and sailing vessels above 10 tons were included.

## THE WORLD'S MERCHANT MARINE—Continued.

## 1. WORLD'S TONNAGE, BASED ON OFFICIAL RETURNS, 1850–1911 (FROM RETURN ON PROGRESS OF BRITISH SHIPPING FOR 1912)—Continued.

Country and class.	1850	1860	1870	1880	1890	1900	1910	1911
Italy (2 tons and upward):								
Sail.....	<i>Tons.</i>							
Sail.....	980,064	922,146	634,149	568,164	410,791			
Steam.....	32,100	77,050	186,567	376,844	696,994			
Total.....		1,012,164	999,196	820,716	945,008		1,107,785	
Austria-Hungary:								
Sail.....		279,400	228,228	109,980	25,342	32,235	32,871	
Steam.....		49,977	62,743	94,234	239,324	477,616	462,970	
Total <sup>a</sup> .....		329,377	290,971	204,214	264,666	509,851	405,841	
Greece:								
Sail.....		398,703		226,702	175,867	145,284		
Steam.....		5,360		44,684	143,436	301,785		
Total.....		263,075	404,063		271,386	319,303	447,069	
China:								
Sail.....				11,801	20,541	14,314	15,679	
Steam.....			21,694	29,766	18,215	88,888	90,139	
Total.....			21,694	41,567	38,756	103,202	105,818	
Japan:								
Sail.....				48,094	52,880	320,572	412,859	451,520
Steam.....				41,215	93,812	543,366	1,233,785	1,386,534
Total.....				89,309	145,692	863,938	1,646,644	1,838,054
United Kingdom:								
Sail.....	3,396,659	4,204,360	4,577,855	3,851,045	2,936,021	2,096,498	1,113,944	902,718
Steam.....	168,474	454,327	1,112,934	2,723,468	5,042,517	7,207,610	10,442,719	10,992,073
Total.....	3,565,133	4,658,687	5,690,789	6,574,513	7,978,538	9,304,108	11,556,663	11,894,791

<sup>a</sup> Excluding small coasting vessels and fishing boats.

## 2. NUMBER AND NET AND GROSS TONNAGE OF STEAM AND SAILING VESSELS AS RECORDED BY THE BUREAU VERITAS FOR 1916-17.

The following table shows the number and gross and net tonnage of steamers of 100 gross tons and over and number and net tonnage of sailing vessels of 50 net tons and over, as given in the *Répertoire Général* of the Bureau Veritas for 1916-17:

Flag.	Steamers of 100 tons and upward.			Sailing vessels of 50 tons and upward.		Total.	
	Number.	Gross tons.	Net tons.	Number.	Net tons.	Number.	Tonnage.
British.....	6,673	19,350,882	11,921,245	4,975	731,019	11,648	20,081,901
German.....	1,074	3,527,487	2,133,040	1,103	365,232	2,177	3,892,719
American.....	1,309	3,148,301	2,053,284	1,851	930,814	3,160	4,079,115
Norwegian.....	1,427	2,139,751	1,363,368	734	494,224	2,161	2,623,975
Japanese.....	932	1,816,623	1,140,767	1,493	191,867	2,425	2,008,490
French.....	681	1,775,635	1,028,655	775	386,828	1,656	2,162,463
Italian.....	598	1,672,895	1,025,071	949	243,235	1,547	1,916,130
Dutch.....	475	1,441,730	898,783	448	49,513	923	1,491,243
Russian.....	653	995,362	607,211	3,554	583,659	4,207	1,579,021
Swedish.....	826	920,071	617,362	901	138,891	1,727	1,058,962
Spanish.....	421	794,310	489,147	234	29,328	655	823,638
Austrian.....	282	792,260	486,835	91	7,084	373	799,344
Danish.....	483	760,156	461,920	634	88,280	1,117	848,436
Greek.....	321	693,365	430,193	585	106,997	906	800,362
Portuguese.....	128	312,819	192,860	217	46,379	345	359,198
Brazilian.....	240	259,059	158,745	79	13,292	319	272,351
Belgian.....	102	237,277	153,791	6	7,350	108	244,627
Argentinian.....	135	147,259	91,109	49	16,256	184	163,515
Chinese.....	70	95,269	60,824	7	865	77	96,134
Chilean.....	65	85,361	54,438	32	24,695	97	110,056
Roumanian.....	29	73,392	43,233	3	551	32	73,943
Turkish.....	69	69,691	41,346	963	199,867	1,032	269,558
Mexican.....	24	32,556	20,048	16	2,483	40	35,039
Cuban.....	27	28,103	17,460	143	14,553	170	42,656
Peruvian.....	11	26,380	14,681	40	20,254	51	46,634
Uruguayan.....	19	18,974	11,651	48	23,163	67	42,137
Bulgarian.....	7	10,490	6,522	1	393	98	10,883
Honduran.....	3	6,322	4,010	4	546	7	6,868
Siamese.....	10	6,097	3,530	.....	.....	10	6,097
Sarawak.....	6	5,442	3,324	.....	.....	6	5,442
Venezuelan.....	7	4,598	2,455	8	1,054	15	5,652
Haitian.....	5	2,360	1,385	.....	.....	5	2,360
Persian.....	3	2,180	1,225	.....	.....	3	2,180
Zanzibar.....	2	1,220	542	.....	.....	2	1,220
Korean.....	1	1,027	796	.....	.....	1	1,027
Paraguayan.....	3	1,018	525	.....	.....	3	1,018
Panaman.....	1	946	452	1	195	2	1,141
Colombian.....	1	881	457	2	242	3	1,123
Nicaraguan.....	1	711	112	.....	.....	1	711
Egyptian.....	1	449	205	4	1,771	5	2,220
Serbian.....	1	264	112	.....	.....	1	264
Bornean.....	1	185	121	.....	.....	1	185
Montenegrin.....	.....	.....	.....	8	2,630	8	2,630
Tunisian.....	.....	.....	.....	7	670	7	670
Dominican.....	.....	.....	.....	4	407	4	407
Unknown.....	8	12,001	7,319	16	7,120	24	19,121
Total.....	17,135	41,271,159	25,550,159	19,985	4,731,707	37,120	46,002,866

3. NUMBER AND NET AND GROSS TONNAGE OF STEAM AND SAILING VESSELS OF OVER 100 TONS, OF THE SEVERAL COUNTRIES OF THE WORLD, AS RECORDED IN LLOYD'S REGISTER FOR 1916-17.

Flag.	Steam.			Sail.		Total.	
	Number.	Net tons.	Gross tons.	Number.	Net tons.	Number.	Tonnage.
British:							
United Kingdom.....	8,454	11,505,570	18,825,356	615	309,501	9,069	19,134,857
Colonies.....	1,576	957,102	1,638,525	496	128,617	2,072	1,767,142
Total.....	10,030	12,462,672	20,463,881	1,111	438,118	11,141	20,901,999
American (U. S.):							
Sea.....	1,285	1,827,780	2,852,535	1,302	938,043	2,587	3,790,578
Northern lakes.....	561	1,674,491	2,225,900	31	92,323	592	2,318,223
Philippine Islands.....	58	23,408	37,780	8	2,280	66	40,060
Total.....	1,904	3,525,679	5,116,215	1,341	1,032,646	3,245	6,148,861
Argentinian.....	238	106,126	181,929	71	32,548	309	214,477
Austro-Hungarian.....	385	550,682	891,103	11	1,515	396	892,618
Belgian.....	144	166,903	264,985	5	7,175	149	272,160
Brazilian.....	377	175,158	290,637	51	13,163	428	303,800
Chilean.....	95	58,881	92,820	27	26,594	122	119,714
Chinese.....	80	61,939	97,841	2	543	82	98,384
Cuban.....	41	20,898	34,281	8	3,768	49	38,049
Danish.....	589	469,164	797,371	265	60,231	854	857,602
Dutch.....	697	913,608	1,486,368	95	22,548	792	1,508,916
French.....	998	1,057,796	1,851,120	512	365,523	1,510	2,216,643
German.....	1,058	2,333,321	3,890,542	245	261,010	1,953	4,151,552
Greek.....	361	449,578	717,045	78	16,222	439	733,267
Italian.....	684	1,035,815	1,685,720	517	210,814	1,201	1,896,534
Japanese.....	1,151	1,169,105	1,847,453			1,151	1,847,453
Mexican.....	41	24,431	40,084	10	3,388	51	43,472
Norwegian.....	1,795	1,358,579	2,263,900	460	507,122	2,255	2,771,022
Peruvian.....	17	12,509	23,342	46	23,783	63	47,125
Portuguese.....	164	185,387	303,706	103	30,785	267	334,491
Roumanian.....	35	34,577	60,205	1	393	36	60,598
Russian.....	753	514,007	875,146	498	193,356	1,251	1,068,502
Spanish.....	552	496,411	815,166	54	14,670	606	829,836
Swedish.....	1,037	538,802	926,650	343	98,370	1,380	1,025,020
Turkish.....	113	49,192	83,087	66	17,701	179	100,788
Uruguayan.....	41	21,477	35,980	13	14,624	54	50,604
Other countries: Albania, Bulgaria, Colombia, Costa Rica, Ecuador, Egypt, Haiti, Honduras, Liberia, Montenegro, Nicaragua, Oman, Panama, Persia, Salvador, Samos, Sarawak, Siam, Tunis, Venezuela, Zanzibar, etc.....	76	34,568	59,746	79	28,500	155	88,246
Not recorded.....	26	30,995	51,401	23	10,002	49	61,403
The world.....	24,132	27,858,260	45,247,724	6,035	3,435,412	30,167	48,683,136

## 4. MOTIVE POWER AND CHIEF MATERIALS OF CONSTRUCTION OF THE WORLD'S MERCHANT MARINE.

[Recorded in Lloyd's, 100 tons or over.]

## THE WORLD.

Year.	Total vessels.		Steam.			Sail.	
	Number.	Tons.	Number.	Gross tons.	Net tons.	Number.	Net tons.
1890.....	32,298	22,151,651	11,108	12,985,372	8,295,514	21,190	9,166,279
1895.....	30,368	25,107,632	13,256	16,887,971	10,573,642	17,112	8,219,661
1900.....	28,422	29,043,728	15,898	22,369,358	13,856,513	12,524	6,674,370
1905.....	29,756	36,000,593	19,153	29,963,392	18,583,769	10,603	6,037,501
1910.....	30,058	41,914,765	22,008	37,290,695	23,046,122	8,050	4,624,070
1911.....	30,087	43,147,154	22,473	38,781,572	23,931,751	7,614	4,365,582
1912.....	30,316	44,600,677	23,217	40,518,177	24,977,920	7,099	4,082,500
1913.....	30,591	46,970,113	23,897	43,079,177	26,517,029	6,694	3,890,936
1914.....	30,836	49,089,552	24,444	45,403,877	27,987,782	6,392	3,685,675
1915.....	30,720	49,261,769	24,508	45,729,208	28,159,895	6,212	3,532,561
1916.....	30,167	48,683,136	24,132	45,247,724	27,858,260	6,035	3,435,412
Year.	Power.		Wood.		Iron.		Steel.
	Number.	Tons.	Number.	Tons.	Number.	Tons.	
1890.....	Steam.....	902	360,147	7,719	8,495,920	2,343	4,086,555
	Sail.....	18,924	6,693,738	1,879	2,021,593	248	348,653
	Total.....	19,826	7,053,885	9,598	10,517,513	2,591	4,435,208
1895.....	Steam.....	1,007	360,911	7,099	7,432,890	4,994	9,038,000
	Sail.....	14,526	5,173,766	1,671	1,778,671	801	1,185,101
	Total.....	15,533	5,534,677	8,770	9,211,561	5,795	10,223,101
1900.....	Steam.....	1,158	382,131	6,262	5,915,714	8,286	15,999,406
	Sail.....	9,970	3,627,491	1,386	1,482,388	1,082	1,509,298
	Total.....	11,128	4,009,622	7,648	7,398,102	9,368	17,508,704
1905.....	Steam.....	1,329	435,444	5,523	4,802,490	12,095	24,648,667
	Sail.....	8,017	2,959,406	1,154	1,242,334	1,368	1,797,331
	Total.....	9,346	3,394,850	6,677	6,044,824	13,463	26,445,998
1910.....	Steam.....	1,407	451,584	4,554	3,675,240	15,849	33,093,992
	Sail.....	5,892	2,093,274	821	873,359	1,294	1,634,708
	Total.....	7,299	2,544,858	5,375	4,548,599	17,143	34,728,700
1911.....	Steam.....	1,401	446,220	4,364	3,439,551	16,515	34,827,427
	Sail.....	5,550	1,963,111	747	794,307	1,280	1,589,000
	Total.....	6,951	2,409,331	5,111	4,233,858	17,795	36,416,427
1912.....	Steam.....	1,435	451,304	4,197	3,267,024	17,396	36,732,785
	Sail.....	5,180	1,819,254	672	714,032	1,213	1,530,874
	Total.....	6,615	2,270,558	4,869	3,981,056	18,609	38,263,659
1913.....	Steam.....	1,378	422,175	4,018	3,060,904	18,316	39,532,390
	Sail.....	4,818	1,691,101	617	660,381	1,230	1,523,497
	Total.....	6,196	2,113,276	4,635	3,721,285	19,546	41,055,887
1914.....	Steam.....	1,337	408,261	3,863	2,914,363	19,061	41,984,515
	Sail.....	4,578	1,575,197	576	614,734	1,210	1,480,695
	Total.....	5,915	1,983,458	4,439	3,529,097	20,271	43,465,210
1915.....	Steam.....	1,332	410,013	3,711	2,787,036	19,286	42,471,025
	Sail.....	4,445	1,510,251	540	566,110	1,199	1,441,286
	Total.....	5,777	1,920,264	4,251	3,353,146	20,485	43,912,311
1916.....	Steam.....	1,324	406,241	3,509	2,613,027	19,120	42,167,487
	Sail.....	4,297	1,449,935	517	541,064	1,191	1,429,274
	Total.....	5,621	1,856,176	4,026	3,154,091	20,311	43,596,761

## 4. MOTIVE POWER AND CHIEF MATERIALS OF CONSTRUCTION OF THE WORLD'S MERCHANT MARINE—Continued.

## UNITED KINGDOM.

Year.	Total vessels.		Steam.		Sail.	
	Number.	Tons.	Number.	Gross tons.	Number.	Net tons.
1890.	9,167	10,241,856	5,574	7,774,644	3,593	2,467,212
1895.	9,227	12,117,957	6,446	9,695,976	2,781	2,421,981
1900.	8,914	13,241,446	7,020	11,513,759	1,894	1,727,687
1905.	9,348	15,803,180	7,893	14,496,763	1,455	1,306,417
1910.	9,417	17,516,479	8,460	16,767,683	957	748,796
1911.	9,334	17,872,697	8,487	17,292,715	847	579,982
1912.	9,279	18,213,620	8,524	17,730,940	755	482,680
1913.	9,214	18,696,237	8,514	18,273,944	700	422,293
1914.	9,240	19,256,766	8,587	18,892,089	653	364,677
1915.	9,285	19,541,368	8,675	19,235,705	610	305,663
1916.	9,069	19,134,857	8,454	18,825,356	615	309,501

  

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	Tons.	Number.	Tons.	Number.	Tons.
1890.	Steam.	117	18,346	4,042	4,996,300	1,411	2,758,214
	Sail.	1,877	471,441	1,439	1,658,672	202	283,065
	Total.	1,994	489,787	5,481	6,654,972	1,613	3,041,279
1895.	Steam.	116	18,521	3,532	3,883,211	2,793	5,792,836
	Sail.	1,105	233,703	1,145	1,332,056	500	836,395
	Total.	1,221	252,224	4,677	5,215,267	3,293	6,629,231
1900.	Steam.	114	18,431	2,729	2,374,011	4,171	9,119,015
	Sail.	728	134,321	683	832,239	473	756,731
	Total.	842	152,752	3,412	3,206,250	4,644	9,875,746
1905.	Steam.	96	15,589	2,144	1,560,878	5,645	12,917,460
	Sail.	550	92,326	429	524,299	471	688,740
	Total.	646	107,915	2,573	2,085,177	6,116	13,606,200
1910.	Steam.	81	12,153	1,536	900,300	6,832	15,851,495
	Sail.	399	63,427	202	109,312	352	475,256
	Total.	480	75,580	1,738	1,109,612	7,184	16,326,751
1911.	Steam.	80	11,808	1,428	787,273	6,970	16,490,525
	Sail.	383	60,683	157	144,803	303	373,695
	Total.	463	72,491	1,585	932,076	7,273	16,864,220
1912.	Steam.	77	11,918	1,300	689,036	7,138	17,026,867
	Sail.	353	55,332	119	93,827	279	332,720
	Total.	430	67,250	1,419	782,863	7,417	17,359,587
1913.	Steam.	82	12,673	1,194	585,837	7,229	17,672,315
	Sail.	332	51,636	99	69,033	265	300,823
	Total.	414	64,309	1,293	654,870	7,494	17,973,138
1914.	Steam.	84	11,687	1,119	528,220	7,374	18,348,895
	Sail.	304	46,626	91	53,310	254	263,940
	Total.	388	58,313	1,210	581,530	7,628	18,612,835
1915.	Steam.	88	12,286	1,038	488,123	7,539	18,732,009
	Sail.	277	40,876	86	47,804	243	216,182
	Total.	365	53,162	1,124	535,927	7,782	18,948,191
1916.	Steam.	89	12,495	974	450,941	7,381	18,358,633
	Sail.	266	38,959	87	47,555	258	222,186
	Total.	355	51,454	1,061	498,496	7,639	18,580,819

## 4. MOTIVE POWER AND CHIEF MATERIALS OF CONSTRUCTION OF THE WORLD'S MERCHANT MARINE—Continued.

## BRITISH COLONIES.

Year.	Total vessels.		Steam.		Sail.	
	Number.	Tons.	Number.	Gross tons.	Number.	Net tons.
1890.	2,904	1,355,250	829	461,210	2,075	894,040
1895.	2,309	1,124,286	874	542,025	1,435	582,657
1900.	1,924	1,019,808	910	635,331	1,014	384,477
1905.	2,017	1,206,540	1,136	912,775	881	293,765
1910.	2,078	1,495,815	1,377	1,291,354	701	204,461
1911.	2,108	1,546,127	1,414	1,350,934	694	195,193
1912.	2,165	1,660,740	1,490	1,471,830	675	188,910
1913.	2,073	1,735,306	1,495	1,575,223	578	160,083
1914.	2,088	1,788,283	1,536	1,631,617	552	156,666
1915.	2,068	1,732,700	1,543	1,595,213	525	137,487
1916.	2,072	1,767,142	1,576	1,638,525	496	128,617
Year.	Power.		Wood.		Iron.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1890.	Steam.....	276	85,914	408	234,009	132
	Sail.....	1,995	837,551	65	46,309	2
	Total.....	2,271	923,465	473	280,318	134
1895.	Steam.....	278	88,414	351	216,351	229
	Sail.....	1,353	531,545	58	30,808	7
	Total.....	1,631	619,959	409	247,159	236
1900.	Steam.....	251	68,789	320	225,161	315
	Sail.....	927	326,915	50	29,989	19
	Total.....	1,178	395,704	370	255,150	334
1905.	Steam.....	314	87,543	300	216,266	497
	Sail.....	776	228,151	58	34,721	32
	Total.....	1,090	315,694	358	250,987	529
1910.	Steam.....	357	91,650	267	189,447	728
	Sail.....	613	149,481	46	27,356	32
	Total.....	970	241,131	313	216,803	760
1911.	Steam.....	356	90,097	259	181,181	773
	Sail.....	612	143,558	43	26,361	31
	Total.....	968	233,655	302	207,542	804
1912.	Steam.....	361	90,247	250	175,671	853
	Sail.....	594	136,882	45	28,870	28
	Total.....	955	227,129	295	204,541	881
1913.	Steam.....	314	74,668	232	154,999	927
	Sail.....	499	109,283	42	27,503	28
	Total.....	813	183,951	274	182,502	955
1914.	Steam.....	312	75,871	222	145,182	979
	Sail.....	468	101,028	42	26,324	34
	Total.....	780	176,899	264	171,506	1,013
1915.	Steam.....	311	78,490	223	145,269	987
	Sail.....	446	91,709	39	21,046	32
	Total.....	757	170,199	262	166,315	1,019
1916.	Steam.....	313	77,318	222	147,098	1,019
	Sail.....	419	84,488	38	20,060	31
	Total.....	732	161,806	260	167,158	1,050

## 4. MOTIVE POWER AND CHIEF MATERIALS OF CONSTRUCTION OF THE WORLD'S MERCHANT MARINE—Continued.

## FRANCE.

Year.	Total vessels.		Steam.		Sail.	
	Number.	Tons.	Number.	Gross tons.	Number.	Net tons.
1890	1,380	1,045,102	526	809,598	854	235,504
1895	1,164	1,094,752	571	903,105	593	191,647
1900	1,214	1,350,562	662	1,052,193	552	298,369
1905	1,497	1,728,038	764	1,260,973	733	467,065
1910	1,465	1,882,280	875	1,448,172	590	434,108
1911	1,478	1,976,862	890	1,542,568	588	434,294
1912	1,491	2,052,518	932	1,638,501	559	414,017
1913	1,552	2,201,164	987	1,793,310	565	407,854
1914	1,576	2,319,438	1,025	1,922,286	551	397,152
1915	1,539	2,285,728	1,016	1,909,609	523	376,119
1916	1,510	2,216,643	998	1,851,120	512	365,523

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	Tons.	Number.	Tons.	Number.	Tons.
1890.	Steam.	5	827	421	619,692	97	188,659
	Sail.	783	171,626	61	56,572	5	11,000
	Total.	788	172,453	482	670,264	102	199,659
1895.	Steam.	10	1,533	393	573,164	166	327,721
	Sail.	496	97,910	66	57,538	28	34,758
	Total.	506	99,443	459	630,703	194	362,479
1900.	Steam.	11	1,619	349	483,359	301	566,651
	Sail.	386	66,657	56	47,328	109	184,026
	Total.	397	68,276	405	530,687	410	750,677
1905.	Steam.	13	2,155	311	376,842	440	881,976
	Sail.	513	92,660	27	23,326	193	351,079
	Total.	526	94,815	338	400,168	633	1,233,055
1910.	Steam.	16	2,750	229	273,735	630	1,171,687
	Sail.	400	72,421	18	17,918	172	343,769
	Total.	416	75,171	247	291,653	802	1,515,456
1911.	Steam.	13	2,376	213	246,428	664	1,293,764
	Sail.	398	72,548	18	17,907	172	343,841
	Total.	411	74,922	231	264,335	836	1,637,605
1912.	Steam.	19	3,497	199	223,114	714	1,411,890
	Sail.	380	70,571	15	16,240	164	327,206
	Total.	399	74,068	214	239,354	878	1,749,096
1913.	Steam.	20	3,502	189	202,346	777	1,587,243
	Sail.	392	73,442	13	14,794	160	319,618
	Total.	412	76,944	202	217,140	937	1,906,861
1914.	Steam.	22	3,790	172	183,023	831	1,735,473
	Sail.	385	70,994	11	14,085	155	312,073
	Total.	407	74,784	183	197,108	986	2,047,546
1915.	Steam.	22	3,790	164	174,223	830	1,731,596
	Sail.	367	68,378	9	10,626	147	297,115
	Total.	389	72,168	173	184,849	977	2,028,711
1916.	Steam.	20	3,564	152	155,500	826	1,692,056
	Sail.	360	66,705	10	12,734	142	286,084
	Total.	380	70,269	162	168,234	968	1,978,140

## 4. MOTIVE POWER AND CHIEF MATERIALS OF CONSTRUCTION OF THE WORLD'S MERCHANT MARINE—Continued.

## GERMANY.

Year.	Total vessels.		Steam.		Sail.	
	Number.	Tons.	Number.	Gross tons.	Number.	Net tons.
1890.....	1,876	1,569,311	741	928,911	1,135	640,400
1895.....	1,730	1,886,812	953	1,343,357	777	543,455
1900.....	1,710	2,050,033	1,209	2,159,919	501	490,114
1905.....	1,996	3,564,798	1,556	3,093,702	440	471,096
1910.....	2,178	4,333,186	1,822	3,959,318	356	373,868
1911.....	2,199	4,466,880	1,856	4,092,015	343	374,865
1912.....	2,213	4,628,983	1,908	4,276,191	305	352,792
1913.....	2,321	5,082,061	2,019	4,743,046	302	339,015
1914.....	2,388	5,459,296	2,090	5,134,720	298	324,576
1915.....	2,166	4,706,027	1,897	4,419,167	269	286,860
1916.....	1,953	4,151,552	1,708	3,890,542	245	261,010

  

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	Tons.	Number.	Tons.	Number.	Tons.
1890.....	Steam.....	4	845	536	536,638	200	391,166
	Sail.....	906	405,789	191	184,003	28	41,831
	Total.....	910	406,634	727	720,641	228	432,997
1895.....	Steam.....	1	204	476	446,842	476	896,311
	Sail.....	462	175,213	200	207,663	109	154,521
	Total.....	463	175,417	676	654,505	585	1,050,832
1900.....	Steam.....	1	203	378	322,808	826	1,835,909
	Sail.....	145	76,901	163	176,628	189	234,600
	Total.....	146	77,104	541	499,436	1,015	2,070,509
1905.....	Steam.....	57	26,146	308	247,762	1,247	2,845,798
	Sail.....	57	26,146	98	115,172	283	329,460
	Total.....	57	26,146	406	362,934	1,530	3,175,258
1910.....	Steam.....	30	13,537	209	143,985	1,612	3,815,162
	Sail.....	30	13,537	37	43,950	286	315,897
	Total.....	30	13,537	246	187,935	1,898	4,131,059
1911.....	Steam.....	3	915	191	123,428	1,661	3,967,412
	Sail.....	27	12,996	28	34,491	285	326,894
	Total.....	30	13,911	219	157,919	1,946	4,294,306
1912.....	Steam.....	7	1,767	168	99,307	1,731	4,174,648
	Sail.....	19	10,860	23	27,799	260	313,649
	Total.....	26	12,627	191	127,106	1,991	4,488,297
1913.....	Steam.....	7	1,676	163	95,470	1,847	4,645,431
	Sail.....	19	10,815	20	25,104	261	302,778
	Total.....	26	12,491	183	120,574	2,108	4,948,209
1914.....	Steam.....	7	1,382	155	90,331	1,926	5,007,798
	Sail.....	17	9,296	16	17,098	263	297,864
	Total.....	24	10,678	171	107,429	2,189	5,305,662
1915.....	Steam.....	5	1,035	150	84,458	1,741	4,333,465
	Sail.....	10	5,998	13	11,022	244	269,522
	Total.....	15	7,033	163	95,480	1,985	4,602,987
1916.....	Steam.....	6	1,488	134	75,792	1,567	3,813,053
	Sail.....	10	5,998	10	6,522	223	248,172
Total.....		16	7,486	144	82,314	1,790	4,061,225

## 4. MOTIVE POWER AND CHIEF MATERIALS OF CONSTRUCTION OF THE WORLD'S MERCHANT MARINE—Continued.

JAPAN.<sup>a</sup>

Year.	Total vessels.		Steam.		Sail.		
	Number.	Tons.	Number.	Gross tons.	Number.	Net tons.	
1890.	289	171,554	212	300,625	124	33,123	
1895.	419	301,101	339	279,668	80	21,433	
1900.	1,066	574,557	484	483,187	582	86,370	
1905.	697	873,552	691	870,839	6	2,713	
1910.	851	1,149,222	846	1,146,977	5	2,245	
1911.	866	1,203,220	861	1,200,975	5	2,245	
1912.	960	1,344,991	960	1,344,991			
1913.	1,037	1,500,014	1,037	1,500,014			
1914.	1,103	1,708,386	1,103	1,708,386			
1915.	1,155	1,826,068	1,155	1,826,068			
1916.	1,151	1,847,453	1,151	1,847,453			
Year.	Power.		Wood.		Iron.		
	Number.	Tons.	Number.	Tons.	Number.	Tons.	
1890.	Steam.....	68	25,936	80	82,357	13	27,103
		122	32,238	2	885	124	33,123
		190	58,174	82	83,242	137	60,226
1895.	Steam.....	173	39,087	122	154,532	38	83,473
		79	20,934	1	499		
		252	60,021	123	155,031	38	83,473
1900.	Steam.....	253	56,057	120	168,159	102	259,799
		580	84,930			1	945
		833	140,987	120	168,159	103	260,744
1905.	Steam.....	299	75,225	144	238,588	234	550,355
		6	2,713				
		305	77,938	144	238,588	234	550,355
1910.	Steam.....	306	78,053	124	208,692	408	855,477
		5	2,245				
		311	80,298	124	208,692	408	855,477
1911.	Steam.....	299	75,221	118	192,378	437	929,595
		5	2,245				
		304	77,466	118	192,378	437	929,595
1912.	Steam.....	293	71,896	124	193,950	536	1,075,364
		293	71,896	124	193,950	536	1,075,364
1913.	Steam.....	276	66,355	118	185,125	636	1,244,753
		276	66,355	118	185,125	636	1,244,753
1914.	Steam.....	269	62,298	117	185,136	710	1,457,053
		269	62,298	117	185,136	710	1,457,053
1915.	Steam.....	279	63,665	110	175,146	760	1,583,466
		279	63,665	110	175,146	760	1,583,466
1916.	Steam.....	272	62,200	101	158,514	772	1,622,948
		272	62,200	101	158,514	772	1,622,948

<sup>a</sup> Japanese sailing vessels are not recorded in Lloyd's.

## 5. TOTAL NUMBER AND TONNAGE OF STEAM VESSELS (OVER 100 TONS) AND SAILING VESSELS (OVER 50 TONS).

[Recorded by Bureau Veritas.]

## THE WORLD.

Year.	Steam (over 100 tons).		Sail (over 50 tons).		Potential tonnage.
	Number.	Gross tons.	Number.	Net tons.	
1890.....	9,638	12,825,709	33,879	10,540,051	43,687,039
1895.....	10,896	16,338,513	29,570	9,323,995	50,764,795
1900.....	12,289	21,787,600	27,982	8,206,889	62,068,253
1905.....	14,018	28,369,140	27,122	7,420,679	78,617,087
1910.....	15,652	34,648,866	23,362	6,412,211	93,132,274
1911.....	15,925	35,969,323	23,277	6,152,977	95,507,173
1912.....	16,368	37,505,993	22,907	5,900,062	98,915,530
1913.....	17,135	39,643,841	21,924	5,629,942	100,992,722
1914.....	17,596	42,742,719	20,674	5,234,060	110,754,304
1915.....	17,755	42,681,216	20,791	4,980,644	112,037,340
1916.....	17,135	41,271,159	19,985	4,731,707	106,932,343

## BRITISH.

1890.....	5,202	8,043,872	10,559	3,693,650	24,119,974
1895.....	5,771	9,984,280	8,793	3,333,607	28,258,883
1900.....	5,649	11,859,581	7,326	2,513,307	32,096,443
1905.....	6,079	12,919,578	6,589	1,912,360	39,006,956
1910.....	6,503	17,566,724	4,703	1,306,843	44,716,435
1911.....	6,491	18,122,071	5,274	1,118,446	45,607,314
1912.....	6,558	18,514,944	5,124	1,026,262	46,584,318
1913.....	6,594	18,863,652	4,945	935,467	44,077,479
1914.....	6,733	19,988,949	4,879	885,360	49,954,416
1915.....	6,981	20,229,327	5,188	786,631	51,411,639
1916.....	6,673	19,350,882	4,975	731,019	48,415,999

## AMERICAN.

1890.....	419	533,333	3,406	1,445,016	2,948,816
1895.....	447	703,399	3,824	1,362,317	3,305,885
1900.....	674	1,183,851	3,671	1,360,978	4,594,546
1905.....	876	1,756,327	3,765	1,513,178	6,267,710
1910.....	921	1,891,552	3,465	1,357,789	6,418,413
1911.....	953	1,955,154	3,197	1,304,924	6,540,264
1912.....	993	2,033,100	3,090	1,252,190	6,679,166
1913.....	1,103	2,261,663	2,993	1,214,974	7,142,370
1914.....	1,114	2,380,303	2,162	1,019,026	7,159,222
1915.....	1,249	2,869,021	2,007	966,877	8,755,537
1916.....	1,309	3,148,301	1,851	930,814	9,143,950

## GERMAN.

1890.....	689	930,754	1,398	706,475	3,331,203
1895.....	826	1,306,771	1,105	597,862	4,343,766
1900.....	1,031	2,169,029	955	551,025	5,962,785
1905.....	1,273	3,033,333	955	492,411	8,031,947
1910.....	1,372	3,864,824	979	441,881	10,365,125
1911.....	1,395	3,893,287	868	433,436	11,252,588
1912.....	1,412	4,160,927	1,000	432,168	10,680,268
1913.....	1,510	4,465,491	1,041	426,919	11,838,107
1914.....	1,549	5,072,993	1,172	443,095	12,732,517
1915.....	1,248	4,062,471	1,137	401,371	10,297,583
1916.....	1,074	3,527,487	1,103	365,232	8,897,392

## FRENCH.

1890.....	471	805,983	1,627	298,787	2,238,747
1895.....	501	864,598	1,459	255,095	2,100,683
1900.....	545	1,060,238	1,396	341,037	2,594,193
1905.....	577	1,222,008	1,414	517,069	3,380,813
1910.....	609	1,416,096	1,155	482,848	3,790,324
1911.....	616	1,471,333	1,129	469,994	4,590,366
1912.....	642	1,627,812	1,115	460,253	4,249,073
1913.....	692	1,739,255	877	434,289	4,489,677
1914.....	710	1,861,333	892	433,290	4,736,822
1915.....	714	1,892,415	867	403,311	4,751,695
1916.....	681	1,775,635	775	386,828	4,501,448

## 5. TOTAL NUMBER AND TONNAGE OF STEAM VESSELS (OVER 100 TONS) AND SAILING VESSELS (OVER 50 TONS)—Continued.

## NORWEGIAN.

Year.	Steam (over 100 tons).		Sail (over 50 tons).		Potential tonnage.
	Number.	Gross tons.	Number.	Net tons.	
1890	371	245,052	3,567	1,405,934	2,111,610
1895	530	455,317	2,959	1,240,159	2,385,531
1900	719	769,242	2,123	898,761	2,815,977
1902	804	863,146	1,837	807,125	2,960,489
1905	916	1,057,822	1,647	741,970	3,374,910
1907	1,021	1,257,774	1,345	702,815	3,804,223
1909	1,093	1,364,401	1,197	623,258	3,997,616
1910	1,099	1,396,151	1,116	608,010	4,037,086
1911	1,155	1,533,441	1,074	654,103	4,424,259
1912	1,199	1,649,789	1,007	636,248	4,731,456
1913	1,266	1,824,762	861	600,714	5,034,730
1914	1,299	1,914,029	832	560,136	5,621,448
1915	1,312	1,920,350	793	553,691	5,596,179
1916	1,427	2,139,751	734	494,224	5,947,696

## 6. CONSTRUCTION.

[Vessels built in the world (over 100 tons) according to Lloyd's (including vessels not recorded in Lloyd's).]

Year.	Total vessels.	Steam.		Sail.	
		Number.	Tons.	Number.	Gross tons.
1890	1,362	1,646,809	880	1,328,541	482
1895	794	1,211,615	629	1,114,019	165
1900	1,285	2,268,938	966	2,046,339	319
1905	1,181	2,302,467	1,051	2,253,632	130
1908	993	1,761,585	872	1,706,396	121
1909	899	1,551,532	758	1,510,070	141
1910	899	1,816,189	811	1,795,419	88
1911	1,189	2,405,681	1,093	2,368,354	96
1912	1,278	2,688,306	1,172	2,650,124	106
1913	1,183	2,884,529	1,076	2,844,144	107

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	Tons.	Number.	Tons.	Number.	Tons.
1890	Steam.....	60	167,974	135	74,157	685	1,234,183
	Sail.....	377	20,201	10	9,294	95	141,000
	Total.....	437	188,175	145	83,451	780	1,375,183
1895	Steam.....	27	10,312	58	9,769	544	1,093,938
	Sail.....	120	38,875	.....	.....	45	58,721
	Total.....	147	49,187	58	9,769	589	1,152,659
1900	Steam.....	60	27,208	72	14,734	834	2,004,397
	Sail.....	212	102,084	.....	.....	107	120,515
	Total.....	272	129,292	72	14,734	941	2,124,912
1905	Steam.....	58	18,610	1	342	992	2,234,080
	Sail.....	109	36,022	.....	.....	21	13,413
	Total.....	167	54,632	1	342	1,013	2,247,493
1908	Steam.....	50	20,812	.....	.....	822	1,685,584
	Sail.....	90	35,300	.....	.....	31	19,889
	Total.....	140	56,112	.....	.....	853	1,705,473
1909	Steam.....	35	7,085	.....	.....	723	1,502,985
	Sail.....	80	20,760	.....	.....	61	20,702
	Total.....	115	27,845	.....	.....	784	1,523,687
1910	Steam.....	32	7,389	.....	.....	779	1,788,030
	Sail.....	64	16,348	.....	.....	24	4,422
	Total.....	96	23,737	.....	.....	803	1,792,452

## 6. CONSTRUCTION—Continued.

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	Tons.	Number.	Tons.	Number.	Tons.
1911.....	Steam.....	50	15,478	2	636	1,041	2,352,240
	Sail.....	58	15,560	1	111	37	21,656
	Total.....	108	31,038	3	747	1,078	2,373,896
1912.....	Steam.....	48	15,211	1	154	1,123	2,634,759
	Sail.....	74	23,264	.....	.....	32	14,198
	Total.....	122	38,475	1	154	1,155	2,649,677
1913.....	Steam.....	57	15,106	.....	.....	1,019	2,829,038
	Sail.....	66	23,480	.....	.....	41	16,905
	Total.....	123	38,586	.....	.....	1,060	2,845,943

Year.	All nations.				United Kingdom.			
	Sail.		Steam.		Sail.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1890.....	482	318,268	880	1,328,541	84	121,015	632	1,076,220
1895.....	165	97,596	629	1,114,019	29	36,999	463	919,308
1900.....	319	222,599	966	2,046,339	6	6,605	645	1,452,802
1905.....	130	49,435	1,051	2,253,032	3	2,461	667	1,516,193
1908.....	121	55,189	872	1,706,396	4	7,897	433	922,415
1909.....	141	41,462	758	1,510,070	11	2,910	452	968,203
1910.....	88	20,770	811	1,795,419	3	685	451	1,140,153
1911.....	96	37,327	1,093	2,405,681	15	7,992	613	1,671,102
1912.....	106	38,182	1,172	2,650,124	16	5,670	613	1,656,197
1913.....	107	40,385	1,076	2,844,144	14	4,310	598	1,788,977

Year.	France.				Germany.			
	Sail.		Steam.		Sail.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1890.....	18	6,896	14	27,666	12	15,083	56	87,382
1895.....	20	8,074	11	14,683	1	3,854	62	76,576
1900.....	52	70,224	13	31,094	20	8,671	70	203,179
1905.....	14	2,130	17	72,075	8	6,298	105	231,832
1908.....	7	943	33	83,114	6	2,844	79	189,888
1909.....	14	2,174	20	43,891	11	3,870	62	121,438
1910.....	13	2,134	18	61,353	3	515	69	132,818
1911.....	20	3,766	32	107,799	12	7,883	124	250,946
1912.....	28	5,070	38	146,283	4	1,425	114	351,137
1913.....	12	2,085	30	154,707	2	711	99	344,831

7. THE WORLD'S SHIPBUILDING IN 1915 (EXCLUDING WARSHIPS).<sup>a</sup>

[Lloyd's Register, London, January, 1916.]

## UNITED KINGDOM.

*Particulars of total output.*—As has been pointed out for some time past in the society's quarterly shipbuilding returns, the rate of progress in merchant ship construction in the United Kingdom has been very much reduced in present circumstances, resulting in a corresponding decrease in the immediate output.

Excluding all vessels not intended for merchant purposes, during 1915, 327 vessels of 650,919 tons (viz., 317 steamers of 648,629 tons and 10 sailing vessels of 2,290 tons) have been launched in the United Kingdom. The sailing ship tonnage is composed, however, almost entirely of barges and similar craft.

<sup>a</sup> This summary does not include particulars of vessels of less than 100 tons gross and takes into account only vessels that were launched in 1915, whether they were completed during the year or are still under construction. On account of the war, it is impossible to give figures in respect of several countries; for the same reason warship tonnage has been excluded throughout this summary.

The output of mercantile tonnage in the United Kingdom during 1915 shows a decrease of 1,032,634 tons on that of last year. Practically the whole of the tonnage launched is composed of steel steam tonnage.

*Nationality of tonnage launched.*—Of the total output, nearly 85 $\frac{1}{4}$  per cent, or 554,803 tons (553,363 steam tons and 1,440 sailing tons), has been built for registration in the United Kingdom.

The amount of tonnage launched for other countries during 1915 was 96,116 tons (including 20,965 tons for the British colonies), forming about 14 $\frac{1}{4}$  per cent of the total output, as compared with an average percentage of 23 $\frac{1}{2}$  for the previous five years.

*Size of vessels.*—The returns for 1915 show that 33 vessels of 6,000 tons and above were launched. Of these, 3 were over 10,000 tons each, the largest being one of 13,400 tons.

The average tonnage of steamers launched in the United Kingdom during 1915 is 2,046 tons, but if steamers of less than 500 tons be excluded the average of the remaining steamers reaches 3,791 tons gross, which is a considerable reduction on the mean of the averages of the five previous years.

*Vessels fitted with turbines or with internal-combustion engines.*—Six steamers were launched with a total of 53,192 tons which will have Parsons steam turbine engines. All these vessels will be fitted with geared turbines.

The launches for the year also include 2 vessels with a total of 10,700 tons fitted with internal-combustion engines.

*Special types of vessels.*—Of steamers building on the Isherwood system of longitudinal framing, 7 were launched during 1915 with a gross total of 43,665 tons. Including 4 of these vessels with 24,084 tons, there were launched during the past year 5 steamers of 31,684 tons for the carriage of oil in bulk.

The returns also include 8 vessels of 66,334 tons with cruiser sterns; 104 steam trawlers and other fishing vessels; besides a number of tugs, dredgers, barges, and other vessels designed for channel, river, and other special services.

*Output of leading districts.*—As was the case last year, the Clyde district occupies the first place among the shipbuilding centers of the country, showing an output of 205,073 tons (Glasgow, 106,203 tons, and Greenock, 98,870 tons). Then follow the Tyne (124,001 tons), the Wear (110,942 tons), Hartlepool (59,308 tons), Middlesbrough (58,574 tons), and Belfast (33,729 tons).

#### OTHER COUNTRIES.

*Particulars of total output.*—Attention is drawn to statistics given in Table VI, from which it appears that, outside the United Kingdom, there have been launched during the year 416 vessels of 550,719 tons (313 steamers of 518,948 tons and 103 sailing vessels of 31,771 tons). The figures show a decrease of nearly 53 per cent compared with those for 1914, but it should be borne in mind that they are incomplete, Germany, Austria-Hungary, and Belgium not being included. The returns for the year include 33 vessels of over 5,000 tons each. The largest vessel of the year was a collier built in the United States of about 11,000 tons. During 1915, 11 vessels of over 1,000 tons each, to be fitted with internal-combustion engines, were launched, their aggregate being about 42,000 tons. The returns for the year include 12 steamers with a total of 71,467 tons, building (all in the United States) on the Isherwood system of longitudinal framing, and 6 steamers of 35,000 tons to be fitted with steam turbine engines. There are also 6 oil-carrying vessels of about 33,000 tons.

*United States.*—The tonnage launched in the United States (177,460 tons) is 23,302 tons less than that of the previous year. During the year there were launched on the coast 13 seagoing steamers of from 5,000 to 7,000 tons each, and 1 collier of about 11,000 tons. The total output includes 5 steamers with a total of about 30,000 tons to carry oil in bulk. Including these 5 vessels, there were launched in the United States 12 steamers of 71,467 tons building on the Isherwood system of longitudinal framing.

*Holland.*—The total tonnage (113,075 tons) launched in Holland during the past year is about 5,000 tons less than the output in 1914, which was a record in the society's returns for that country. This total does not include vessels known to be exclusively intended for river navigation, and which tonnage appears from information to hand to amount to over 70,000 tons; so that the total output, including such craft, would appear to reach over 183,000 tons.

The largest vessel launched during the year was of about 8,000 tons. There are 4 other steamers of from 5,000 to 7,500 tons each.

*Norway.*—The returns for the year show the output to be 62,070 tons, which is about 8,000 tons more than the total for the previous year, and is the highest ever recorded in the society's returns for this country. As in other years, the tonnage launched is practically composed of vessels of between 1,000 and 2,000 tons. Only 1 vessel of a larger tonnage has been launched, viz, a motor vessel of 2,600 tons.

*Japan.*—The tonnage launched during the year (49,408 tons) is over 42 per cent lower than the output for 1914. It comprises 2 steamers of about 9,500 tons each and 1 steamer, 7,375 tons, fitted with steam turbine engines.

*Denmark.*—The figures (45,198 tons) exceed those for the previous year by nearly 13,000 tons and are the highest on record. Included in this total are 6 vessels of about 30,000 tons which are to be fitted with Diesel engines.

VESSELS CLASSED BY LLOYD'S REGISTER.

Of the merchant vessels launched during 1915, 378 of 874,775 tons (including 91 vessels of 299,743 tons launched outside the United Kingdom) have been built under the society's inspection with a view to classification in Lloyd's Register Book.

TABLE I.—*Vessels launched in the United Kingdom, 1890–1915.*

Year.	Steam.		Sail.		Total.	
	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.
1890.....	651	1,061,619	92	133,086	743	1,194,705
1891.....	641	878,353	181	252,463	822	1,130,816
1892.....	512	841,356	169	268,594	681	1,109,950
1893.....	438	718,277	98	118,106	536	836,383
1894.....	549	964,926	65	81,582	614	1,046,508
1895.....	526	904,991	53	45,976	579	950,967
1896.....	628	1,113,831	68	45,920	696	1,159,751
1897.....	548	924,382	46	28,104	591	952,486
1898.....	744	1,363,318	17	4,252	761	1,367,570
1899.....	714	1,414,774	12	2,017	726	1,416,791
1900.....	664	1,432,600	28	9,871	692	1,442,471
1901.....	591	1,501,078	48	23,661	639	1,524,739
1902.....	622	1,378,206	72	49,352	694	1,427,558
1903.....	632	1,165,503	65	25,115	697	1,190,618
1904.....	613	1,171,375	99	33,787	712	1,205,162
1905.....	737	1,604,796	58	18,372	795	1,623,168
1906.....	815	1,809,433	71	18,910	886	1,828,343
1907.....	752	1,581,521	89	26,369	841	1,607,890
1908.....	454	914,570	69	15,099	523	929,669
1909.....	465	972,799	61	18,267	526	991,066
1910.....	473	1,137,738	27	5,431	500	1,143,169
1911.....	700	1,782,908	72	20,936	772	1,803,844
1912.....	643	1,720,957	69	17,557	712	1,738,514
1913.....	641	1,919,578	47	12,575	688	1,932,153
1914.....	621	1,674,358	35	9,195	656	1,683,553
1915.....	317	648,629	10	2,290	327	650,919

TABLE II.—*Number and gross tonnage of merchant vessels launched in the world (outside the United Kingdom) from 1892 to 1915.*

Year.	Steam.		Sail.		Total.	
	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.
1892.....	147	126,210	223	121,885	370	248,095
1893.....	135	121,506	175	68,752	310	190,358
1894.....	148	203,279	170	73,751	318	277,030
1895.....	190	209,300	111	57,993	301	267,193
1896.....	260	299,421	157	108,710	417	408,131
1897.....	253	278,443	146	100,995	399	379,438
1898.....	371	415,907	158	109,866	529	525,773
1899.....	292	530,945	251	174,002	543	704,947
1900.....	347	602,989	325	258,703	672	861,692
1901.....	446	800,849	453	291,951	899	1,092,800
1902.....	487	747,945	469	327,252	956	1,075,197
1903.....	549	798,205	404	156,808	953	955,013
1904.....	570	626,190	361	156,583	931	782,773
1905.....	525	801,705	256	90,049	781	891,754
1906.....	642	984,613	308	106,807	950	1,091,420
1907.....	681	1,070,913	266	99,285	947	1,170,198
1908.....	550	791,509	332	112,008	882	903,617
1909.....	348	564,771	189	46,220	537	610,991
1910.....	453	719,903	324	94,781	777	814,684
1911.....	537	748,515	290	97,781	827	846,296
1912.....	720	1,074,911	287	88,344	1,007	1,163,255
1913.....	639	1,269,000	423	131,729	1,062	1,400,729
1914 a.....	473	1,111,027	190	58,173	663	1,161,200
1915 a.....	313	518,948	103	31,771	416	550,719

a Returns not complete.

TABLE III.—*Merchant vessels launched in the principal shipbuilding districts of the United Kingdom during the three years 1913–1915.*

District.	1915						Total, 1914.	Total, 1913.		
	Steam.		Sail.		Total.					
	No.	Gr. tons.	No.	Gr. tons.	No.	Gr. tons.				
Aberdeen.....	33	7,103			33	7,103	47	10,190		
Barrow, Maryport, and Workington.....	3	2,174			3	2,174	1	284		
Belfast.....	8	33,729			8	33,729	21	239,819		
Dundee.....	5	4,587			5	4,587	10	11,793		
Glasgow.....	40	104,953	5	1,250	45	106,203	110	248,103		
Greecock.....	28	98,870			28	98,870	51	196,518		
Hartlepool and Whitby.....	13	59,308			13	59,308	29	124,419		
Hull and Grimsby.....	65	24,018			65	24,018	93	53,726		
Leith.....	10	5,889			10	5,889	17	18,671		
Liverpool.....	8	10,672			8	10,672	15	39,465		
Middlesbrough and Stockton.....	30	58,574			30	58,574	70	137,165		
Newcastle.....	34	123,586	2	415	36	124,001	91	315,585		
Sunderland.....	31	110,942			31	110,942	72	277,528		

TABLE IV.—*Size of merchant vessels launched in the United Kingdom during 1915.*

Tonnage.	Steam.	Sail.	Tonnage.		Steam.	Sail.
			100 and under 500 tons.....	10,000 and under 12,000 tons.....		
500 and under 1,000 tons.....	20		500 and under 1,000 tons.....	12,000 and under 15,000 tons.....		
1,000 and under 2,000 tons.....	33		1,000 and under 2,000 tons.....	15,000 and under 20,000 tons.....		
2,000 and under 3,000 tons.....	17		2,000 and under 3,000 tons.....	20,000 and under 25,000 tons.....		
3,000 and under 4,000 tons.....	23		3,000 and under 4,000 tons.....	25,000 and under 30,000 tons.....		
4,000 and under 5,000 tons.....	26		4,000 and under 5,000 tons.....	30,000 and under 40,000 tons.....		
5,000 and under 6,000 tons.....	9		5,000 and under 6,000 tons.....	40,000 tons and above.....		
6,000 and under 8,000 tons.....	20					
8,000 and under 10,000 tons.....	10					
			Total.....		317	10

TABLE V.—*Total output of merchant vessels in the world during 1915.*

Where built.	Steam.		Sail.		Total.	
	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.
United Kingdom.....	317	648,629	10	2,290	327	650,919
Other countries.....	313	518,948	103	31,771	416	550,719
Total for the world.....	630	1,167,577	113	34,061	743	1,201,638

TABLE VI.—*Merchant vessels (over 100 tons) built in the world (outside the United Kingdom) during 1915.<sup>a</sup>*

Country and district.	Steam.				Sail.				Total built in each country.			
	Steel.		Wood.		Steel.		Wood.					
	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.				
British colonies:												
Canada—												
Great Lakes.....	15	10,236	4	888	4	1,000	3	1,016	31	22,014		
Coast.....			1	234			1	149		234		
Other colonies.....												
Chile.....												
Denmark:												
Copenhagen and Elsinore.....	16	43,430					2	341	23	45,198		
Other ports.....	5	1,427										
France:												
Havre and River Seine.....	2	15,918										
Nantes and St. Nazaire.....	3	8,244							6	25,402		
Mediterranean ports.....	1	1,240										
Holland:												
Amsterdam, Groningen, and Friesland.....	13	19,908			4	631						
Rotterdam, Dordrecht, and Flushing.....	71	88,700			32	3,836			120	113,075		
Italy:												
Gulf of Genoa.....	2	9,935			3	500	6	681				
Leghorn and Viareggio.....			1	239			5	1,212				
Gulf of Naples.....							11	2,265	30	22,132		
Ancona.....	1	2,800										
Palermo.....	1	4,500										
Japan:												
Kobe and Osaka.....	19	31,235										
Nagasaki.....	4	17,674			2	340	1	159	26	49,408		
Other ports.....												
Norway:												
Stavanger, Bergen, and Trondhjem.....	20	20,028	1	123	1	120						
Christiania (Lindesnæs to Fredrikshald).....	35	40,525	1	924	1	350			59	62,070		
Russia.....	1	161			2	366	1	115	4	642		
Spain.....	5	12,765							5	12,765		
Sweden.....	21	19,233	3	592			3	494	27	20,319		
United States:												
Maine and Massachusetts.....	3	7,261	1	100	1	468	7	6,834				
New Hampshire, Connecticut, and New York.....	9	2,097	2	516	1	1,861						
New Jersey, Pennsylvania, and Delaware.....	16	58,068			1	283	3	2,954	84	177,460		
Maryland and Virginia.....	12	43,658			1	650	7	5,146				
Great Lakes.....	8	20,293										
Pacific coast.....	5	22,132	7	5,139								
Total.....	292	510,193	21	8,755	53	10,405	50	21,366	416	550,719		

<sup>a</sup> On account of the European war it is impossible to give figures in respect to other countries.

TABLE VII.—Number and tonnage of merchant vessels of 100 tons gross and upward launched, 1892–1915.

Year.	United Kingdom.	British colonies.				Austria-Hungary.	Denmark.	France.	
		United Kingdom.		Canadian lake ports.					
1892	681	1,109,950	58	19,792	(a)	7	2,302	22	12,707
1893	536	836,333	41	17,089	(a)	6	7,435	18	10,719
1894	614	1,046,508	26	6,055	1	748	5	1,703	16
1895	579	950,967	23	6,105	7	4,276	10	7,371	14
1896	696	1,159,751	36	8,394	5	2,730	9	6,246	14
1897	591	952,486	36	10,489	4	1,042	6	6,601	13
1898	761	1,367,570	65	22,664	5	2,357	9	5,432	17
1899	726	1,416,731	31	6,475	3	1,989	8	9,248	30
1900	692	1,442,471	38	6,967	2	2,596	12	14,889	17
1901	639	1,524,739	68	16,610	6	11,524	7	20,013	41
1902	694	1,427,558	65	18,235	4	10,584	16	15,192	44
1903	697	1,190,618	64	20,866	9	13,824	6	11,328	39
1904	712	1,205,162	55	27,253	6	3,712	40	16,645	30
1905	795	1,623,168	45	—	10,798	27	16,402	19	17,557
1906	886	1,828,343	50	16,026	7	10,016	25	18,590	18
1907	841	1,607,890	83	21,479	14	24,964	7	8,717	29
1908	523	929,669	111	25,512	8	8,669	24	23,502	24
1909	526	991,066	35	6,592	3	869	15	25,006	11
1910	500	1,148,169	53	14,601	7	11,742	8	14,304	18
1911	772	1,803,844	59	16,006	3	3,656	16	37,836	18
1912	712	1,738,514	76	25,090	8	9,700	12	38,821	22
1913	688	1,932,153	77	26,744	14	21,595	17	61,757	31
1914	656	1,683,553	58	22,288	22	25,246	11	b34,335	25
1915	327	650,919	27	13,289	4	8,725	(a)	23	45,198
									6
									25,402
Year.	Germany.	Holland.		Italy.		Japan.		Norway.	
1892	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.
1892	73	64,888	15	14,368	21	13,888	—	42	24,572
1893	65	60,167	8	1,339	21	10,626	3	1,132	30
1894	77	119,702	41	15,360	10	5,396	14	3,173	16,552
1895	75	87,786	25	8,292	10	5,603	3	2,296	25,17,169
1896	63	103,295	28	12,405	10	6,779	26	7,849	17,12,059
1897	84	139,728	42	20,351	8	12,910	22	6,740	25,17,248
1898	104	153,147	27	19,468	19	26,530	9	11,424	29,22,670
1899	93	211,684	50	34,384	31	49,472	3	6,775	34,27,853
1900	93	204,731	61	45,074	36	67,522	3	4,543	42,32,751
1901	101	217,593	33	29,927	35	60,526	94	37,208	40,36,875
1902	108	213,961	114	69,101	62	46,270	53	27,181	46,37,878
1903	120	184,494	109	59,174	81	50,089	62	34,514	54,41,599
1904	149	202,197	109	55,636	35	30,016	67	32,969	67,50,469
1905	148	255,423	58	44,135	46	61,629	81	31,725	58,52,580
1906	205	318,230	89	66,809	30	30,560	107	42,489	69,60,774
1907	188	275,003	60	68,623	31	44,666	78	66,254	82,57,556
1908	120	207,777	76	58,604	34	26,864	73	56,725	81,52,839
1909	84	128,696	52	59,106	28	31,217	75	52,319	45,28,601
1910	117	159,303	105	70,945	21	23,019	70	30,215	64,36,931
1911	154	255,532	113	93,050	14	17,401	109	44,359	71,33,435
1912	165	375,317	112	99,439	27	25,196	168	57,755	89,50,255
1913	162	465,226	95	104,296	38	50,356	152	64,664	74,50,637
1914	89	b387,192	130	118,153	47	42,981	32	85,861	61,54,204
1915	(a)	(a)	120	113,075	30	22,132	26	49,408	59,62,070

a No returns.

b Returns not complete.

TABLE VII.—*Number and tonnage of merchant vessels of 100 tons gross and upward launched, 1892–1915—Continued.*

Year.	Sweden.	United States.						Other countries.	Total.		
		Coast.			Great Lakes.						
		No.	Tons.	No.	Tons.	No.	Tons.				
1892.....	12	4,659	73	62,588	(a)	(a)	28	11,103	1,051	1,358,045	
1893.....	18	6,566	36	27,174	(a)	(a)	42	11,222	846	1,026,741	
1894.....	14	7,310	36	44,847	7	22,047	18	6,584	932	1,323,538	
1895.....	13	2,767	41	42,431	20	42,446	12	5,114	880	1,218,160	
1896.....	14	4,405	112	77,964	32	106,211	10	3,415	1,113	1,567,882	
1897.....	14	6,984	63	34,076	21	52,762	22	6,727	990	1,331,924	
1898.....	12	4,385	141	110,186	21	63,064	23	4,583	1,290	1,893,343	
1899.....	29	10,367	127	146,108	21	78,170	32	6,015	1,269	2,121,738	
1900.....	19	5,735	196	190,962	39	142,565	48	15,439	1,364	2,304,163	
1901.....	31	8,241	234	268,091	52	165,144	65	20,649	1,538	2,617,539	
1902.....	32	9,030	206	223,360	45	155,814	62	29,247	1,650	2,502,755	
1903.....	30	11,855	195	211,219	51	170,601	58	24,073	1,650	2,145,631	
1904.....	32	10,267	208	189,430	19	49,088	45	17,987	1,643	1,987,935	
1905.....	20	5,282	157	107,368	43	195,459	36	20,272	1,576	2,514,922	
1906.....	23	11,579	192	169,358	50	271,729	37	15,334	1,836	2,919,763	
1907.....	28	11,781	208	217,530	47	257,145	42	26,026	1,788	2,778,088	
1908.....	23	9,546	202	158,645	36	145,398	20	23,435	1,405	1,833,286	
1909.....	12	6,316	73	80,485	29	129,119	24	12,960	1,063	1,602,057	
1910.....	17	8,904	156	177,601	39	153,717	47	20,497	1,277	1,957,853	
1911.....	11	9,427	112	95,693	30	75,876	38	17,864	1,599	2,650,140	
1912.....	22	13,968	144	194,273	30	89,950	52	46,654	1,719	2,901,769	
1913.....	25	18,524	182	228,232	23	48,216	83	43,455	1,750	3,332,882	
1914.....	26	15,163	84	162,937	10	37,825	35	b 36,148	1,319	b 2,852,753	
1915.....	27	20,319	76	157,167	8	20,293	10	b 13,641	743	b 1,201,638	

a No returns.

b Returns not complete.

## 8. MERCHANT VESSELS UNDER CONSTRUCTION JUNE 30, 1916.

NOTE.—In consequence of the war it is not possible at present to publish the usual information regarding the shipbuilding industry throughout the world. The present returns are therefore confined to merchant vessels in course of construction in the United Kingdom.

The returns compiled by Lloyd's Register of Shipping, which only take into account vessels of 100 tons and upward the construction of which has actually begun, show that there were 440 merchant vessels of 1,540,218 tons gross under construction in the United Kingdom at the close of the quarter ended June 30, 1916. The particulars of the vessels in question are as follows, similar details being given for the last quarter and for June 30, 1915, for the purpose of comparison:

Description.	June 30, 1916.		Mar. 31, 1916.		June 30, 1915.	
	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.
Steam: Steel.....	432	1,538,640	420	1,422,545	434	1,505,025
Sail:						
Steel.....	7	1,478	3	790	6	1,450
Wood and composite.....	1	100	1	100	2	450
Total.....	8	1,578	4	890	8	1,900
Total steam and sail.....	440	1,540,218	424	1,423,435	442	1,506,925

The tonnage now under construction in the United Kingdom is about 117,000 tons more than that which was in hand at the end of last quarter, and about 33,000 tons more than the tonnage building 12 months ago. It will be understood that the rate of progress in merchant ship construction continues to be very much reduced in the present circumstances and that the immediate output will be considerably less than that which would be obtained under normal conditions.

Of the merchant vessels being built in the United Kingdom at the end of June, 382 of 1,254,366 tons are under the inspection of the surveyors of Lloyd's Register with a view to classification by this society.

## WORK IN HAND IN PRINCIPAL DISTRICTS.

The following table gives the total figures for vessels now under construction in some of the principal shipbuilding districts of the country, as compared with those for the last quarter and 12 months ago. Each district, of course, includes places in the neighborhood of the port after which it is named:

District and class.	June 30, 1916.		Mar. 31, 1916.		June 30, 1915.	
	No. 3	Gross tons. 2,175	No. 3	Gross tons. 1,810	No. 3	Gross tons. 1,885
Barrow, Maryport, and Workington: Steam.....	24	262,050	23	228,550	24	260,700
Belfast: Steam.....						
Glasgow:						
Steam.....	67	295,159	64	294,229	80	353,173
Sail.....	4	863	1	400	2	750
Total.....	71	296,022	65	294,629	82	353,923
Greenock: Steam.....	52	233,830	47	217,320	46	209,004
Hartlepool and Whitby: Steam.....	12	69,625	14	72,800	15	71,350
Hull:						
Steam.....	60	31,268	60	30,721	50	26,032
Sail.....	1	160	1	160		
Total.....	61	31,428	61	30,881	50	26,032
Liverpool: Steam.....	13	26,637	13	26,637	11	24,065
Middlesbrough and Stockton: Steam.....	13	51,670	26	43,405	31	83,165
Newcastle:						
Steam.....	66	310,347	60	293,886	61	270,684
Sail.....	1	230	1	230	1	170
Total.....	67	310,577	61	294,116	62	270,854
Sunderland: Steam.....	52	197,359	44	169,129	43	162,836

## SIZE OF VESSELS UNDER CONSTRUCTION.

The following table shows the vessels under construction in the United Kingdom classified according to gross tonnage:

Gross tonnage.	Number.		Gross tonnage.	Number.	
	Steam.	Sail.		Steam.	Sail.
100 <sup>a</sup> and under 500 tons.....	140	8	10,000 and under 12,000 tons.....	6	.....
500 and under 1,000 tons.....	25	.....	12,000 and under 15,000 tons.....	5	.....
1,000 and under 2,000 tons.....	33	.....	15,000 and under 20,000 tons.....	7	.....
2,000 and under 3,000 tons.....	35	.....	20,000 and under 25,000 tons.....	2	.....
3,000 and under 4,000 tons.....	33	.....	25,000 and under 30,000 tons.....	1	.....
4,000 and under 5,000 tons.....	51	.....	30,000 and under 40,000 tons.....	2	.....
5,000 and under 6,000 tons.....	32	.....	40,000 tons and above.....	.....	.....
6,000 and under 8,000 tons.....	39	.....	Total.....	432	8
8,000 and under 10,000 tons.....	21	.....			

<sup>a</sup> Vessels of less than 100 tons are not included in Lloyd's Register Shipbuilding Returns.

## OTHER DETAILS.

The following details concerning the shipbuilding work of the United Kingdom during the past three months may be added:

During quarter ended June 30, 1916.	Steam.		Sail.	
	Number.	Gross tons.	Number.	Gross tons.
Vessels commenced.....	81	193,256	3	463
Vessels launched.....	86	156,529	5	1,065

9. NUMBER, TONNAGE, AND NATIONALITY OF VESSELS TOTALLY LOST, CONDEMNED, ETC., DURING THE YEAR 1914, AS REPORTED UP TO JULY 12, 1915; ALSO THE NUMBER AND TONNAGE OF STEAM AND SAILING VESSELS OWNED IN EACH COUNTRY.

## STEAM VESSELS.

[Vessels under 100 tons gross are not included in this return.]

Flag.	Steam vessels owned, according to Lloyd's Register Book, 1914-15.			How lost. <sup>a</sup>					
	No.	Net tons.	Gross tons.	Abandoned at sea.			Foundered.		
				No.	Net tons.	Gross tons.	No.	Net tons.	Gross tons.
British:									
United Kingdom	8,587	11,545,746	18,892,089	1	1,814	2,821	6	4,178	6,799
Colonies	1,536	949,386	1,631,617	1	47	113	2	879	1,370
United States	b 1,113	1,315,976	2,026,908				5	3,537	5,026
Austro-Hungarian	433	653,873	1,052,346						
Danish	576	454,262	770,430				1	1,333	2,110
Dutch	709	910,123	1,471,710				2	2,952	4,728
French	1,025	1,099,914	1,922,286				2	553	1,121
German	2,090	3,116,968	5,134,720				1	73	245
Italian	637	872,308	1,430,475				1	430	803
Japanese	1,103	1,088,333	1,708,386				2	1,002	1,616
Norwegian	1,656	1,173,036	1,957,353				5	2,901	4,846
Russian	747	500,352	851,949						
Spanish	589	537,575	883,926				2	2,037	3,447
Swedish	1,088	591,382	1,015,364				1	906	1,561
Other European countries							2	468	811
Central and South America							1	107	165
Total				2	1,861	2,934	33	21,356	34,648

Flag.	How lost—Continued.												
	Missing. <sup>c</sup>			Burned.			Collision.			Wrecked. <sup>d</sup>			
	No.	Net tons.	Gross tons.	No.	Net tons.	Gross tons.	No.	Net tons.	Gross tons.	No.	Net tons.	Gross tons.	
British:													
United Kingdom	19	5,958	11,068	7	16,195	25,680	17	16,658	28,488	43	63,392	108,387	
Colonies							2	833	1,443	17	10,108	16,520	
United States	1	1,615	2,564	1	142	276	3	4,576	7,444	7	2,180	3,166	
Austro-Hungarian										1	324	594	
Danish										4	5,545	8,869	
Dutch										2	237	429	
French	1	116	419				2	227	604	7	4,306	6,890	
German	4	5,115	8,222	1	2,713	4,247	1	182	268	12	4,755	8,433	
Italian	1	1,452	2,269	1	1,700	3,014				6	3,306	5,555	
Japanese	3	4,141	6,277				6	4,876	7,893	11	8,429	13,111	
Norwegian	1	276	485				4	1,886	3,338	20	14,490	23,474	
Russian				1	1,246	2,005				4	3,602	5,940	
Spanish	1	1,280	2,385	1	288	584	2	716	1,216	1	1,951	3,179	
Swedish	3	4,619	9,164	1	498	904	3	853	1,429	7	4,944	8,392	
Other European countries					1	696	1,251	1	1,936	3,033	6	7,627	12,304
Central and South America				1	243	412				5	5,301	8,062	
Other countries										1	61		
Total	34	24,572	42,853	16	23,813	38,558	41	32,743	55,156	154	140,558	233,459	

<sup>a</sup> Vessels condemned after damage by fire, collision, stranding, etc., are included, according to the date of the casualties, under "Burned," "Collision," "Wrecked," etc. Cases of breaking up, condemnation, etc., not known to be consequent upon stress of weather, etc., are excluded from the table; during 1914 54 steamers of 96,728 tons gross (including 20 belonging to the United Kingdom of 43,395 tons gross) come within this category.

<sup>b</sup> Excluding vessels trading on the Great Lakes of North America.

<sup>c</sup> Under the heading "Missing" are included only vessels so posted or reported during the period covered by the return.

<sup>d</sup> Under the heading "Wrecked" are included vessels lost through stranding or through striking rocks, sunken wrecks, etc.

NOTE.—Material of construction of steam vessels: Steel, 296 of 675,261 tons; iron, 103 of 85,965 tons; wood and composite, 38 of 12,708 tons.

9. NUMBER, TONNAGE, AND NATIONALITY OF VESSELS TOTALLY LOST, CONDEMNED, ETC., DURING THE YEAR 1914, AS REPORTED UP TO JULY 12, 1915; ALSO THE NUMBER AND TONNAGE OF STEAM AND SAILING VESSELS OWNED IN EACH COUNTRY—Continued.

## STEAM VESSELS—Continued.

Flag.	How lost—Continued.									Percentage lost.	
	Lost, etc. <sup>a</sup>			Sunk by warships or by mines.			Total. <sup>b</sup>			Vessels owned.	Gross tonnage owned.
	No.	Net tons.	Gross tons.	No.	Net tons.	Gross tons.	No.	Net tons.	Gross tons.		
British:											
United Kingdom	1	54	134	100	141,975	227,588	194	250,224	410,965	2,25	2.12
Colonies	1	54	229	1	185	473	25	12,198	20,333	1,63	1.24
United States	1	3,795	5,853				18	15,845	24,329	1,62	1.20
Austro-Hungarian				4	3,477	6,289	5	3,801	6,883	1.15	.65
Danish				6	6,697	10,941	11	13,575	21,920	1.91	2.85
Dutch				5	7,680	11,574	9	10,869	16,731	1.27	1.13
French				1	3,067	4,803	13	8,269	13,837	1.27	.72
German				13	37,055	67,641	32	49,893	89,056	1.53	1.73
Italian							9	6,888	11,671	1.41	.82
Japanese							22	18,448	28,897	1.99	1.69
Norwegian				8	7,205	11,902	38	26,758	44,045	2.29	2.25
Russian				7	5,001	8,266	12	9,849	16,211	1.61	1.90
Spanish							7	6,272	10,811	1.19	1.28
Swedish				8	6,026	9,875	23	17,846	31,325	2.11	3.08
Other European countries							10	10,727	17,399		
Central and South America							7	5,651	8,639		
Other countries				1	449	758	2	510	882		
Total	3	3,903	6,216	154	218,817	360,110	437	467,623	773,934		

## SAILING VESSELS.

Flag.	Sailing vessels owned, according to Lloyd's Register Book, 1914-15.	How lost.										
		Aban-			Foun-		Missin-		Broken		Burned.	
		don-	don-	sea.	dered.	dered.	g. c	up, con-	demned,	etc. <sup>a</sup>		
British:												
United Kingdom	653	364,677		No.	Net tons.	No.	Net tons.	No.	Net tons.	No.	Net tons.	
Colonies	552	156,666		6	1,373	1	128	1	113			
United States	1,377	943,376	14	12,429	12	11,545	3	1,801	1	599		
Austro-Hungarian	12	3,373					1	1,858				
Danish	246	49,751					1	102				
Dutch	97	24,745					1	101				
French	551	397,152	5	1,243	6	764	2	4,279				
German	298	324,576				1	105	2	2,476	1	1,785	
Italian	523	237,821					1	899	1	1,546		
Norwegian	535	547,369	8	6,976	1	2,083	4	6,006	9	8,672	1	1,114
Russian	507	201,869	2	1,864	1	246	1	760				
Spanish	58	14,897										
Swedish	378	102,722			2	557	1	474				
Other European countries										1	308	
Central and South America										1	439	
Total			35	23,885	27	16,135	22	22,405	13	13,041	4	1,691

<sup>a</sup> Under the heading "Lost, etc.," are included total losses which, for want of sufficient information or for other reasons, can not be otherwise classified.

<sup>b</sup> Excluding cases of breaking up, condemnation, etc., which are not known to be consequent upon stress of weather, etc. Including such cases the grand total for 1914 is 491 steamers of 870,662 tons gross.

<sup>c</sup> Under the heading "Missing," are included only vessels so posted or reported during the period covered by the return.

<sup>a</sup> Vessels condemned after damage by fire, collision, stranding, etc., are included, according to the date of the casualties under "Burned," "Collision," "Wrecked," etc. Cases of breaking up, condemnation, etc., not known to be consequent upon stress of weather, etc., are excluded from the table; during 1914, 45 vessels of 32,250 tons (including 3 belonging to the United Kingdom, of 804 tons), come within this category.

<sup>e</sup> Excluding vessels trading on the Great Lakes of North America.

9. NUMBER, TONNAGE, AND NATIONALITY OF VESSELS TOTALLY LOST, CONDEMNED, ETC., DURING THE YEAR 1914, AS REPORTED UP TO JULY 12, 1915; ALSO THE NUMBER AND TONNAGE OF STEAM AND SAILING VESSELS OWNED IN EACH COUNTRY—Continued.

SAILING VESSELS—Continued.

Flag	How lost.							Percentage lost.	
	Collision.		Wrecked. <sup>a</sup>		Lost, etc. <sup>b</sup>		Sunk by warships or by mines.	Total. <sup>c</sup>	Vessels owned.
	No.	Net tons.	No.	Net tons.	No.	Net tons.			
British:									
United Kingdom.....	6	2,434	14	4,722	1	166	1	1,591	31
Colonies.....			15	4,578			1	1,798	24
United States.....	4	3,455	26	16,545				60	46,374
Austro-Hungarian.....								1	1,858
Danish.....	1	178	6	917			1	199	9
Dutch.....								1	1,396
French.....	4	813	4	2,602			4	8,294	25
German.....								5	6,360
Italian.....			10	8,604				12	11,049
Norwegian.....	1	819	9	5,548				33	31,218
Russian.....			3	2,688				7	5,558
Spanish.....									
Swedish.....			9	2,915				12	3,946
Other European countries.....			4	642			1	285	6
Central and South America.....			3	3,256					4
Total.....	16	7,699	104	55,011	1	166	8	12,167	230
								152,200	

<sup>a</sup> Under the heading "Wrecked" are included vessels lost through stranding, or through striking rocks, sunken wrecks, etc.

<sup>b</sup> Under the heading "Lost, etc.," are included total losses which, for want of sufficient information, or for other reasons, can not be otherwise classified.

<sup>c</sup> Excluding cases of breaking up, condemnation, etc., which are not known to be consequent upon stress of weather, etc. Including such cases, the grand total for 1914 is 275 vessels of 184,450 tons net.

NOTE.—Material of construction of sailing vessels: Steel, 34 of 46,052 tons; iron, 29 of 36,934 tons; wood and composite, 167 of 69,214 tons.

9. NUMBER, TONNAGE, AND NATIONALITY OF VESSELS TOTALLY LOST, CONDEMNED, ETC., DURING THE YEAR 1914, AS REPORTED UP TO JULY 12, 1915; ALSO THE NUMBER AND TONNAGE OF STEAM AND SAILING VESSELS OWNED IN EACH COUNTRY—Continued.

## STEAM AND SAILING VESSELS.

[The tonnage given is gross for steam vessels and net for sailing vessels.]

Flag.	Steam and sailing vessels owned according to Lloyd's Register Book 1914-15.		How lost.										
			Abandoned at sea.		Foundered.		Missing. <sup>a</sup>		Broken up, condemned, etc. <sup>b</sup>		Burned.		
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.		
British:													
United Kingdom.....	9,240	19,256	766	1	2,821	9	7,506	23	14,604	.....	9	25,949	
Colonies.....	2,088	1,788	283	7	1,486	3	1,498	1	113	.....	1	185	
United States.....	c 2,490	2,970	284	14	12,429	17	16,571	4	4,365	1	599	1	276
Austro-Hungarian.....	445	1,055	719	.....	.....	.....	.....	1	1,858	.....	.....	.....	.....
Danish.....	822	820	181	.....	.....	2,110	1	102	.....	.....	.....	.....	.....
Dutch.....	806	1,496	455	.....	.....	2,4728	1	101	.....	.....	.....	.....	.....
French.....	1,578	2,319	438	5	1,243	8	1,885	3	4,698	.....	.....	.....	.....
German.....	2,388	5,459	296	.....	.....	2,350	6	10,698	1	1,785	1	4,247	
Italian.....	1,160	1,668	296	.....	.....	1	803	2	3,168	1	1,546	1	3,014
Japanese <sup>d</sup> .....	1,103	1,708	386	.....	.....	2	1,616	3	6,277	.....	.....	.....	.....
Norwegian.....	2,191	2,504	722	8	6,976	6	6,929	5	6,491	9	8,672	1	1,114
Russian.....	1,254	1,053	818	2	1,864	1	246	1	760	.....	.....	1	2,005
Spanish.....	647	898	823	.....	.....	2,3447	1	2,385	.....	.....	1	584	
Swedish.....	1,466	1,118	086	.....	.....	3,2118	4	9,638	.....	.....	1	904	
Other European countries.....	.....	.....	.....	.....	.....	2,811	.....	.....	.....	.....	2	1,559	
Central and South America.....	.....	.....	.....	1	165	.....	.....	1	439	1	412		
Other countries.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Total.....	.....	37	26,819	60	50,783	56	65,258	13	13,041	20	40,249		

Flag.	How lost—Continued.										Percentage lost.	
	Collision.		Wrecked. <sup>e</sup>		Lost, etc.		Sunk by warships or by mines.		Total. <sup>g</sup>		Vessels owned.	Tonnage owned.
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.			
British:												
United Kingdom.....	23	30,922	57	113,109	2	300	101	229,179	225	424,390	2,43	2,20
Colonies.....	2	1,443	32	21,098	1	229	2	2,271	49	28,323	2,35	1,58
United States.....	7	10,899	33	19,711	1	5,853	.....	.....	78	70,703	3,13	2,38
Austro-Hungarian.....	.....	1	594	.....	.....	4	6,289	6	8,741	1,35	.....	.....
Danish.....	1	178	10	9,786	.....	7	11,140	20	23,316	2,43	2,84	
Dutch.....	.....	2	429	.....	.....	5	11,574	10	16,832	1,24	1,10	
French.....	6	1,417	11	9,492	.....	5	13,097	38	31,832	2,41	1,37	
German.....	1	268	13	10,427	.....	13	67,641	37	95,416	1,55	1,75	
Italian.....	.....	16	14,189	.....	.....	.....	.....	21	22,720	1,81	1,37	
Japanese <sup>d</sup> .....	6	7,893	11	13,111	.....	.....	.....	22	28,897	2,00	1,69	
Norwegian.....	5	4,157	29	29,022	.....	8	11,902	71	75,263	3,24	3,00	
Russian.....	.....	7	8,628	.....	.....	7	8,266	19	21,769	1,51	2,07	
Spanish.....	2	1,216	1	3,179	.....	8	9,875	7	10,811	1,08	1,20	
Swedish.....	3	1,429	16	11,307	.....	8	9,875	35	35,271	2,39	3,15	
Other European countries.....	1	3,033	10	12,946	.....	1	285	16	18,634	.....	.....	.....
Central and South America.....	.....	8	11,318	.....	.....	1	758	11	12,334	.....	.....	.....
Other countries.....	.....	1	124	.....	.....	1	758	2	882	.....	.....	.....
Total.....	57	62,855	258	288,470	4	6,332	162	372,277	667	926,134	.....	.....

<sup>a</sup> Under the heading "Missing" are included only vessels so posted or reported during the period covered by the return.

<sup>b</sup> Vessels condemned after damage by fire, collision, stranding, etc., are included, according to the date of the casualties, under "Burned," "Collision," "Wrecked," etc. Cases of breaking up, condemnation, etc., not known to be consequent upon stress of weather, etc., are excluded from the table; during 1914, 99 vessels, of 128,978 tons (including 23 belonging to the United Kingdom of 44,199 tons), come within this category.

<sup>c</sup> Excluding vessels trading on the Great Lakes of North America.

<sup>d</sup> Japanese sailing vessels are not inserted in Lloyd's Register Book, and are therefore not included in these tables.

<sup>e</sup> Under the heading "Wrecked" are included vessels lost through stranding, or through striking rocks, sunken wrecks, etc.

<sup>f</sup> Under the heading "Lost, etc.," are included total losses which, for want of sufficient information, or for other reasons, can not be otherwise classified.

<sup>g</sup> Excluding cases of breaking up, condemnation, etc., which are not known to be consequent upon stress of weather, etc. Including such cases the grand total for 1914 is 766 vessels, of 1,055,112 tons.

NOTE.—Material of construction of steam and sailing vessels: Steel, 330, of 721,313 tons; iron, 132, of 122,899 tons; wood and composite, 205, of 81,922 tons.

## APPENDIX G.

### PROGRESS OF BRITISH, GERMAN, AND JAPANESE SHIPPING.

The following tables illustrate the progress of British, German, and Japanese shipping. The statement of British shipping for earlier years is compiled from complete returns published in full in the report for 1901 (pp. 468-483), supplemented by the annual returns on navigation and shipping.

#### 1. PROGRESS OF BRITISH SHIPPING.

TABLE 1.—*Number and net tonnage of registered vessels of British Empire, 1801-1914, with number of men employed, 1801-1878.*

Year ended Dec. 31—	United Kingdom.		British possessions.		Total in British Empire.		
	Number.	Net tons.	Number.	Net tons.	Number.	Net tons.	Men.
1801	16,426	1,786,325	3,285	251,928	19,711	2,038,253	149,766
1810	20,253	2,210,661	3,450	215,383	23,703	2,426,040	164,195
1820	21,969	2,439,029	3,405	203,564	25,374	2,648,593	174,514
1830	19,174	2,201,592	4,547	330,227	23,721	2,531,819	154,812
1840	22,654	2,768,262	6,308	543,276	28,962	3,311,538	201,340
1850	25,984	3,565,133	8,304	667,829	34,288	4,232,962	239,283
1860	27,663	4,658,687	10,838	1,052,281	38,501	5,710,968	294,460
1870	26,367	5,690,789	11,220	1,458,345	37,587	7,149,134	327,449
1878	25,884	6,555,164	12,732	1,774,257	38,616	8,329,421	358,158
1880	25,185	6,574,513	13,754	1,872,658	38,939	8,447,171	—
1890	21,591	7,978,538	14,623	1,709,550	36,214	9,688,088	—
1895	21,003	8,988,450	14,908	1,516,212	35,911	10,504,662	—
1900	19,982	9,304,108	14,893	1,447,284	34,875	10,751,392	—
1905	20,581	10,735,582	16,736	1,506,822	37,317	12,332,404	—
1906	20,764	11,167,332	17,108	1,624,049	37,872	12,791,381	—
1907	21,042	11,485,094	17,300	1,698,256	38,342	13,183,355	—
1908	21,168	11,541,394	17,440	1,721,960	38,603	13,263,354	—
1909	21,189	11,585,878	17,600	1,762,135	38,798	13,348,013	—
1910	21,090	11,555,663	17,838	1,806,325	38,928	13,361,988	—
1911	21,072	11,698,508	18,082	1,834,990	39,154	13,533,498	—
1912	20,892	11,894,791	18,453	1,951,574	39,345	13,846,365	—
1913	20,938	12,119,891	18,654	2,048,383	39,592	14,168,274	—
1914	21,065	12,415,204	18,868	2,036,776	39,933	14,451,980	—

TABLE 2.—*Number and net tonnage of steam vessels belonging to the British Empire, 1814-1914.*

Year.	United Kingdom.		British possessions.		Total in British Empire.	
	Number.	Net tons.	Number.	Net tons.	Number.	Net tons.
1814	1	69	1	387	2	456
1820	34	3,018	9	4,225	43	7,243
1830	298	30,339	17	3,105	315	33,444
1840	771	87,928	53	7,879	824	95,807
1850	1,187	168,474	163	19,157	1,350	187,631
1860	2,000	454,327	337	45,817	2,337	500,144
1870	3,179	1,112,934	618	89,200	3,796	1,202,134
1880	5,247	2,723,468	1,656	225,814	6,903	2,949,282
1890	7,410	5,042,517	2,730	371,189	10,140	5,413,706
1895	8,386	6,121,555	3,151	422,900	11,537	6,544,455
1900	9,209	7,207,610	3,672	532,188	12,881	7,739,798
1905	10,522	9,604,816	4,515	690,450	15,037	9,755,266
1906	10,907	9,612,013	4,755	728,576	15,660	10,340,589
1907	11,394	10,023,723	5,024	814,808	16,418	10,838,531
1908	11,626	10,138,613	5,171	841,678	16,797	10,980,291
1909	11,797	10,284,818	5,373	888,740	17,170	11,173,558
1910	12,000	10,442,719	5,547	926,399	17,547	11,369,118
1911	12,242	10,717,511	5,755	961,241	17,997	11,678,752
1912	12,382	10,992,073	6,084	1,043,417	18,466	12,035,490
1913	12,602	11,273,387	6,336	1,129,844	18,938	12,403,231
1914	12,862	11,621,637	6,589	1,113,200	19,451	12,734,837

TABLE 2.—Number and net tonnage of steam vessels belonging to the British Empire, 1814–1914—Continued.

## GROSS STEAM TONNAGE, UNITED KINGDOM, 1890–1914.

Year.	Gross tons.	Year.	Gross tons.	Year.	Gross tons
1890.	8,095,370	1900.	11,816,924	1909.	16,994,732
1895.	9,952,211	1904.	14,358,823	1910.	17,263,833
1896.	10,237,703	1905.	14,883,594	1911.	17,743,746
1897.	10,401,202	1906.	15,783,724	1912.	18,197,117
1898.	10,829,811	1907.	16,513,782	1913.	18,683,039
1899.	11,341,622	1908.	16,755,722	1914.	19,145,140

TABLE 3.—Number and net tonnage of vessels built and registered in British Empire, 1800–1914.<sup>a</sup>

Year.	United Kingdom.		British possessions.		Total in British Empire.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1800.	939	111,589	126	11,004	1,065	122,593
1810.	(b)	(b)	(b)	(b)	870	115,638
1820.	635	68,142	248	16,440	883	84,582
1830.	750	77,411	367	32,719	1,117	110,130
1840.	1,448	220,064	771	143,288	2,219	363,352
1850.	725	137,530	714	124,953	1,439	262,483
1860.	1,047	214,410	675	104,418	1,722	318,828
1870.	970	342,299	642	122,699	1,612	464,998
1880.	822	403,841	614	79,070	1,436	482,911
1890.	858	652,013	475	58,554	1,333	710,567
1895.	860	519,622	400	22,566	1,260	542,188
1900.	1,171	736,906	597	34,002	1,768	770,908
1905.	999	853,433	612	29,333	1,611	882,766
1906.	1,153	922,182	715	37,285	1,868	924,050
1907.	1,266	740,812	692	51,751	1,958	792,563
1908.	894	413,052	566	40,663	1,460	453,715
1909.	824	510,890	547	33,880	1,371	544,770
1910.	866	600,972	504	30,364	1,370	631,336
1911.	1,076	914,662	543	34,742	1,619	949,404
1912.	1,010	900,257	619	44,290	1,629	944,547
1913.	1,045	975,174	582	53,981	1,627	1,029,155
1914.	1,010	838,608	575	61,783	1,585	900,391

<sup>a</sup> In 1880 and subsequent years all vessels built in the United Kingdom for British owners are included, whether registered or not. Vessels built in the British possessions in years prior to those in which they were registered appear in the years in which they were first registered.

<sup>b</sup> Records destroyed by fire at customhouse.

TABLE 4.—Number and net tonnage of steam vessels built and registered in British Empire, 1814–1914.<sup>a</sup>

Year.	United Kingdom.		British possessions.		Total in British Empire.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1814.	5	285	1	387	6	672
1820.	8	655	1	116	9	771
1830.	18	1,745	1	481	19	2,226
1840.	74	10,178	3	461	77	10,639
1850.	68	14,584	13	943	81	15,527
1860.	200	54,018	11	1,724	211	55,742
1870.	430	225,365	31	2,693	461	228,058
1880.	474	346,361	70	4,715	544	351,076
1890.	581	528,789	97	6,499	678	535,288
1895.	541	465,467	93	6,809	634	472,276
1900.	667	698,330	136	7,352	803	705,682
1905.	713	821,059	205	8,008	918	829,067
1906.	819	890,280	246	11,261	1,065	891,345
1907.	929	716,538	279	24,319	1,208	740,857
1908.	593	386,431	201	13,843	794	400,274
1909.	570	484,290	263	13,740	833	498,030
1910.	604	580,495	236	12,125	840	592,620
1911.	790	887,733	245	15,821	1,035	903,554
1912.	721	857,177	303	13,113	1,024	870,290
1913.	755	950,010	277	24,278	1,032	974,288
1914.	754	812,351	296	31,953	1,050	844,304

<sup>a</sup> In 1880 and subsequent years all vessels built in the United Kingdom for British owners are included, whether registered or not. Vessels built in the British possessions in years prior to those in which they were registered appear in the year in which they were first registered.

TABLE 5.—*Net tonnage built in United Kingdom for British and colonial register and for foreigners, 1858-1914.*

Year.	For home and the colonies.			For foreigners.			Total.		
	Sailing vessels.	Steam vessels.	Total.	Sailing vessels.	Steam vessels.	Total.	Sailing vessels.	Steam vessels.	Total.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
1858.....	154,930	53,150	208,080	1,518	26,956	28,474	156,448	80,106	236,554
1860.....	158,172	53,796	211,963		13,903	13,903	158,172	67,699	225,871
1870.....	117,032	125,674	342,706	9,429	42,222	51,651	126,461	267,896	394,357
1880.....	57,480	346,361	403,841	585	68,470	69,055	58,065	414,831	472,896
1890.....	123,224	528,789	652,013	25,468	135,157	160,625	148,692	663,946	812,638
1895.....	54,155	465,467	519,622	10,562	117,450	128,012	64,717	582,917	647,634
1900.....	38,576	698,330	736,906	7,546	199,815	207,361	46,122	898,145	944,267
1905.....	30,374	821,059	851,433	7,716	178,719	186,435	38,080	999,778	1,037,858
1906.....	31,902	890,280	922,182	17,181	209,197	226,378	49,093	1,099,477	1,148,560
1907.....	24,274	716,538	737,812	15,516	280,639	296,155	36,790	997,177	1,033,967
1908.....	26,621	386,431	413,052	10,771	169,390	180,161	37,692	555,621	593,513
1909.....	21,381	482,304	503,685	7,315	102,389	109,704	28,696	584,693	613,389
1910.....	16,801	577,164	593,965	7,773	89,724	97,497	21,574	666,888	691,462
1911.....	21,304	883,851	905,155	11,115	182,019	193,134	32,419	1,065,870	1,098,289
1912.....	37,193	854,282	891,475	9,736	186,936	196,672	46,929	1,041,218	1,088,147
1913.....	19,967	946,020	965,987	5,218	220,097	225,315	25,185	1,166,117	1,191,302
1914.....	21,690	807,977	829,667	2,850	193,714	196,564	24,540	1,001,691	1,026,231

TABLE 6.—*Number and net tonnage of sail and steam vessels purchased from foreigners and registered in United Kingdom, 1853-1914.*

Year.	Sailing vessels.		Steam vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1853.....	(a)	(a)	(a)	(a)	102	30,073
1854.....	(a)	(a)	(a)	(a)	267	97,641
1855.....	(a)	(a)	(a)	(a)	91	39,437
1856.....	(a)	(a)	(a)	(a)	57	11,650
1857.....	(a)	(a)	(a)	(a)	74	26,432
1858.....	(a)	(a)	(a)	(a)	57	20,408
1859.....	(a)	(a)	(a)	(a)	60	15,840
1860.....	(a)	(a)	(a)	(a)	54	19,271
1861.....	125	76,325	5	4,353	130	80,678
1862.....	150	73,017	2	1,612	152	74,629
1863.....	298	221,011	2	2,212	300	223,223
1864.....	211	127,657	5	1,104	216	128,761
1865.....	82	32,187	3	2,095	85	34,282
1866.....	60	19,763	3	1,169	63	20,937
1867.....	71	22,630	2	313	73	22,943
1868.....	58	28,519	4	1,495	62	30,014
1869.....	31	6,267	3	1,112	34	7,379
1870.....	54	11,562	3	573	57	12,135
1880.....	19	6,306	11	4,811	30	11,117
1890.....	20	5,851	18	5,184	38	11,035
1895.....	15	2,142	15	10,899	30	13,041
1900.....	27	8,262	35	26,934	62	35,196
1905.....	11	1,577	31	9,480	42	11,057
1906.....	10	1,191	53	37,177	63	38,368
1907.....	18	4,556	43	17,614	61	22,170
1908.....	15	2,993	33	30,338	48	33,331
1909.....	7	855	34	18,723	41	19,578
1910.....	21	6,791	52	29,465	73	36,256
1911.....	15	4,125	48	52,409	63	56,534
1912.....	9	1,889	37	14,616	46	16,505
1913.....	12	4,110	54	25,046	66	29,156
1914.....	14	4,809	54	64,633	68	69,442

*a* Not distinguished.

TABLE 7.—*Number and net tonnage of sail and steam vessels belonging to United Kingdom sold to foreigners, 1856–1914.*<sup>a</sup>

Year.	Sailing vessels.		Steam vessels.		Total.	
	Number. (b)	Tons. (b)	Number. (b)	Tons. (b)	Number. (b)	Tons. (b)
1856					149	44,235
1860	38	12,230	49	15,721	88	27,951
1870	141	58,515	95	26,730	236	85,245
1880	168	75,031	79	36,425	247	111,456
1890	234	93,106	105	52,361	339	145,467
1894	162	62,470	136	121,197	298	183,667
1895	145	62,059	196	183,035	341	245,124
1896	137	73,962	190	164,603	327	238,565
1900	245	99,834	301	306,180	546	406,014
1905	134	83,934	268	265,975	402	349,909
1906	108	75,967	266	215,545	374	291,512
1907	117	62,930	230	166,907	347	329,837
1908	74	46,474	165	106,143	239	152,614
1909	98	79,208	192	169,547	290	248,755
1910	159	146,704	231	226,317	390	373,021
1911	157	105,580	360	379,662	517	485,242
1912	128	53,444	392	384,735	520	418,179
1913	56	35,812	374	450,371	430	486,183
1914	47	44,282	277	354,348	324	398,630

<sup>a</sup> There are no returns of vessels belonging to the British possessions that were sold to foreigners.<sup>b</sup> Not distinguished.TABLE 8.—*Number and net tonnage of sail and steam vessels of United Kingdom stricken from register for causes other than sale, 1861–1914.*

Year.	Sailing vessels.		Steam vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1861	872	184,222	50	13,157	922	197,379
1870	1,490	287,917	135	35,703	1,625	323,620
1880	848	221,526	148	80,271	996	301,797
1890	531	130,243	233	160,424	764	290,667
1894	433	85,433	209	157,168	642	242,601
1895	473	116,376	210	163,479	683	279,855
1896	467	115,165	206	160,791	673	275,956
1900	461	82,254	230	154,503	691	236,757
1905	372	75,740	357	228,547	729	304,287
1906	387	68,434	363	220,489	750	288,923
1907	440	62,367	347	250,952	787	313,319
1908	364	55,389	338	236,034	702	291,423
1909	365	60,325	284	243,517	649	303,842
1910	356	62,073	370	281,411	726	343,484
1911	338	54,487	344	256,083	682	310,570
1912	422	46,642	528	423,296	950	469,938
1913	343	44,545	463	317,369	806	361,914
1914	257	26,757	521	432,706	778	459,463

TABLE 9.—*Trade of shipping of United Kingdom and men employed in various trades, 1849-1914.*

[This return, prepared by the registrar general of seamen, can not be given for earlier years. It includes Channel Islands vessels. The home trade signifies on the coast of the United Kingdom or to ports between the limits of the River Elbe and Brest. The foreign trade signifies to ports beyond such limits. No foreign-going vessel is included which has not been so reported within four years, and no home-trade vessel which has not been reported within one year. It is possible that some vessels may be included which have ceased to exist or are no longer employed as British vessels, but every endeavor is made to ascertain and strike off such vessels. With respect to the crews, a very small deduction ought to be made for the case of men who join a fresh ship immediately on their discharge from the former one which happens to remain in port.]

## IN THE HOME TRADE.

Year.	Sailing vessels.			Steam vessels.			Total.		
	Num- ber.	Tons.	Men em- ployed, exclu- sive of masters.	Num- ber.	Tons.	Men em- ployed, exclu- sive of masters.	Num- ber.	Tons.	Men em- ployed, exclu- sive of masters.
1849.....	9,298	665,726	40,208	312	54,089	4,442	9,610	719,815	44,650
1850.....	8,830	666,957	38,527	320	54,196	4,491	9,150	721,153	43,018
1860.....	10,848	821,079	39,163	402	92,254	6,416	11,250	913,333	45,579
1870.....	11,598	766,742	40,265	<sup>a</sup> 1,071	170,746	11,445	12,669	937,488	51,710
1880.....	10,677	693,501	35,839	1,317	236,358	14,088	11,994	929,859	49,927
1890.....	8,894	575,147	<sup>b</sup> 37,618	2,004	325,082	<sup>b</sup> 22,850	10,898	900,229	<sup>b</sup> 60,468
1895.....	7,495	479,764	<sup>b</sup> 31,757	2,633	406,477	<sup>b</sup> 30,424	10,128	886,241	<sup>b</sup> 62,181
1900.....	6,203	378,957	<sup>b</sup> 23,734	3,545	508,359	<sup>b</sup> 40,288	9,748	887,316	<sup>b</sup> 64,022
1905.....	5,280	314,112	<sup>b</sup> 19,346	4,135	541,958	<sup>b</sup> 46,366	9,415	856,070	<sup>b</sup> 65,712
1906.....	5,217	305,976	<sup>b</sup> 19,127	4,358	583,836	<sup>b</sup> 48,986	9,575	889,812	<sup>b</sup> 68,113
1907.....	5,044	294,587	<sup>b</sup> 18,389	4,661	645,551	<sup>b</sup> 52,858	9,705	940,138	<sup>b</sup> 71,247
1908.....	4,903	283,867	<sup>b</sup> 17,795	4,890	626,103	<sup>b</sup> 55,014	9,793	909,970	<sup>b</sup> 72,809
1909.....	4,777	273,858	<sup>b</sup> 17,279	4,954	645,763	<sup>b</sup> 55,395	9,731	919,621	<sup>b</sup> 72,674
1910.....	4,559	259,130	<sup>b</sup> 16,344	5,088	658,044	<sup>b</sup> 56,721	9,647	917,174	<sup>b</sup> 73,065
1911.....	3,504	211,345	<sup>b</sup> 13,419	5,107	637,374	<sup>b</sup> 56,855	8,611	848,719	<sup>b</sup> 70,274
1912.....	3,105	190,283	<sup>b</sup> 12,045	5,249	658,616	<sup>b</sup> 58,577	8,354	848,899	<sup>b</sup> 70,622
1913.....	2,957	183,726	<sup>b</sup> 11,326	5,392	685,364	<sup>b</sup> 59,754	8,349	869,090	<sup>b</sup> 71,080
1914.....	2,671	167,772	<sup>b</sup> 10,084	5,268	742,391	<sup>b</sup> 58,588	7,939	910,163	<sup>b</sup> 68,672

## PARTLY IN THE HOME AND PARTLY IN THE FOREIGN TRADE.

1849.....	1,897	281,951	12,715	20	5,539	262	1,917	287,490	12,977
1850.....	1,487	222,341	10,291	20	5,298	396	1,507	227,639	10,687
1860.....	1,366	226,556	8,700	80	29,803	1,731	1,446	256,359	10,431
1870.....	1,585	283,682	9,988	234	108,813	4,221	1,819	392,495	14,209
1880.....	988	132,534	4,989	179	68,598	2,700	1,167	201,132	7,689
1890.....	381	50,991	<sup>b</sup> 2,219	250	133,563	<sup>b</sup> 4,386	631	184,554	<sup>b</sup> 6,605
1895.....	222	26,721	<sup>b</sup> 1,210	329	238,633	<sup>b</sup> 6,444	551	265,354	<sup>b</sup> 7,654
1900.....	134	15,936	<sup>b</sup> 719	267	201,542	<sup>b</sup> 4,930	401	217,478	<sup>b</sup> 5,649
1905.....	95	28,856	<sup>b</sup> 739	293	351,077	<sup>b</sup> 7,701	388	379,933	<sup>b</sup> 8,440
1906.....	77	10,384	<sup>b</sup> 439	308	390,875	<sup>b</sup> 8,586	385	401,259	<sup>b</sup> 9,025
1907.....	59	7,136	<sup>b</sup> 320	239	240,938	<sup>b</sup> 5,362	298	248,074	<sup>b</sup> 5,682
1908.....	53	10,284	<sup>b</sup> 332	248	270,524	<sup>b</sup> 6,022	301	280,808	<sup>b</sup> 6,354
1909.....	51	6,594	<sup>b</sup> 283	306	410,740	<sup>b</sup> 8,957	357	417,334	<sup>b</sup> 9,240
1910.....	48	6,151	<sup>b</sup> 282	321	518,251	<sup>b</sup> 11,250	369	524,402	<sup>b</sup> 11,532
1911.....	47	6,856	<sup>b</sup> 282	339	524,482	<sup>b</sup> 11,487	386	531,333	<sup>b</sup> 11,769
1912.....	39	5,043	<sup>b</sup> 233	295	445,030	<sup>b</sup> 9,991	334	450,073	<sup>b</sup> 10,224
1913.....	38	4,829	<sup>b</sup> 222	337	611,325	<sup>b</sup> 13,081	375	616,154	<sup>b</sup> 13,303
1914.....	31	6,957	<sup>b</sup> 224	360	605,631	<sup>b</sup> 12,298	391	612,588	<sup>b</sup> 12,522

<sup>a</sup> A large number of vessels under this head are tugboats, for which no returns were received prior to the year 1870.

<sup>b</sup> Includes masters and pilots as well as lascars and Asiatics.

TABLE 9.—*Trade of shipping of United Kingdom and men employed in various trades, 1849-1914—Continued.*  
IN THE FOREIGN TRADE.

Year.	Sailing vessels.			Steam vessels.			Total.		
	Number.	Tons.	Men employed, exclusive of masters.	Number.	Tons.	Men employed, exclusive of masters.	Number.	Tons.	Men employed, exclusive of masters.
1849.....	6,612	2,040,344	91,242	82	48,693	3,742	6,694	2,089,037	94,984
1850.....	7,149	2,143,234	93,912	86	45,186	3,813	7,235	2,188,420	97,725
1860.....	6,876	2,804,610	97,624	447	277,437	17,958	7,323	3,082,047	115,582
1870.....	6,757	3,468,717	96,954	935	760,410	33,089	7,692	4,229,127	130,047
1880.....	4,518	2,924,407	67,840	2,293	2,289,179	67,516	6,811	5,213,586	135,356
1890.....	2,295	2,267,434	a 44,381	3,601	4,563,119	a 124,654	5,896	6,830,553	a 169,035
1895.....	1,765	2,280,285	a 38,639	3,661	5,479,968	a 132,012	5,426	7,710,253	a 170,651
1900.....	1,143	1,594,838	a 25,856	3,643	6,695,575	a 151,921	4,786	8,290,413	a 177,777
1905.....	771	1,125,473	a 17,482	3,947	8,236,255	a 172,052	4,718	9,361,755	a 189,534
1906.....	712	1,049,108	a 16,056	4,044	8,695,593	a 177,597	4,756	9,744,701	a 193,653
1907.....	638	944,191	a 14,350	4,105	9,156,356	a 185,867	4,743	10,100,547	a 200,217
1908.....	556	846,430	a 12,408	4,042	9,131,366	a 184,150	4,598	9,977,796	a 196,558
1909.....	485	736,955	a 10,772	3,960	9,066,891	a 181,621	4,445	9,803,846	a 192,393
1910.....	406	628,556	a 9,207	4,018	9,233,107	a 182,502	4,424	9,861,663	a 191,709
1911.....	312	481,134	a 7,027	4,102	9,653,015	a 192,230	4,414	10,134,149	a 199,257
1912.....	242	373,712	a 5,505	4,128	10,041,514	a 200,455	4,370	10,415,226	a 205,960
1913.....	203	318,246	a 4,618	4,062	10,156,001	a 203,056	4,265	10,474,247	a 207,674
1914.....	175	256,465	a 3,786	3,981	10,435,324	a 210,672	4,156	10,691,789	a 214,458

## TOTAL OF VARIOUS TRADES.

1849.....	17,807	2,988,021	144,165	414	108,321	8,446	18,221	3,096,342	152,611
1850.....	17,466	3,032,532	142,730	426	104,680	8,700	17,892	3,137,212	151,430
1860.....	19,090	3,852,245	145,487	929	399,494	26,105	20,019	4,251,739	171,592
1870.....	19,940	4,519,141	147,207	2,240	1,039,969	48,755	22,180	5,559,110	195,962
1880.....	16,183	3,750,442	108,668	3,789	2,594,135	84,304	19,972	6,344,577	192,972
1890.....	11,570	2,893,572	a 84,218	5,855	5,021,668	a 151,890	17,425	7,915,336	a 236,108
1895.....	9,482	2,736,770	a 71,606	6,623	6,125,078	a 168,880	16,105	8,861,848	a 240,486
1900.....	7,480	1,989,731	a 50,309	7,455	7,405,476	a 197,139	14,935	9,395,207	a 247,448
1905.....	6,146	1,468,441	a 37,567	8,375	9,129,320	a 226,119	14,521	10,597,761	a 263,686
1906.....	6,006	1,365,468	a 35,622	8,710	9,670,304	a 235,169	14,716	11,035,772	a 270,791
1907.....	5,741	1,245,914	a 33,059	9,005	10,042,845	a 244,087	14,746	11,288,759	a 277,146
1908.....	5,512	1,140,581	a 30,535	9,180	10,027,993	a 245,186	14,692	11,168,574	a 275,721
1909.....	5,313	1,017,407	a 28,334	9,220	10,123,394	a 245,973	14,533	11,140,801	a 274,307
1910.....	5,013	893,837	a 25,833	9,427	10,409,402	a 250,473	14,440	11,303,239	a 276,306
1911.....	3,863	699,335	a 20,728	9,548	10,814,871	a 260,572	13,411	11,514,206	a 281,300
1912.....	3,386	569,038	a 17,783	9,672	11,145,160	a 269,023	13,058	11,714,198	a 286,806
1913.....	3,198	506,801	a 16,166	9,791	11,452,690	a 275,891	12,989	11,959,491	a 292,057
1914.....	2,877	431,134	a 14,094	9,609	11,783,316	a 581,558	12,486	12,214,540	a 295,652

a Includes masters and pilots as well as lascars and Asiatics.

TABLE 10.—*Combined entries and clearances of vessels in foreign and colonial trade of United Kingdom, 1814-1914, with British percentage of total.*

Year.	British.	Foreign.	Per cent British.	Total.	
				Net tons.	Net tons.
1814.....	3,722,525	1,137,929	77	4,860,454	
1820.....	4,478,063	799,392	85	5,277,455	
1830.....	4,282,189	1,517,196	74	5,799,385	
1840.....	6,490,185	2,949,182	69	9,439,667	
1850.....	9,442,544	5,062,520	65	14,505,064	
1860.....	13,914,923	10,774,369	56	24,689,292	
1870.....	25,072,180	11,568,002	68	36,640,182	
1880.....	41,348,984	17,387,079	70	58,736,063	
1890.....	53,973,112	20,310,757	73	74,283,869	
1895.....	58,691,926	21,847,248	73	80,539,174	
1900.....	62,710,836	35,812,857	64	98,523,683	
1905.....	70,963,087	41,077,647	63	112,040,734	
1906.....	76,465,979	44,324,331	63	120,790,310	
1907.....	81,308,442	51,963,278	61	133,271,720	
1908.....	77,869,772	53,576,424	59	131,446,196	
1909.....	79,763,971	53,503,711	59	133,267,682	
1910.....	79,815,086	54,215,228	59	134,030,314	
1911.....	81,885,454	57,023,887	59	138,909,341	
1912.....	88,666,788	63,790,257	58	152,457,045	
1913.....	93,249,573	71,560,008	56	164,809,581	
1914.....	78,660,406	61,429,132	56	140,089,538	

## 2. PROGRESS OF GERMAN SHIPPING.

TABLE 1.—Number and tonnage of the sail and steam vessels, together with number of crews, of the German maritime States and the German Empire, 1885-1914.

[Handbuch für die Deutsche Handels-Marine.]

HAMBURG.

Year.	Sailing vessels.				Steam vessels.				Total.			
	Number.	Gross tons.	Net tons.	Crew.	Number.	Gross tons.	Net tons.	Crew.	Number.	Gross tons.	Net tons.	Crew.
1885...	293	132,925	3,404	187	186,546	5,495	480	319,471	8,899			
1890...	262	156,204	3,233	258	293,535	7,987	520	449,739	11,220			
1895...	431	193,945	3,793	358	466,881	11,500	789	660,826	15,293			
1900...	411	225,833	222,119	3,842	435	993,709	624,245	13,888	846,1,229,542	846,634	17,730	
1905...	542	295,958	276,080	4,498	597,1,570,790	980,807	21,811	1,139,1,866,748	256,887	26,309		
1910...	621	304,293	281,850	4,678	704,2,113,322	1,305,026	28,336	1,325,2,417,615	1,586,876	33,014		
1911...	621	304,819	281,609	4,619	712,1,245,286	1,322,806	28,403	1,332,2,450,105	1,604,415	33,022		
1912...	618	238,526	275,762	4,501	730,2,267,883	1,400,614	29,041	1,348,2,566,409	1,676,376	33,542		
1913...	636	285,136	262,769	4,361	798,2,485,681	1,534,739	31,341	1,434,2,770,817	1,797,508	35,702		
1914...	644	290,226	267,451	4,475	822,2,679,474	1,640,828	35,964	1,466,2,969,700	1,908,279	40,439		

BREMEN.

1885...	250	215,312	3,816	112	101,891	4,023	362	317,203	7,839			
1890...	208	192,357	3,003	130	156,096	6,107	338	348,453	9,110			
1895...	217	198,084	2,863	191	228,406	7,583	408	426,490	10,446			
1900...	247	213,840	202,742	3,022	273,510,029	306,591	9,828	520,723,869	509,333	12,850		
1905...	261	203,910	191,322	3,098	371,833,302	502,548	15,868	632,1,037,212	693,870	18,966		
1910...	254	155,962	144,763	2,405	465,1,175,254	705,168	20,858	719,1,331,216	849,931	23,263		
1911...	252	152,877	141,702	2,346	435,1,195,199	717,362	20,749	687,1,348,076	859,064	23,095		
1912...	267	158,210	146,376	2,576	445,1,248,213	747,011	21,044	712,1,406,423	893,387	23,620		
1913...	251	156,682	145,069	2,587	446,1,268,547	757,152	21,331	697,1,425,229	902,221	23,918		
1914...	252	137,820	127,335	2,271	461,1,356,970	810,275	22,861	713,1,494,790	937,610	25,132		

PRUSSIA.

1885...	2,387	343,055	13,076	302	106,343	3,721	2,689	449,298	16,797			
1890...	1,848	204,449	8,235	368	146,610	4,560	2,216	351,059	12,795			
1895...	1,616	128,370	5,965	419	164,479	5,130	2,035	292,849	11,095			
1900...	1,561	92,123	78,882	5,064	514	314,844	191,555	6,403	2,075	409,967	270,467	11,467
1905...	1,560	80,690	66,924	5,001	576	362,800	216,247	7,225	2,136	443,490	283,171	12,226
1910...	1,616	80,168	63,294	5,478	631	386,694	222,977	7,673	2,247	466,862	286,271	13,151
1911...	1,609	78,437	61,208	5,468	637	410,375	236,790	7,838	2,246	488,812	297,998	13,306
1912...	1,620	82,353	64,371	5,522	640	430,933	248,342	7,901	2,260	513,286	312,713	13,423
1913...	1,633	81,076	62,952	5,540	651	411,190	235,632	7,883	2,284	492,266	298,584	13,423
1914...	1,642	85,213	66,722	5,461	687	440,302	251,924	8,274	2,329	525,515	318,646	13,735

OTHER NORTH SEA AND BALTIC STATES.

1885...	3,064	532,108	18,794	351	125,506	4,469	3,415	657,614	23,173			
1890...	2,309	354,249	12,202	427	168,280	5,325	2,736	522,529	17,527			
1895...	1,973	268,795	9,127	494	197,759	6,116	2,467	486,554	15,243			
1900...	1,808	182,181	162,768	6,981	586	360,107	219,496	7,325	2,394	542,288	382,264	14,306
1905...	1,763	129,166	111,123	6,275	677	484,547	290,717	9,068	2,454	613,713	401,840	15,343
1910...	1,833	104,696	83,137	7,012	781	576,700	339,363	10,227	2,614	615,396	422,500	17,239
1911...	1,829	105,736	83,526	7,084	827	609,274	356,565	10,792	2,656	715,010	440,091	17,876
1912...	1,838	110,940	87,921	7,083	834	628,226	366,041	10,883	2,672	739,166	453,962	17,966
1913...	1,865	113,743	90,390	7,085	854	626,120	333,605	11,041	2,719	739,863	453,995	18,126
1914...	1,869	116,701	92,973	6,928	887	657,746	381,209	11,399	2,756	774,447	474,182	18,327

GERMAN EMPIRE.

1885...	5,994	1,223,400	39,090	952	520,186	17,708	6,946	1,743,586	56,708			
1890...	4,627	907,259	26,673	1,183	764,521	23,979	5,810	1,671,780	50,652			
1895...	4,237	789,194	21,748	1,462	1,057,525	30,329	5,699	1,846,719	52,077			
1900...	4,027	723,977	666,511	1,909	1,808,2,178,689	3,141,917	37,444	5,835,2,905,666,2,008,428	56,353			
1905...	4,129	709,750	645,471	18,874	2,221,3,251,489	1,990,319	53,972	6,362,3,991,189,2,635,790	72,846			
1910...	4,324	645,119	573,044	19,573	2,581,4,251,970	2,572,534	67,094	6,905,4,887,089,3,145,578	86,667			
1911...	4,311	641,869	588,045	19,517	2,610,4,360	3,142,633,523	67,782	6,921,5,002,003,202,568	87,299			
1912...	4,343	650,029	574,430	19,682	2,649,4,575	2,553,2,762,008	68,869	6,992,5,225,284,3,336,438	88,551			
1913...	4,385	636,637	551,180	19,573	2,749,4,791	538,2,861,128	71,596	7,134,5,428,175,3,452,108	91,169			
1914...	4,407	629,960	554,481	19,135	2,857,5,134	492,3,084,236	78,498	7,264,5,764,452,3,638,717	97,633			

## 3. PROGRESS OF JAPANESE SHIPPING.

TABLE 1.—Number and gross and net tonnage of steam and number and net tonnage of sail vessels of Japan, 1890–1916.

[Bureau Veritas.]

Year.	Steam vessels.			Sailing vessels.		Total.	
	Number.	Gr. tons.	Net tons.	Number.	Net tons.	Number.	Tons. <sup>a</sup>
1890.....	147	123,279	76,412	104	27,721	251	151,000
1895.....	242	274,659	172,977	255	37,655	497	312,314
1900.....	338	477,311	296,639	1,053	117,364	1,391	594,675
1905.....	502	843,710	537,342	1,336	166,723	1,838	1,010,433
1908.....	626	1,076,170	682,501	1,326	165,929	1,952	1,242,099
1909.....	614	1,095,427	697,253	1,372	170,781	1,986	1,266,208
1910.....	623	1,108,843	745,417	1,356	173,142	1,979	1,281,985
1911.....	641	1,202,458	765,043	1,347	171,206	1,988	1,373,664
1912.....	708	1,308,446	828,714	1,344	168,431	2,052	1,476,877
1913.....	803	1,507,145	953,117	1,308	167,119	2,111	1,674,264
1914.....	851	1,680,561	1,077,794	1,443	185,758	2,294	1,866,319
1915.....	892	1,772,831	1,131,941	1,493	191,767	2,385	1,964,598
1916.....	932	1,816,623	1,140,767	1,493	191,867	2,425	2,008,490

<sup>a</sup> Steam vessels, gross tons, sail vessels, net tons.

TABLE 2.—Number and gross tonnage of Japanese merchant vessels registered, 1895–1916.

[Official Japanese list.]

Tonnage.	Steam vessels.			Sailing vessels.		Total.	
	Number.	Gr. tons.	Net tons.	Number.	Gr. tons.	Number.	Gr. tons.
1895.....							
4,000 tons or over.....	3	14,600				3	14,660
1,000 to 4,000 tons.....	111	228,302		1	1,221	112	229,523
Under 1,000 tons.....	414	88,472		172	28,100	586	116,572
Total.....	528	331,374		173	29,321	701	360,695
1900.....							
4,000 tons or over.....	20	118,348				20	118,348
1,000 to 4,000 tons.....	139	292,190		1	1,524	140	293,714
Under 1,000 tons.....	a 351	105,755		1,107	153,139	1,458	258,894
Total.....	510	516,293		1,108	154,663	1,618	670,956
1901.....							
4,000 tons or over.....	23	136,037				23	136,037
1,000 to 4,000 tons.....	147	307,602				147	307,602
Under 1,000 tons.....	369	112,819		1,203	165,555	1,572	278,374
Total.....	539	556,458		1,203	165,555	1,742	722,013
1902.....							
4,000 tons or over.....	24	140,677				24	140,677
1,000 to 4,000 tons.....	158	329,186				158	329,186
Under 1,000 tons.....	369	112,071		1,243	170,721	1,612	282,792
Total.....	551	581,934		1,243	170,721	1,794	752,655
1903.....							
4,000 tons or over.....	27	157,206				27	157,206
1,000 to 4,000 tons.....	170	354,462				170	354,462
Under 1,000 tons.....	386	121,074		1,223	167,569	1,609	288,643
Total.....	583	632,742		1,223	167,569	1,806	800,311
1904.....							
4,000 tons or over.....	34	187,497				34	187,497
1,000 to 4,000 tons.....	207	444,416		1	2,287	208	446,703
Under 1,000 tons.....	414	131,896		1,208	165,446	1,622	297,342
Total.....	655	763,809		1,209	167,733	1,864	931,542
1905.....							
4,000 tons or over.....	35	194,971				35	194,971
1,000 to 4,000 tons.....	257	548,608		1	2,287	258	550,895
Under 1,000 tons.....	448	157,646		1,218	166,051	1,666	323,697
Total.....	740	901,225		1,219	168,338	1,959	1,069,563

<sup>a</sup> The falling off in the number and tonnage of vessels under 1,000 tons for 1900 and since is due to the fact that vessels of 100 tons or less were omitted from the tables for those years.

TABLE 2.—*Number and gross tonnage of Japanese merchant vessels registered, 1895-1916—Continued.*

Tonnage.	Steam vessels.		Sailing vessels.		Total.	
	Number.	Gr. tons.	Number.	Gr. tons.	Number.	Gr. tons.
1906.						
4,000 tons or over.....	40	221,916			40	221,916
1,000 to 4,000 tons.....	279	597,041	1	2,287	280	599,328
Under 1,000 tons.....	480	174,346	1,254	169,992	1,734	344,338
Total.....	799	993,303	1,255	172,279	2,054	1,165,582
1907.						
4,000 tons or over.....	45	244,384			45	244,384
1,000 to 4,000 tons.....	292	637,945	1	2,287	293	640,232
Under 1,000 tons.....	511	184,103	1,295	175,825	1,806	359,928
Total.....	844	1,066,432	1,296	178,112	2,144	1,244,544
1908.						
4,000 tons or over.....	50	296,931			50	296,931
1,000 to 4,000 tons.....	285	625,792	1	2,287	286	628,079
Under 1,000 tons.....	520	186,182	1,309	176,861	1,829	363,043
Total.....	855	1,108,905	1,310	179,148	2,165	1,288,053
1909.						
4,000 tons or over.....	55	334,888			55	334,888
1,000 to 4,000 tons.....	282	621,598	1	2,287	283	623,885
Under 1,000 tons.....	532	188,703	1,318	178,011	1,850	366,714
Total.....	869	1,145,189	1,319	180,298	2,188	1,325,487
1910.						
4,000 tons or over.....	62	375,442			62	375,442
1,000 to 4,000 tons.....	274	612,362	1	2,439	275	614,801
Under 1,000 tons.....	541	189,613	1,324	178,491	1,865	368,104
Total.....	877	1,177,417	1,325	180,930	2,202	1,358,347
1911.						
4,000 tons or over.....	71	431,015			71	431,015
1,000 to 4,000 tons.....	309	700,004	1	2,439	310	702,443
Under 1,000 tons.....	590	202,479	1,303	175,395	1,893	377,874
Total.....	970	1,333,498	1,304	177,834	2,274	1,511,332
1912.						
4,000 tons or over.....	76	458,097			76	458,097
1,000 to 4,000 tons.....	312	715,198	1	2,439	313	717,637
Under 1,000 tons.....	644	212,173	1,316	176,067	1,960	388,240
Total.....	1,032	1,385,468	1,317	178,506	2,349	1,563,974
1913.						
4,000 tons or over.....	81	500,552			81	500,552
1,000 to 4,000 tons.....	325	753,142	1	2,439	326	755,581
Under 1,000 tons.....	654	212,826	1,445	193,418	2,099	406,244
Total.....	1,060	1,466,520	1,446	195,857	2,506	1,662,377
1914.						
4,000 tons or over.....	85	540,483			85	540,483
1,000 to 4,000 tons.....	329	768,466	1	2,439	330	770,905
Under 1,000 tons.....	671	219,075	1,490	199,478	2,161	418,553
Total.....	1,085	1,528,024	1,491	201,917	2,576	1,729,941
1915.						
4,000 tons or over.....	93	582,740			93	582,740
1,000 to 4,000 tons.....	323	748,568	1	2,439	324	751,007
Under 1,000 tons.....	680	226,449	1,494	199,675	2,174	426,124
Total.....	1,096	1,557,757	1,495	202,114	2,591	1,759,871
1916.						
4,000 tons or over.....	98	617,489			98	617,489
1,000 to 4,000 tons.....	349	803,588	1	2,439	350	806,027
Under 1,000 tons.....	667	228,398	1,615	218,901	2,282	447,299
Total.....	1,114	1,649,475	1,616	221,340	2,730	1,870,815

## APPENDIX I.

### SQUARE-RIGGED AMERICAN VESSELS.

The steady decline in the square-rigged ships of the world (except in France, where they are paid high bounties) has been noted from time to time in the reports of the Bureau. The following is the inventory of the square-rigged sail vessels of the United States, as returned by collectors of customs on June 30, 1917. The list is printed at this time chiefly for historical reference.

#### NUMBER AND GROSS TONNAGE OF SQUARE-RIGGED VESSELS OF THE UNITED STATES, BY RIG AND MATERIAL OF WHICH BUILT, JUNE 30, 1917.

Rig.	American built.		Foreign built.		Total.	
	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.
<b>Ships:</b>						
Steel.....	4	13,167	9	20,209	13	33,376
Iron.....			10	17,626	10	17,626
Wood.....	15	26,861			15	26,861
<b>Total.....</b>	<b>19</b>	<b>40,028</b>	<b>19</b>	<b>37,835</b>	<b>38</b>	<b>77,863</b>
<b>Barks:</b>						
Steel.....	1	1,699	9	17,491	10	19,190
Iron.....			12	16,524	12	16,524
Wood.....	30	29,686	3	3,593	33	33,279
<b>Total.....</b>	<b>31</b>	<b>31,385</b>	<b>24</b>	<b>37,608</b>	<b>55</b>	<b>68,993</b>
<b>Barkentines:</b>						
Steel.....			2	2,466	2	2,466
Iron.....			6	9,260	6	9,260
Wood.....	29	25,790	1	471	30	26,261
<b>Total.....</b>	<b>29</b>	<b>25,790</b>	<b>9</b>	<b>12,197</b>	<b>38</b>	<b>37,987</b>
<b>Brigs and brigantines: Wood.....</b>	<b>3</b>	<b>940</b>			<b>3</b>	<b>940</b>
<b>Total, according to material:</b>						
Steel.....	5	14,866	20	40,166	25	55,032
Iron.....			28	43,410	28	43,410
Wood.....	77	83,277	4	4,064	81	87,341
<b>Total.....</b>	<b>82</b>	<b>98,143</b>	<b>52</b>	<b>87,640</b>	<b>134</b>	<b>185,783</b>
<b>Total, according to rigs:</b>						
<b>Ships.....</b>	<b>19</b>	<b>40,028</b>	<b>19</b>	<b>37,835</b>	<b>38</b>	<b>77,863</b>
<b>Barks.....</b>	<b>31</b>	<b>31,385</b>	<b>24</b>	<b>37,608</b>	<b>55</b>	<b>68,993</b>
<b>Barkentines.....</b>	<b>29</b>	<b>25,790</b>	<b>9</b>	<b>12,197</b>	<b>38</b>	<b>37,987</b>
<b>Brigs and brigantines.....</b>	<b>3</b>	<b>940</b>			<b>3</b>	<b>940</b>
<b>Total.....</b>	<b>82</b>	<b>98,143</b>	<b>52</b>	<b>87,640</b>	<b>134</b>	<b>185,783</b>
<b>Total—1916.....</b>	<b>87</b>	<b>103,126</b>	<b>42</b>	<b>66,418</b>	<b>129</b>	<b>169,544</b>
1915.....	93	107,140	41	64,008	134	171,148
1914.....	110	129,047	23	36,630	133	165,677
1913.....	122	139,625	24	37,753	146	177,373
1912.....	129	144,088	24	37,753	153	181,841
1911.....	139	153,176	26	39,702	165	192,878
1910.....	157	171,240	26	39,702	183	210,942
1909.....	171	188,884	26	39,706	197	228,590
1908.....	191	211,720	29	45,095	220	256,815
1907.....	214	239,751	29	45,095	243	284,846

The table following gives a summary according to year of American build, from which can be formed an approximate idea of the durability of the fleet.

NUMBER, GROSS TONNAGE, AND RIG OF SQUARE-RIGGED VESSELS BUILT IN THE UNITED STATES, 1840-1917,<sup>a</sup> AND DOCUMENTED ON JUNE 30, 1917.

Calendar year built.	Ships.		Barks.		Barkentines.		Brigs and brigantines.		Total.	
	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.
1840-1849.....			1	313					1	313
1850-1865.....			1	177	1	345			2	522
1867.....			1	303					1	303
1869.....	1	1,798							1	1,798
1871.....			1	842					1	842
1873.....			1	1,436					1	1,436
1874.....	1	1,893	3	3,541					4	5,434
1875.....	2	3,094			2	4,189			4	7,283
1876.....	2	3,022	1	338					3	3,360
1877.....	1	1,392	5	4,895					6	6,287
1878.....			3	1,534			1	252	4	1,786
1879.....			2	2,946					2	2,946
1880.....			1	1,317	1	470			2	1,787
1881.....	3	5,510			2	1,069			5	6,579
1882.....	3	5,873	2	2,141	1	606			6	8,620
1883.....	1	2,156	1	523	1	515			3	3,194
1884.....			2	3,403					2	3,403
1885.....			1	952					1	952
1887.....					1	604			1	604
1890.....			2	1,883	3	2,565			5	4,448
1891.....			1	1,673					1	1,673
1892.....			1	1,469	2	1,746	1	495	4	3,710
1893.....	1	2,123							1	2,123
1896.....					1	707			1	707
1899.....	1	3,206	1	1,699	1	674			3	5,579
1900.....						1	1,187		1	1,187
1901.....	2	6,580			6	6,590			8	13,170
1902.....	1	3,381			6	6,206			7	9,587
1910.....							1	193	1	193
1917.....					1	1,220			1	1,220
Total.....	19	40,028	31	31,385	30	28,693	3	940	83	101,046

<sup>a</sup> None built in 1895, 1897, 1903-1909, 1911-1916.

Following is a list of vessels included in the tabulation, the total crews being 1,286, steel vessels being printed in small capitals and iron vessels in italics. Those marked with an asterisk were built abroad.

## SQUARE-RIGGED VESSELS OF THE UNITED STATES, DOCUMENTED ON JUNE 30, 1917.

## SHIPS.

Name.	Crew.	Tonnage.	Year built.	Name.	Crew.	Tonnage.	Year built.
STAR OF LAPLAND.....	33	3,381	1902	<i>Falls of Clyde</i> *.....	16	1,809	1878
STAR OF ZEALAND.....	30	3,292	1901	St. Nicholas.....	10	1,798	1869
STAR OF POLAND.....	29	3,288	1901	<i>Star of Italy</i> *.....	16	1,784	1877
EDWARD SEWALL.....	29	3,206	1899	<i>Star of France</i> *.....	17	1,766	1877
JOHN ENA *.....	29	2,842	1892	Tacoma.....	14	1,738	1881
STAR OF SCOTLAND *.....	29	2,598	1887	<i>Marion Chilcott</i> *.....	16	1,737	1882
GOLDEN GATE *.....	25	2,340	1888	<i>Rhine</i> *.....	18	1,690	1886
MANGA REVA *.....	26	2,214	1891	Bohemia.....	18	1,633	1875
Katherine *.....	20	2,205	1887	<i>Timandra</i> *.....	17	1,579	1885
STAR OF GREENLAND *.....	21	2,179	1892	<i>A von</i> *.....	21	1,573	1884
NORTHERN LIGHT *.....	16	2,163	1892	Santa Clara.....	18	1,535	1876
Benj. F. Packard.....	15	2,156	1883	<i>Brynhilda</i> *.....	21	1,502	1885
DUNSYRE *.....	23	2,149	1891	Indiana.....	14	1,487	1876
Aryan.....	21	2,123	1893	Elwell.....	15	1,461	1875
Charles E. Moody.....	20	2,003	1882	Llewellyn J. Morse.....	18	1,392	1877
<i>Star of Russia</i> *.....	19	1,981	1874				
Abner Coburn.....	19	1,972	1882				
Reuce.....	17	1,924	1881	American built (19 vessels).....	362	40,028	
St. Frances.....	17	1,898	1882	Foreign built (19 vessels).....	380	37,835	
St. Paul.....	14	1,893	1874	Total (38 vessels). ....	742	77,863	
STAR OF ALASKA *.....	18	1,862	1886				
GAMECOCK *.....	12	1,862	1892				
A. J. Fuller.....	11	1,848	1881				

SQUARE-RIGGED VESSELS OF THE UNITED STATES, DOCUMENTED ON JUNE 30, 1917—  
Continued.

## BARKS.

Name.	Crew.	Tonnage.	Year built.	Name.	Crew.	Tonnage.	Year built.
DREADNOUGHT*.....	15	3,116	1904	GALENA*.....	16	1,073	1888
RED JACKET*.....	18	2,782	1892	Ruth Stark*.....	12	1,057	1873
Phyllis*.....	23	2,246	1886	Star of Peru*.....	16	1,027	1863
ANNIE M. REID*.....	26	2,165	1892	CALLAO*.....	14	1,014	1885
STAR OF ICELAND*.....	17	2,161	1896	Diamond Head*.....	5	1,012	1866
Star of England*.....	17	2,123	1893	Star of Chile*.....	12	1,001	1868
STAR OF HOLLAND*.....	19	2,121	1885	Amy Turner.....	6	991	1877
Celtic Monarch*.....	11	2,118	1884	Christiane*.....	14	964	1877
George Curtis.....	18	1,837	1884	Anna Maria d'Abundo*.....	12	954	1903
STAR OF FINLAND.....	17	1,699	1899	W. B. Flint.....	13	952	1885
Oriental.....	17	1,688	1874	C. D. Bryant.....	13	929	1878
Pactolus.....	18	1,673	1891	Alden Besse.....	15	842	1871
Berlin.....	17	1,634	1882	Albert.....	10	682	1890
Levi G. Burgess.....	16	1,616	1877	Will W. Case.....	12	582	1877
Guy C. Goss.....	20	1,572	1879	Ferris S. Thompson.....	9	531	1874
Harvard.....	10	1,566	1884	Narwhal.....	9	523	1883
WINDRUSH*.....	17	1,531	1891	Beluga.....	14	507	1882
Hecla.....	28	1,529	1877	John and Winthrop (W).....	35	338	1876
BELMONT*.....	19	1,528	1891	Charles W. Morgan (W).....	27	313	1841
Olympic.....	15	1,469	1892	Wanderer (W).....	37	303	1878
Louisiana.....	14	1,436	1873	Andrew Hicks (W).....	36	303	1867
John H. Kirby*.....	14	1,395	1879	Alice Knowles (W).....	34	302	1878
McLaurin.....	17	1,374	1879	Bertha (W).....	27	177	1877
Paolina*.....	14	1,337	1900	Grey Hound (W).....	22	177	1851
B. P. Cheney.....	19	1,322	1874				
Star of India*.....	16	1,318	1863	American built (31 vessels).....	571	31,385	
Emily F. Whitney.....	13	1,317	1880	Foreign built (24 vessels).....	372	37,608	
Launberga*.....	16	1,302	1893	Total (55 vessels).....	943	68,993	
St. Katherine.....	13	1,201	1890				
Edith Wolden*.....	14	1,152	1887				
Snowdon*.....	15	1,111	1877				

## BARKENTINES.

City of Sydney.....	18	2,903	1875	Kohala.....	11	891	1901
E. R. Sterling*.....	18	2,577	1883	Charles F. Crocker.....	10	860	1890
ALTA*.....	13	1,381	1900	Kremlin.....	9	786	1890
Prins Valdemar*.....	13	1,338	1892	Mannie Swan.....	10	776	1892
Centennial.....	8	1,286	1875	Carioca*.....	11	762	1866
James Tuft.....	12	1,274	1901	Echo.....	9	707	1896
Herdis.....	13	1,220	1917	Benicia.....	9	674	1899
Aurora.....	13	1,211	1901	Hildegard*.....	10	622	1876
John Palmer.....	12	1,187	1900	J. M. Griffith.....	9	606	1882
Amazon.....	14	1,167	1902	S. G. Wilder.....	10	604	1887
James Johnson.....	13	1,149	1901	Retriever.....	11	547	1881
HAWAII*.....	13	1,085	1900	Mary Winkelmann.....	9	522	1881
Koko Head.....	13	1,084	1902	Thrasher.....	10	515	1883
Puako.....	13	1,084	1902	St. Paul*.....	7	471	1890
Lahaina.....	13	1,067	1901	Wrestler.....	10	470	1880
Coronado*.....	13	1,058	1874	Fremont.....	3	345	1850
Thos. P. Emigh.....	12	1,040	1902				
Georgia.....	12	998	1901	American built (30 vessels).....	332	28,693	
Jane L. Stanford.....	13	970	1892	Foreign built (8 vessels).....	98	9,294	
John C. Meyer.....	11	932	1902	Total (38 vessels).....	430	37,987	
John S. Emory.....	10	919	1890				
Makaweli.....	12	899	1902				

## BRIGS AND BRIGANTINES.

Geneva.....	8	495	1892	Viola (W).....	6	193	1910
Harriet G.....	7	252	1878	Total (3 vessels).....	21	940	

(W)=whaling vessel.

## APPENDIX K.

### MISCELLANEOUS.

The following appendix contains miscellaneous information relating to matters in the text.

#### 1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821-1917.

The following statement of the value of imports and exports of the United States carried in American and foreign vessels and in cars and other land vehicles for the fiscal years 1821 to 1917 is furnished by the Bureau of Foreign and Domestic Commerce of the Department of Commerce:

Year.	Imports.			Exports. <sup>a</sup>		
	In cars and other land vehicles. <sup>b</sup>	In American vessels.	In foreign vessels.	In cars and other land vehicles. <sup>b</sup>	In American vessels.	In foreign vessels.
1821.....	\$58,025,890	\$4,559,825	.....	\$55,175,572	\$9,798,410	
1822.....	76,984,331	6,257,210	.....	60,715,568	11,444,713	
1823.....	71,511,541	6,067,726	.....	65,315,666	9,383,464	
1824.....	75,265,053	5,283,954	.....	67,411,706	8,574,951	
1825.....	91,902,512	4,437,563	.....	88,799,749	10,735,639	
1826.....	80,778,120	4,196,357	.....	69,553,516	8,041,806	
1827.....	74,965,496	4,518,572	.....	72,090,544	10,232,283	
1828.....	81,051,519	6,558,505	.....	61,108,374	11,156,312	
1829.....	69,325,552	5,166,975	.....	62,089,441	10,269,230	
1830.....	66,035,739	4,481,181	.....	63,882,719	9,966,789	
1831.....	93,962,110	9,229,014	.....	65,546,181	15,764,402	
1832.....	90,298,229	10,731,037	.....	66,140,760	21,036,183	
1833.....	98,060,772	10,057,539	.....	68,058,231	22,082,202	
1834.....	113,700,174	12,821,858	.....	77,693,461	26,643,512	
1835.....	135,288,865	14,606,877	.....	94,135,191	27,558,386	
1836.....	171,056,442	18,323,593	.....	97,132,457	31,530,583	
1837.....	122,177,193	18,812,024	.....	91,207,563	26,211,813	
1838.....	103,887,448	10,629,956	.....	89,818,799	18,666,817	
1839.....	143,874,252	18,217,880	.....	94,787,948	26,240,468	
1840.....	92,802,352	14,339,167	.....	105,622,257	26,463,689	
1841.....	113,221,877	14,724,300	.....	94,808,638	27,043,165	
1842.....	88,724,280	11,437,807	.....	79,893,023	24,798,511	
1843.....	49,971,875	14,781,924	.....	65,053,636	19,292,844	
1844.....	94,174,673	14,260,362	.....	78,450,529	32,749,517	
1845.....	102,438,481	14,816,083	.....	86,942,442	27,704,164	
1846.....	106,008,173	15,683,624	.....	86,550,175	26,938,341	
1847.....	113,141,357	33,404,281	.....	100,204,804	53,868,210	
1848.....	128,647,232	26,351,696	.....	109,657,931	44,374,200	
1849.....	120,382,152	27,475,287	.....	100,533,123	45,222,697	
1850.....	139,657,043	38,481,275	.....	99,615,041	52,283,679	
1851.....	163,650,543	52,574,388	.....	152,451,689	65,931,322	
1852.....	155,258,467	53,038,388	.....	139,476,937	70,181,429	
1853.....	191,688,325	76,290,322	.....	155,028,802	75,947,355	
1854.....	215,376,273	86,117,821	.....	191,322,266	84,474,054	
1855.....	202,234,900	59,233,620	.....	203,250,562	71,906,284	
1856.....	249,972,512	64,667,430	.....	232,295,762	94,669,146	
1857.....	259,116,170	101,773,971	.....	251,214,857	111,745,825	
1858.....	203,700,016	78,913,134	.....	243,491,288	81,153,133	
1859.....	216,123,428	122,644,702	.....	249,617,953	107,171,509	
1860.....	228,164,855	134,001,399	.....	279,082,902	121,039,394	
1861.....	201,544,055	134,106,098	.....	179,972,733	69,372,180	
1862.....	92,274,100	113,497,629	.....	125,421,318	104,517,667	
1863.....	100,744,580	143,175,340	.....	132,127,891	199,880,691	
1864.....	81,212,077	248,350,818	.....	102,849,409	237,442,730	
1865.....	74,385,116	174,170,536	.....	93,017,756	262,839,588	
1866.....	112,040,395	333,471,763	.....	213,671,466	351,754,928	
1867.....	117,209,536	300,622,035	.....	180,628,368	280,708,368	

<sup>a</sup> Stated in mixed gold and currency values from 1862 to 1879, inclusive.

<sup>b</sup> Not separately stated prior to July 1, 1870.

## 1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821-1917—Continued.

Year.	Imports.			Exports.		
	In cars and other land vehicles.	In American vessels.	In foreign vessels.	In cars and other land vehicles.	In American vessels.	In foreign vessels.
1868.....	\$122,965,225	\$248,659,583		\$175,016,348	\$301,886,491	
1869.....	136,802,024	300,512,231		153,154,748	285,979,781	
1870.....	153,237,077	309,140,510		199,732,324	329,786,978	
1871.....	\$15,187,354	163,285,710	363,020,644	\$7,798,156	190,378,462	392,801,932
1872.....	17,635,681	177,286,202	445,416,783	10,015,089	168,044,799	333,929,579
1873.....	17,070,548	174,789,834	471,806,765	10,799,430	171,566,758	494,915,889
1874.....	14,513,335	178,027,778	403,320,135	8,509,205	174,424,216	533,885,971
1875.....	13,083,859	157,872,726	382,949,568	7,304,376	156,385,066	501,883,949
1876.....	12,148,667	143,389,704	321,139,500	6,324,487	167,686,467	492,215,487
1877.....	10,697,640	151,834,067	329,565,833	6,767,170	164,826,214	530,354,703
1878.....	12,965,999	146,499,282	307,407,565	7,511,365	166,551,624	569,583,564
1879.....	11,983,823	143,590,353	310,499,599	7,439,862	128,425,339	600,769,633
1880.....	15,142,465	149,317,368	503,494,913	5,838,928	109,029,209	720,770,521
1881.....	17,193,213	133,631,146	491,840,269	8,259,308	116,955,324	777,162,714
1882.....	22,854,946	130,266,826	571,517,802	12,118,371	96,962,919	641,460,967
1883.....	23,008,048	130,002,290	564,175,576	25,089,844	104,418,210	694,331,348
1884.....	20,140,294	135,046,207	512,511,192	26,573,774	98,652,828	615,287,007
1885.....	21,149,476	112,864,052	443,513,801	24,183,299	82,001,691	636,004,765
1886.....	24,555,683	118,942,817	491,937,636	19,144,667	78,406,686	581,973,477
1887.....	27,562,059	121,363,493	543,292,216	21,389,666	72,901,253	621,802,292
1888.....	32,209,459	123,525,298	568,222,857	22,147,368	67,332,175	606,474,964
1889.....	38,227,861	120,782,910	586,120,881	28,436,517	83,022,198	630,942,660
1890.....	40,621,361	124,948,948	623,740,100	32,949,902	77,502,138	747,376,644
1891.....	40,932,755	127,471,678	676,511,763	31,923,439	78,988,047	773,569,324
1892.....	39,726,595	139,139,891	648,535,976	33,221,472	81,033,844	916,022,832
1893.....	44,121,094	127,095,434	695,184,394	43,862,947	70,670,073	733,132,174
1894.....	29,623,095	121,561,193	503,810,334	49,221,427	73,707,023	769,212,122
1895.....	33,201,988	108,229,615	590,588,362	49,902,754	62,277,581	695,357,830
1896.....	35,535,079	117,299,074	626,890,521	61,131,125	70,392,813	751,083,000
1897.....	35,812,620	109,133,454	619,784,338	65,082,305	79,941,823	905,969,428
1898.....	30,427,784	93,535,867	492,086,003	73,283,704	67,792,150	1,090,406,476
1899.....	33,424,821	82,050,118	581,673,550	83,870,907	78,562,088	1,064,500,307
1900.....	44,412,509	104,304,940	701,223,735	110,483,141	90,779,252	1,193,220,689
1901.....	47,100,814	93,055,493	683,015,858	111,900,931	84,343,122	1,291,520,938
1902.....	56,366,711	102,188,002	744,766,235	123,824,337	83,651,985	1,174,263,079
1903.....	66,208,195	123,666,832	835,844,210	138,851,301	91,028,200	1,190,258,178
1904.....	68,239,120	132,253,065	790,595,186	152,736,889	97,482,054	1,210,608,328
1905.....	78,725,270	160,649,571	878,138,230	163,540,059	129,958,375	1,225,063,232
1906.....	86,677,047	168,488,129	971,397,270	193,735,340	153,859,076	1,396,270,084
1907.....	94,172,649	176,550,716	1,163,698,060	218,472,537	141,780,310	1,520,598,231
1908.....	71,310,825	151,919,733	971,111,234	190,551,127	120,592,495	1,549,629,724
1909.....	71,391,142	150,528,075	1,090,001,007	182,189,155	108,129,142	1,372,692,807
1910.....	90,408,369	147,100,976	1,319,438,085	228,724,159	113,736,171	1,402,524,390
1911.....	91,074,620	146,640,912	1,289,510,573	274,828,714	133,565,552	1,640,925,933
1912.....	102,187,084	170,849,680	1,380,228,170	323,929,836	151,601,885	1,728,790,688
1913.....	115,346,125	193,094,242	1,504,567,867	390,485,334	187,938,253	1,887,460,562
1914.....	156,217,004	198,923,666	1,538,784,987	316,819,289	169,436,090	1,878,323,769
1915.....	147,900,328	281,334,84	1,244,934,571	302,233,277	290,597,071	2,175,758,992
1916.....	197,908,390	449,872,543	1,550,102,577	507,416,794	499,035,673	3,327,030,418
1917.....	304,616,383	648,256,478	1,706,482,324	825,386,539	804,236,635	4,662,557,869

## 1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821-1917—Continued.

## TOTAL UNITED STATES IMPORTS AND EXPORTS.

Year.	By sea. <sup>a</sup>				By land vehicles.	Total by land and sea.
	In American vessels.	In foreign vessels.	Total.	Per cent in American vessels.		
1821.....	\$113,201,462	\$14,358,235	\$127,559,697	88.7	.....	.....
1822.....	137,699,899	17,701,923	155,401,822	88.4	.....	.....
1823.....	136,827,207	15,451,190	152,278,397	89.9	.....	.....
1824.....	142,676,759	13,858,905	156,535,664	91.2	.....	.....
1825.....	180,702,261	15,173,202	195,875,463	92.3	.....	.....
1826.....	150,331,636	12,238,163	162,569,799	92.5	.....	.....
1827.....	147,056,040	14,750,855	161,806,895	90.9	.....	.....
1828.....	142,059,693	17,714,817	160,774,510	88.9	.....	.....
1829.....	131,414,993	15,436,205	146,851,198	89.5	.....	.....
1830.....	129,918,458	14,447,970	144,366,428	89.9	.....	.....
1831.....	159,508,291	24,993,416	184,501,707	86.5	.....	.....
1832.....	156,438,989	31,767,220	188,206,209	83.1	.....	.....
1833.....	166,119,003	32,139,741	198,258,744	83.8	.....	.....
1834.....	191,393,635	39,464,670	230,858,305	83.0	.....	.....
1835.....	229,424,056	42,165,263	271,589,319	84.5	.....	.....
1836.....	208,188,899	49,854,176	318,043,075	84.3	.....	.....
1837.....	213,384,756	45,023,837	258,408,593	82.6	.....	.....
1838.....	192,907,247	29,296,773	222,204,020	84.2	.....	.....
1839.....	238,662,200	44,458,348	283,120,548	84.3	.....	.....
1840.....	198,424,609	40,802,856	239,227,465	82.9	.....	.....
1841.....	208,030,515	41,767,465	249,797,980	83.3	.....	.....
1842.....	168,617,303	36,236,318	204,853,621	82.3	.....	.....
1843.....	115,025,511	34,074,768	149,100,279	77.1	.....	.....
1844.....	172,625,202	47,009,879	219,635,081	78.6	.....	.....
1845.....	189,380,923	42,520,247	231,901,170	81.7	.....	.....
1846.....	192,558,348	42,621,965	235,180,313	81.7	.....	.....
1847.....	213,346,161	87,272,491	300,618,652	70.9	.....	.....
1848.....	238,305,163	70,725,896	309,031,059	77.4	.....	.....
1849.....	220,915,275	72,697,984	293,613,259	75.2	.....	.....
1850.....	239,272,084	90,764,954	330,037,038	72.5	.....	.....
1851.....	316,107,232	118,505,711	434,612,943	72.7	.....	.....
1852.....	294,735,404	123,219,817	417,955,221	70.5	.....	.....
1853.....	346,717,127	152,237,677	498,954,804	69.5	.....	.....
1854.....	406,698,539	170,591,875	577,290,414	70.5	.....	.....
1855.....	405,485,462	131,139,904	536,625,366	75.6	.....	.....
1856.....	482,268,274	159,336,576	641,604,850	75.2	.....	.....
1857.....	510,331,027	213,519,796	723,850,823	70.5	.....	.....
1858.....	447,191,304	160,066,267	607,257,561	73.7	.....	.....
1859.....	465,741,381	229,816,211	695,557,592	66.9	.....	.....
1860.....	507,247,757	255,040,793	762,288,550	66.5	.....	.....
1861.....	381,516,738	203,478,278	584,995,066	65.2	.....	.....
1862.....	217,695,418	218,015,296	435,710,714	50.0	.....	.....
1863.....	241,872,471	343,056,031	584,928,502	41.4	.....	.....
1864.....	184,061,486	485,793,543	669,855,034	27.5	.....	.....
1865.....	167,402,872	437,010,124	604,412,996	27.7	.....	.....
1866.....	325,711,861	685,226,691	1,010,938,552	32.2	.....	.....
1867.....	297,834,904	581,330,403	879,165,307	33.9	.....	.....
1868.....	297,981,573	550,546,074	848,527,647	35.1	.....	\$848,527,647
1869.....	289,956,772	586,492,012	876,448,784	33.2	.....	876,448,784
1870.....	352,969,401	638,927,488	991,896,889	35.6	.....	991,896,889
1871.....	353,664,172	755,822,576	1,109,486,748	31.9	\$22,985,510	1,132,472,258
1872.....	345,331,101	839,346,362	1,184,677,463	29.2	27,650,770	1,212,328,233
1873.....	346,306,592	966,722,651	1,313,029,243	26.4	27,869,978	1,340,899,221
1874.....	350,451,994	939,206,106	1,289,658,100	27.2	23,022,540	1,312,680,640
1875.....	314,257,792	884,788,517	1,199,046,309	26.2	20,385,235	1,219,434,544
1876.....	311,076,171	813,354,987	1,124,431,158	27.7	18,473,154	1,142,904,312
1877.....	316,600,281	859,920,536	1,176,580,817	26.9	17,464,810	1,194,045,627
1878.....	313,050,906	876,991,129	1,190,042,035	26.3	20,477,364	1,210,519,399
1879.....	272,015,692	911,269,232	1,183,284,924	23.0	19,423,685	1,202,708,609
1880.....	258,346,577	1,224,265,434	1,482,612,011	17.4	20,981,393	1,503,593,404
1881.....	250,586,470	1,269,002,983	1,519,589,453	16.5	25,452,521	1,545,041,974
1882.....	227,229,745	1,212,978,769	1,440,208,514	15.8	34,973,317	1,475,181,831
1883.....	240,420,500	1,258,506,924	1,498,927,424	16.0	48,092,892	1,547,020,316
1884.....	233,699,035	1,127,798,199	1,361,497,234	17.2	46,714,068	1,408,211,302
1885.....	194,865,743	1,079,518,566	1,274,384,309	15.3	45,332,775	1,319,717,084
1886.....	197,349,503	1,073,911,113	1,271,260,616	15.5	43,700,350	1,314,960,966
1887.....	194,366,746	1,165,194,508	1,359,551,254	14.3	48,951,725	1,408,502,979
1888.....	190,857,473	1,174,697,321	1,365,554,794	14.0	54,356,827	1,419,911,621
1889.....	203,805,108	1,217,063,541	1,420,868,649	14.3	66,664,378	1,487,533,027
1890.....	202,451,086	1,371,116,744	1,573,567,830	12.9	73,571,263	1,647,139,093
1891.....	206,459,725	1,450,081,087	1,656,540,812	12.5	72,856,194	1,729,397,006

<sup>a</sup> Includes also all water-borne foreign commerce of ports on the Great Lakes.

## 1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821-1917—Continued.

## TOTAL UNITED STATES IMPORTS AND EXPORTS—Continued.

Year.	By sea.				By land vehicles.	Total by land and sea.
	In American vessels.	In foreign vessels.	Total.	Per cent in American vessels.		
1892.....	\$220,173,735	\$1,564,559,651	\$1,784,733,386	12.3	\$72,947,224	\$1,857,680,610
1893.....	197,765,507	1,428,316,568	1,626,082,075	12.2	87,984,041	1,714,066,116
1894.....	195,268,216	1,273,022,456	1,468,290,672	13.3	78,844,522	1,547,135,194
1895.....	170,507,196	1,285,896,192	1,456,403,388	11.7	83,104,742	1,539,508,130
1896.....	187,691,887	1,377,973,521	1,565,665,408	12.0	96,666,204	1,662,331,612
1897.....	189,075,277	1,525,753,761	1,714,829,043	11.0	100,894,925	1,813,723,968
1898.....	161,328,017	1,582,492,479	1,743,820,496	9.3	103,711,488	1,847,531,984
1899.....	160,612,206	1,646,263,857	1,806,876,063	8.9	117,295,728	1,924,171,791
1900.....	195,084,192	1,894,444,424	2,089,528,616	9.3	154,895,650	2,244,424,266
1901.....	177,398,615	1,974,536,796	2,151,935,411	8.2	159,001,745	2,310,937,156
1902.....	185,819,987	1,919,029,314	2,104,849,301	8.8	180,191,048	2,285,040,349
1903.....	214,695,632	2,026,106,388	2,240,801,420	9.6	205,059,496	2,445,860,916
1904.....	229,735,119	2,001,203,514	2,230,938,033	10.3	220,976,009	2,451,914,642
1905.....	290,607,946	2,103,201,464	2,393,809,408	12.1	242,265,329	2,630,074,737
1906.....	322,347,205	2,367,667,355	2,690,014,559	12.0	280,412,387	2,970,426,946
1907.....	318,331,026	2,684,296,291	3,002,627,317	10.6	312,645,186	3,315,272,503
1908.....	272,513,322	2,520,739,864	2,793,253,186	9.8	261,861,952	3,055,115,138
1909.....	258,657,217	2,462,693,814	2,721,351,031	9.5	253,580,297	2,974,931,328
1910.....	280,837,147	2,721,962,475	2,982,799,622	8.7	319,132,528	3,301,932,150
1911.....	280,206,464	2,930,436,504	3,210,642,970	8.7	365,903,334	3,576,546,304
1912.....	322,451,565	3,109,018,855	3,431,470,423	9.4	426,116,920	3,857,587,343
1913.....	381,032,495	3,302,028,429	3,773,060,925	10.1	505,831,459	4,278,892,384
1914.....	368,359,756	3,417,108,756	3,785,468,512	9.7	473,036,293	4,258,504,805
1915.....	571,931,912	3,420,693,563	3,992,625,475	14.3	450,133,605	4,442,759,080
1916.....	948,908,216	4,877,132,995	5,826,041,211	16.3	705,325,184	6,531,366,395
1917.....	1,452,493,113	6,369,040,193	7,821,533,306	18.6	1,130,002,922	8,951,536,228

## 2. TONNAGE OF AMERICAN AND FOREIGN VESSELS ENTERED AND CLEARED IN THE FOREIGN TRADE OF THE UNITED STATES, FISCAL YEARS 1821-1917.

[Compiled in the Bureau of Foreign and Domestic Commerce of the Department of Commerce.]

Year.	Entered.			Cleared.			Total.			
	Ameri-can.	Per cent.	Foreign.	Per cent.	Ameri-can.	Per cent.	Foreign.	Per cent.	Foreign.	Per cent.
1821.....	765,098	91	81,526	9	804,947	91	83,073	9	1,570,045	90
1822.....	787,961	89	100,541	11	813,748	90	97,490	10	1,501,709	88
1823.....	775,271	86	119,468	14	810,761	87	119,740	13	1,586,032	86
1824.....	850,033	89	102,367	11	919,278	89	102,552	11	1,769,311	90
1825.....	880,754	90	92,927	10	960,366	90	95,080	10	1,841,120	91
1826.....	942,206	89	105,654	11	953,012	90	99,417	10	1,895,218	89
1827.....	918,361	86	137,589	14	980,542	88	131,250	12	1,898,903	88
1828.....	868,381	86	150,223	14	897,404	86	151,030	14	1,765,785	85
1829.....	872,949	86	130,743	14	944,799	87	133,006	13	1,817,748	87
1830.....	967,227	88	131,900	12	971,760	88	133,436	12	1,938,987	88
1831.....	922,952	76	481,948	24	972,504	78	271,994	22	1,895,456	77
1832.....	949,622	70	393,038	30	974,865	71	387,505	29	1,924,487	71
1833.....	1,111,441	69	496,705	31	1,142,160	69	497,039	31	2,253,601	68
1834.....	1,074,670	65	568,052	35	1,134,020	66	577,700	34	2,208,690	66
1835.....	1,352,653	68	641,310	32	1,400,517	69	630,824	31	2,753,270	68
1836.....	1,255,384	64	680,213	36	1,315,523	66	674,721	34	2,570,907	65
1837.....	1,299,720	62	765,703	38	1,266,622	62	756,292	38	2,566,342	63
1838.....	1,302,764	68	592,110	32	1,408,761	69	604,166	31	2,711,735	69
1839.....	1,491,279	71	624,814	29	1,477,928	71	611,839	29	2,969,207	71
1840.....	1,576,946	68	712,363	32	1,647,009	69	706,486	31	3,223,955	69
1841.....	1,631,909	68	736,444	32	1,634,156	68	736,849	32	3,266,065	69
1842.....	1,510,111	67	732,775	33	1,536,451	67	740,497	33	3,046,562	68
1843.....	1,143,523	68	534,752	32	1,268,083	70	523,949	30	2,411,606	70
1844.....	1,977,438	68	916,922	32	2,010,924	68	906,814	32	3,988,362	69
1845.....	2,035,486	69	910,536	31	2,053,977	69	930,275	31	4,089,463	69
1846.....	2,151,114	69	959,739	31	2,221,028	69	968,178	31	4,372,142	70
1847.....	2,101,359	66	1,220,346	34	2,202,393	65	1,176,605	35	4,303,752	65
1848.....	2,393,482	63	1,405,191	37	2,461,280	63	1,404,159	37	4,854,762	64
1849.....	2,658,321	61	1,710,515	39	2,753,724	62	1,675,709	38	5,412,045	62
1850.....	2,573,016	59	1,175,623	41	2,632,788	60	1,728,214	40	5,205,804	60
1851.....	3,054,349	61	1,939,091	39	3,200,519	62	1,929,535	38	6,254,868	62
1852.....	3,235,522	61	2,057,358	39	3,230,590	61	2,047,575	39	6,466,112	62

## 2. TONNAGE OF AMERICAN AND FOREIGN VESSELS ENTERED AND CLEARED IN THE FOREIGN TRADE OF THE UNITED STATES, FISCAL YEARS 1821-1917—Continued.

Year.	Entered.				Cleared.				Total.			
	Ameri-can.	Per cent.	Foreign.	Per cent.	Ameri-can.	Per cent.	Foreign.	Per cent.	Ameri-can.	Per cent.	Foreign.	Per cent.
1853	4,004,013	63	2,277,930	37	3,766,789	62	2,298,790	38	7,770,802	63	4,576,720	37
1854	3,752,115	63	2,132,224	37	3,911,392	64	2,107,802	36	7,663,507	65	4,240,026	35
1855	3,861,391	64	2,083,948	36	4,068,979	65	2,110,322	35	7,930,373	65	4,194,270	35
1856	4,385,484	65	2,486,769	35	4,538,364	64	2,462,109	36	8,923,848	65	4,948,378	35
1857	4,721,370	65	2,464,946	35	4,580,651	64	2,490,170	36	9,302,021	66	4,955,116	34
1858	4,395,642	66	2,209,403	34	4,490,033	66	3,312,759	34	8,885,675	67	4,522,162	33
1859	5,265,648	67	2,540,387	33	5,297,367	66	2,618,338	34	10,563,015	68	5,158,775	32
1860	5,921,285	71	2,353,911	29	6,105,924	70	2,624,005	30	12,087,209	71	4,977,191	29
1861	5,023,917	69	2,217,554	31	4,889,313	68	2,262,042	32	9,913,230	70	4,479,596	30
1862	5,117,685	69	2,245,278	31	4,961,818	67	2,376,999	33	10,079,503	69	4,622,277	31
1863	4,614,698	63	2,640,378	37	4,447,261	59	3,064,023	41	9,061,959	62	5,704,401	38
1864	3,066,434	46	3,471,219	54	3,000,948	45	3,741,131	55	6,157,382	46	7,212,350	54
1865	2,943,661	47	3,216,967	53	3,025,134	45	3,595,123	55	5,968,795	47	6,812,009	53
1866	3,372,060	43	4,410,424	57	3,383,176	43	4,483,384	57	6,755,236	48	8,848,808	56
1867	3,455,052	44	3,418,673	56	3,419,502	43	4,465,490	57	6,874,554	44	8,784,163	56
1868	3,550,550	44	4,495,465	56	3,717,956	44	4,561,060	56	7,268,506	45	9,056,525	55
1869	3,402,668	38	3,537,649	62	3,381,363	38	3,372,570	62	6,784,031	39	10,720,264	61
1870	3,486,038	38	5,669,621	62	3,506,929	35	5,662,474	62	6,992,967	38	11,332,095	62
1871	3,742,740	37	6,266,444	63	3,746,942	37	6,151,537	63	7,489,682	38	12,417,981	62
1872	3,711,846	34	7,094,577	66	3,682,309	34	7,051,425	66	7,394,155	35	14,146,002	65
1873	3,612,631	30	8,083,086	70	3,750,564	30	8,005,132	70	7,369,195	32	16,148,218	68
1874	3,893,725	29	9,197,829	71	3,982,052	30	9,207,396	70	7,875,777	30	18,405,225	70
1875	3,573,950	30	8,118,860	70	3,736,639	31	8,159,868	69	7,310,589	30	16,275,728	70
1876	3,611,436	28	8,899,312	72	3,732,415	28	8,922,699	71	7,343,851	30	17,822,011	70
1877	3,663,403	27	9,791,386	73	3,765,171	28	9,677,218	72	7,428,574	28	19,468,604	72
1878	3,642,417	25	10,821,387	73	3,872,203	26	10,935,315	74	7,514,620	26	21,756,715	74
1879	3,415,410	21	12,777,734	79	3,464,360	21	12,610,923	79	6,879,770	22	25,388,657	78
1880	3,436,964	19	14,573,685	81	3,397,355	18	14,645,544	82	6,834,319	19	21,219,229	81
1881	3,253,584	17	15,065,620	83	3,375,535	15	15,094,392	82	6,629,119	19	30,160,012	81
1882	3,340,968	18	14,259,769	82	3,317,598	18	14,439,164	82	6,658,566	19	28,698,933	81
1883	3,255,543	20	13,126,184	80	3,307,223	20	13,233,673	80	6,562,766	20	35,859,857	80
1884	3,202,293	22	11,866,535	78	3,230,641	22	11,967,902	78	6,438,934	22	23,834,437	78
1885	3,132,011	21	12,172,816	79	3,231,556	21	12,283,213	79	6,363,567	24	4,456,029	77
1886	3,231,573	21	11,904,043	79	3,303,373	21	12,024,299	79	6,534,946	21	23,928,342	79
1887	3,365,516	22	12,450,767	79	3,259,046	20	12,404,185	80	6,624,562	20	24,944,952	80
1888	3,366,767	22	12,026,336	78	3,415,004	22	12,253,900	78	6,781,771	22	24,280,236	78
1889	3,724,325	23	12,227,794	77	3,988,454	24	12,354,693	76	7,712,779	33	24,582,487	77
1890	4,083,121	24	14,024,140	77	4,066,757	23	14,082,105	77	8,149,878	23	28,106,245	77
1891	4,380,804	24	13,823,491	76	4,455,402	24	13,805,430	76	8,836,206	24	27,628,921	76
1892	4,469,955	22	16,543,469	74	5,436,151	22	16,624,882	78	9,006,106	23	16,385,517	78
1893	4,358,686	22	15,223,130	78	4,403,362	22	15,357,384	78	8,762,048	22	20,588,514	78
1894	4,654,679	23	15,334,984	77	4,730,918	23	15,531,772	77	9,394,597	23	20,866,756	77
1895	4,472,830	24	14,822,085	75	4,504,227	23	14,246,319	77	8,77,057	23	20,968,404	77
1896	5,196,320	25	15,792,844	75	5,329,599	25	16,084,986	75	10,525,919	25	31,877,850	75
1897	5,523,328	23	18,234,922	77	5,618,142	24	18,091,051	76	11,143,470	23	36,325,975	77
1898	5,240,046	20	20,339,335	80	5,111,447	20	20,636,785	80	10,351,493	20	40,976,138	80
1899	5,340,660	20	20,770,156	80	5,471,752	21	20,794,224	79	10,812,412	21	41,564,380	79
1900	6,135,652	22	22,027,353	78	6,208,918	22	22,073,223	78	12,344,570	22	44,099,578	78
1901	6,381,305	21	23,386,716	79	6,417,347	22	23,402,546	78	12,798,652	21	46,782,262	79
1902	6,961,200	23	28,693,232	77	6,821,555	22	23,622,527	78	13,782,755	23	47,315,759	77
1903	6,906,582	22	24,187,081	78	6,975,227	22	24,340,941	78	13,881,809	22	48,528,022	78
1904	6,679,173	22	23,273,237	78	6,641,374	22	23,374,201	78	13,320,547	22	46,647,438	78
1905	7,080,624	23	23,902,593	77	7,203,008	23	23,954,533	77	14,283,632	23	47,857,126	77
1906	7,612,690	22	26,542,755	78	7,548,533	22	26,203,921	78	15,193,223	22	52,746,676	78
1907	8,115,656	22	28,506,600	78	8,092,557	22	28,597,500	78	16,208,213	22	56,404,100	78
1908	8,473,227	22	30,075,963	78	8,435,207	22	29,846,489	78	16,908,434	22	59,922,457	78
1909	8,771,464	22	30,286,674	78	8,491,725	22	29,704,756	78	17,263,189	22	59,991,430	78
1910	8,885,459	22	31,347,347	78	8,808,603	22	30,897,255	78	17,697,062	22	62,244,602	78
1911	9,692,770	23	32,982,219	77	9,753,463	23	32,683,684	77	19,446,233	23	65,665,903	77
1912	11,257,098	25	34,900,973	75	11,703,467	25	34,713,445	75	22,960,565	25	69,614,418	75
1913	13,072,567	26	37,566,606	74	13,945,801	27	37,206,158	73	27,018,368	26	74,772,764	74
1914	13,730,075	26	39,658,502	74	13,740,628	26	39,442,781	74	27,470,703	26	79,101,283	74
1915	13,275,454	28	33,435,012	72	13,418,282	29	33,466,806	71	26,693,736	29	66,901,818	71
1916	17,927,674	35	33,622,223	65	17,902,068	34	34,520,940	66	35,829,742	34	68,143,163	66
1917	18,724,710	37	31,747,466	63	19,145,754	37	32,931,316	63	37,870,464	37	64,678,782	63

## 3. WATER-BORNE IMPORTS AND DOMESTIC EXPORTS OF UNITED STATES, BY NATIONALITY OF VESSELS, FISCAL YEARS 1914-1917.

Nationality of vessels.	1914	1915	1916	1917
IMPORTS.				
American.....	\$198,923,666	\$231,334,841	\$449,872,543	\$648,256,478
Austrian.....	24,358,126	3,025,275	7,408	19,153
Belgian.....	35,461,566	7,053,131	2,875,491	1,070,358
British.....	852,672,141	694,219,523	830,168,016	774,803,474
Danish.....	(a)	(a)	55,359,614	91,919,443
Dutch.....	68,786,793	124,687,344	110,888,920	113,965,111
French.....	111,799,180	68,341,417	91,006,098	100,779,934
German.....	241,319,067	31,081,662	416,149	907,550
Italian.....	34,714,668	49,072,575	45,878,084	32,432,151
Japanese.....	55,305,703	68,080,817	177,059,632	289,277,360
Norwegian.....	66,475,681	115,729,291	140,805,658	171,413,038
Spanish.....	(a)	(a)	14,284,512	26,489,080
All others.....	47,892,062	83,643,536	81,352,995	103,405,672
Total.....	1,737,708,653	1,526,269,412	1,999,975,120	2,354,738,802
DOMESTIC EXPORTS.				
American.....	166,055,061	284,410,965	490,559,739	794,960,998
Austrian.....	35,086,502	877,044		
Belgian.....	12,504,875	15,439,965	31,946,584	60,786,422
British.....	1,172,354,610	1,394,215,920	2,110,758,160	2,859,700,415
Danish.....	(a)	(a)	62,936,331	94,484,766
Dutch.....	84,589,948	108,386,976	115,397,348	126,876,635
French.....	63,702,289	126,517,813	186,660,775	274,993,210
German.....	280,818,368	19,917,218		1,049,340
Italian.....	38,727,602	75,668,508	142,661,161	178,477,022
Japanese.....	25,657,162	36,004,988	140,344,245	240,065,407
Norwegian.....	65,552,041	158,416,411	244,270,259	371,813,646
Spanish.....	(a)	(a)	56,811,688	117,896,809
All others.....	82,742,184	210,972,956	205,076,001	312,669,014
Total.....	2,027,790,642	2,430,828,764	3,787,422,291	5,433,753,684
TOTAL IMPORTS AND DOMESTIC EXPORTS.				
American.....	364,978,727	565,745,806	940,432,282	1,443,217,476
Austrian.....	59,444,628	3,902,319	7,408	19,153
Belgian.....	47,966,441	22,493,096	34,822,075	61,856,780
British.....	2,025,026,751	2,088,435,443	2,940,926,176	3,634,503,889
Danish.....	(a)	(a)	118,295,945	186,384,209
Dutch.....	153,376,741	233,074,320	226,286,268	240,841,746
French.....	175,501,469	194,859,230	277,666,873	375,773,144
German.....	522,137,435	50,998,880	416,049	1,956,890
Italian.....	73,442,270	124,741,083	188,339,245	210,909,173
Japanese.....	80,962,865	104,085,805	317,403,877	529,342,767
Norwegian.....	132,027,722	274,145,702	385,075,917	543,226,684
Spanish.....	(a)	(a)	71,096,200	144,385,889
All others.....	130,634,246	294,616,492	286,428,996	416,074,686
Total.....	3,765,499,295	3,957,098,176	5,787,397,411	7,788,492,486

<sup>a</sup> Included in "All others."

## 4. WATER-BORNE IMPORTS AND EXPORTS OF THE UNITED STATES BY MONTHS, FISCAL YEARS 1914-1917.

Month.	1914	1915	1916	1917
IMPORTS.				
July.....	\$129,404,598	\$147,536,541	\$129,867,009	\$165,192,171
August.....	127,832,907	115,826,908	127,410,886	178,932,335
September.....	158,710,680	127,525,688	135,594,597	143,397,959
October.....	120,191,863	124,726,464	129,897,060	154,089,629
November.....	132,222,756	113,204,516	138,015,316	151,798,183
December.....	168,431,647	102,040,876	155,974,296	180,655,485
January.....	140,676,048	110,757,664	170,306,329	218,879,283
February.....	136,490,649	113,037,111	179,893,028	178,828,556
March.....	169,107,706	145,461,525	195,510,428	241,637,380
April.....	161,269,229	151,113,615	200,431,659	224,042,802
May.....	151,365,626	130,896,905	209,358,124	244,416,626
June.....	142,004,944	144,141,599	227,716,388	272,868,393
Total.....	1,737,708,653	1,526,269,412	1,999,975,120	2,354,738,802
EXPORTS.				
July.....	131,929,490	131,259,033	236,858,862	395,392,484
August.....	158,637,530	86,157,767	229,904,980	448,145,392
September.....	191,248,453	135,526,348	268,871,938	457,762,548
October.....	243,337,160	173,709,455	299,910,710	433,360,153
November.....	218,059,057	182,273,846	294,344,741	453,127,680
December.....	208,337,572	224,833,227	317,431,353	453,794,875
January.....	182,020,419	244,300,755	285,528,322	542,290,995
February.....	151,054,773	268,652,373	356,056,514	404,718,922
March.....	160,202,105	268,064,718	362,628,810	469,214,320
April.....	135,122,728	267,849,664	342,803,692	458,967,394
May.....	136,223,277	247,353,319	419,831,802	463,377,975
June.....	131,587,295	236,375,560	411,894,367	486,641,766
Total.....	2,047,759,859	2,466,356,063	3,826,066,091	5,466,794,504
TOTAL IMPORTS AND EXPORTS.				
July.....	261,334,088	278,795,574	366,725,871	560,584,655
August.....	286,470,437	201,984,675	357,315,866	627,077,727
September.....	349,959,133	263,052,034	404,466,535	601,160,507
October.....	363,529,023	298,435,919	429,807,770	587,449,782
November.....	350,281,813	295,478,362	432,360,057	604,925,863
December.....	376,769,219	326,874,103	473,405,649	634,450,360
January.....	322,696,467	355,058,419	455,834,651	761,170,278
February.....	287,545,422	381,689,484	535,949,542	583,547,478
March.....	329,309,811	413,526,243	558,139,238	710,851,700
April.....	296,391,957	418,963,279	543,235,351	688,910,196
May.....	287,588,903	378,250,224	629,189,926	707,794,601
June.....	273,592,293	380,517,159	639,610,755	759,510,159
Total.....	3,785,468,512	3,992,625,475	5,826,041,211	7,821,533,316

## 7. NATIONALITY OF MEMBERS OF SEAMEN'S UNIONS.

The following table, compiled by Andrew Furuseth, president of the International Seamen's Union of America, shows the nationality of the members of the several divisions of that union. It is made up from the records of the districts of the seamen's union as they were on July 15, 1917—the Pacific, the Lakes, and the Atlantic and Gulf. Each district has three divisions—sailors, firemen, and cooks and stewards, or deck department, engine department, and stewards' department. Licensed officers are not members.

Nationality.	The Pacific.				The Great Lakes.			
	Sailors.	Firemen.	Cooks.	Total.	Sailors.	Firemen.	Cooks.	Total.
Argentina.			5	5				
Austria.	32	47	59	138	69	103	7	179
Belgium.	12	26	17	55		21	1	22
British.	651	352	797	1,800	614	926	135	1,675
Bulgaria.			1	1		1		1
Chile.		9	32	41				
Denmark.	444	50	88	582	98	48	9	155
Finland.	808	53	21	882		62		62
France.	34	5	21	60		8	1	9
Germany.	841	221	302	1,364	243	294	33	570
Greece.	46	127	15	188		81	1	82
Holland.	98	16	34	148	39	16	4	59
Italy.	15	9	31	55	56	16	3	75
Luxemburg.	2			2				
Mexico.	4	10	53	67		1		1
Norway.	1,397	275	128	1,800	621	179	42	842
Portugal.	2	5	53	60			1	1
Roumania.	2	5		7		5		5
Russia.	415	50	17	482	260	138	16	414
South America, not specified.	37			37				
Spain.	13	150	89	252		34	1	35
Sweden.	1,261	225	71	1,557	287	230	19	536
Switzerland.	19	6	26	51		12		12
Turkey.	7	20	3	30		3		3
United States.	529	1,350	910	2,789	1,910	2,234	799	4,943
Others.			74	74	42	4	1	47
Total.	6,669	3,011	2,847	12,527	4,239	4,416	1,073	9,728

Nationality.	The Atlantic and Gulf.				Total.			Grand total.
	Sailors.	Firemen.	Cooks.	Total.	Sailors.	Firemen.	Cooks.	
Argentina.	1	16		17	1	16	5	22
Austria.	102	192	58	352	203	342	124	669
Belgium.	119	32		151	12	166	50	228
British.	530	709	2,152	3,391	1,795	1,987	3,084	6,866
Bulgaria.	2			2	2	1	1	4
Chile.	2	32		34	2	41	32	75
Cuba.			9	9			9	9
Denmark.	650	199	102	951	1,192	297	199	1,688
Finland.		187		187	808	302	21	1,131
France.	30		42	72	64	13	64	141
Germany.	776	587	424	1,787	1,860	1,102	759	3,721
Greece.	147	300	24	471	193	508	40	741
Holland.	225	104	152	481	362	136	190	688
Italy.	76		70	146	147	25	104	276
Luxemburg.				2				2
Mexico.	2		2	6	11	53	70	70
Norway.	1,636	742	66	2,444	3,654	1,196	236	5,086
Portugal.	36	512	9	557	38	517	63	618
Roumania.	2			2	4	10		14
Russia.	1,140	191	47	1,378	1,815	379	80	2,274
South America, not specified.			45	45	37		45	82
Spain.	110	610	362	1,082	123	794	452	1,369
Sweden.	1,127	798	62	1,987	2,675	1,253	152	4,080
Switzerland.	30		40	70	49	18	66	133
Turkey.	5	19		24	12	42	3	57
United States.	1,327	1,250	1,910	4,487	3,766	4,834	3,619	12,219
Others.			23	23	42	4	98	144
Total.	7,956	6,567	5,629	20,152	18,864	13,994	9,549	42,407

## No. 10.—DOCUMENTED SAILING AND STEAM TONNAGE CONSTITUTING

Year ended—	Registered vessels.						Enrolled vessels.											
	Sailing. <sup>a</sup>			Steam.			Total.			Sailing. <sup>b</sup>			Steam.			Total.		
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
Dec. 31, 1789.	123, 893		123, 893		123, 893		77, 669		77, 669		77, 669		77, 669		77, 669		77, 669	
1790.	346, 254		346, 254		346, 254		132, 123		132, 123		132, 123		132, 123		132, 123		132, 123	
1791.	363, 110		363, 110		363, 110		139, 036		139, 036		139, 036		139, 036		139, 036		139, 036	
1792.	411, 438		411, 438		411, 438		153, 019		153, 019		153, 019		153, 019		153, 019		153, 019	
1793.	367, 734		367, 734		367, 734		143, 827		143, 827		143, 827		143, 827		143, 827		143, 827	
1794.	438, 863		438, 863		438, 863		167, 228		167, 228		167, 228		167, 228		167, 228		167, 228	
1795.	529, 471		529, 471		529, 471		192, 846		192, 846		192, 846		192, 846		192, 846		192, 846	
1796.	576, 733		576, 733		576, 733		226, 297		226, 297		226, 297		226, 297		226, 297		226, 297	
1797.	597, 777		597, 777		597, 777		248, 587		248, 587		248, 587		248, 587		248, 587		248, 587	
1798.	603, 376		603, 376		603, 376		263, 584		263, 584		263, 584		263, 584		263, 584		263, 584	
1799.	662, 197		662, 197		662, 197		245, 429		245, 429		245, 429		245, 429		245, 429		245, 429	
1800.	669, 921		669, 921		669, 921		268, 254		268, 254		268, 254		268, 254		268, 254		268, 254	
1801.	c 632, 907		632, 907		632, 907		278, 271		278, 271		278, 271		278, 271		278, 271		278, 271	
1802.	c 560, 381		560, 381		560, 381		294, 111		294, 111		294, 111		294, 111		294, 111		294, 111	
1803.	597, 157		597, 157		597, 157		313, 235		313, 235		313, 235		313, 235		313, 235		313, 235	
1804.	672, 530		672, 530		672, 530		330, 251		330, 251		330, 251		330, 251		330, 251		330, 251	
1805.	749, 341		749, 341		749, 341		350, 743		350, 743		350, 743		350, 743		350, 743		350, 743	
1806.	808, 285		808, 285		808, 285		361, 059		361, 059		361, 059		361, 059		361, 059		361, 059	
1807.	848, 307		848, 307		848, 307		379, 787		379, 787		379, 787		379, 787		379, 787		379, 787	
1808.	769, 054		769, 054		769, 054		432, 006		432, 006		432, 006		432, 006		432, 006		432, 006	
1809.	910, 059		910, 059		910, 059		398, 184		398, 184		398, 184		398, 184		398, 184		398, 184	
1810.	984, 269		984, 269		984, 269		397, 704		397, 704		397, 704		397, 704		397, 704		397, 704	
1811.	c 768, 852		768, 852		768, 852		420, 674		420, 674		420, 674		420, 674		420, 674		420, 674	
1812.	760, 624		760, 624		760, 624		465, 945		465, 945		465, 945		465, 945		465, 945		465, 945	
1813.	674, 853		674, 853		674, 853		445, 449		445, 449		445, 449		445, 449		445, 449		445, 449	
1814.	674, 633		674, 633		674, 633		435, 139		435, 139		435, 139		435, 139		435, 139		435, 139	
1815.	854, 295		854, 295		854, 295		462, 807		462, 807		462, 807		462, 807		462, 807		462, 807	
1816.	800, 760		800, 760		800, 760		519, 026		519, 026		519, 026		519, 026		519, 026		519, 026	
1817.	809, 725		809, 725		809, 725		535, 798		535, 798		535, 798		535, 798		535, 798		535, 798	
1818.	d 606, 089		606, 089		606, 089		562, 307		562, 307		562, 307		562, 307		562, 307		562, 307	
1819.	612, 930		612, 930		612, 930		589, 288		589, 288		589, 288		589, 288		589, 288		589, 288	
1820.	619, 048		619, 048		619, 048		600, 977		600, 977		600, 977		600, 977		600, 977		600, 977	
1821.	619, 896		619, 896		619, 896		612, 712		612, 712		612, 712		612, 712		612, 712		612, 712	
1822.	628, 150		628, 150		628, 150		634, 619		634, 619		634, 619		634, 619		634, 619		634, 619	
1823.	639, 921		639, 921		639, 921		609, 156		609, 156		609, 156		609, 156		609, 156		609, 156	
1824.	669, 973		669, 973		669, 973		636, 032		636, 032		636, 032		636, 032		636, 032		636, 032	
1825.	700, 788		700, 788		700, 788		634, 838		634, 838		634, 838		634, 838		634, 838		634, 838	
1826.	737, 978		737, 978		737, 978		696, 123		696, 123		696, 123		696, 123		696, 123		696, 123	
1827.	747, 170		747, 170		747, 170		766, 788		766, 788		766, 788		766, 788		766, 788		766, 788	
1828.	812, 619		812, 619		812, 619		822, 753		822, 753		822, 753		822, 753		822, 753		822, 753	
1829.	d 650, 143		650, 143		650, 143		534, 320		534, 320		534, 320		534, 320		534, 320		534, 320	
1830.	d 575, 056	1, 419	576, 475		576, 475		528, 394		528, 394		528, 394		528, 394		528, 394		528, 394	
1831.	619, 575	877	620, 452		620, 452		551, 449		551, 449		551, 449		551, 449		551, 449		551, 449	
1832.	686, 809	181	686, 990		686, 990		633, 056		633, 056		633, 056		633, 056		633, 056		633, 056	
1833.	749, 482	545	750, 027		750, 027		723, 890		723, 890		723, 890		723, 890		723, 890		723, 890	
1834.	857, 098	340	857, 438		857, 438		746, 908		746, 908		746, 908		746, 908		746, 908		746, 908	
Sept. 30, 1835 <sup>e</sup>	883, 482	340	885, 822		885, 822		784, 138		784, 138		784, 138		784, 138		784, 138		784, 138	
1836.	897, 321	454	897, 775		897, 775		807, 425		807, 425		807, 425		807, 425		807, 425		807, 425	
1837.	809, 343	1, 104	810, 447		810, 447		897, 350		897, 350		897, 350		897, 350		897, 350		897, 350	
1838.	819, 801	2, 791	822, 592		822, 592		943, 367		943, 367		943, 367		943, 367		943, 367		943, 367	
1839.	829, 096	5, 149	834, 245		834, 245		1, 032, 023		1, 032, 023		1, 032, 023		1, 032, 023		1, 032, 023		1, 032, 023	
1840.	895, 610	4, 155	899, 765		899, 765		1, 042, 676		1, 042, 676		1, 042, 676		1, 042, 676		1, 042, 676		1, 042, 676	
1841.	945, 057	746	945, 803		945, 803		973, 571		973, 571		973, 571		973, 571		973, 571		973, 571	
1842.	970, 658	4, 701	975, 359		975, 359		859, 619		859, 619		859, 619		859, 619		859, 619		859, 619	
June 30, 1843.	1, 003, 932	5, 373	1, 009, 305		1, 009, 305		883, 534		883, 534		883, 534		883, 534		883, 534		883, 534	
1844.	1, 061, 855	6, 910	1, 068, 765		1, 068, 765		908, 268		908, 268		908, 268		908, 268		908, 268		908, 268	
1845.	1, 088, 680	6, 492	1, 095, 172		1, 095, 172		962, 817		962, 817		962, 817		962, 817		962, 817		962, 817	
1846.	1, 124, 000	6, 287	1, 130, 287		1, 130, 287		1, 057, 684		1, 057, 684		1, 057, 684		1, 057, 684		1, 057, 684		1, 057, 684	
1847.	1, 235, 682	5, 631	1, 241, 313		1, 241, 313		1, 155, 042		1, 155, 042		1, 155, 042		1, 155, 042		1, 155, 042		1, 155, 042	
1848.	1, 344, 819	16, 068	1, 360, 887		1, 360, 887		1, 335, 809		1, 335, 809		1, 335, 809		1, 335, 809		1, 335, 809		1, 335, 809	
1849.	1, 418, 072	20, 870	1, 438, 942		1, 438, 942		1, 406, 710		1, 406, 710		1, 406, 710		1, 406, 710		1, 406, 710		1, 406, 710	

<sup>a</sup> Including barges.<sup>b</sup> Including canal boats and barges.<sup>c</sup> The decrease of registered tonnage for the years 1801, 1802, and 1811 is due largely, if not entirely, to clerical corrections. (American State Papers, Commerce and Navigation, 1801-2, vol. 1, pp. 494-499, 528-546.)<sup>d</sup> The decrease of tonnage in the years 1818, 1829, and 1830 arises principally from the registered tonnage having been corrected by striking off all vessels the registers of which were granted prior to 1815, which were supposed by the collectors to have been lost at sea, captured, etc. Joseph Nourse, Register of the Treasury (American State Papers, Vol. II, p. 648) and Pitkin (Commerce of the United States, edition 1835, p. 351.)<sup>e</sup> Nine months.

# TABLES.

## THE TOTAL MERCHANT MARINE OF THE UNITED STATES, 1789-1916.

Licensed vessels under 20 tons.						Total merchant marine.						Annual in- crease or de- crease (-).	Year.
Sailing. <sup>a</sup>		Steam.		Total.		Sailing. <sup>b</sup>		Steam.		Total.			
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	Per ct.	
						201, 562				201, 562			
						478, 377				478, 377	137. 33		f1789
						502, 146				502, 146	4. 96		f1790
						564, 457				564, 457	12. 40		f1791
9, 203				9, 203		520, 764				520, 764	7. 74		1793
22, 527				22, 527		628, 618				628, 618	20. 71		1794
25, 648				25, 648		747, 965				747, 965	19		1795
28, 870				28, 870		831, 900				831, 900	11. 22		1796
30, 548				30, 548		876, 912				876, 912	5. 41		1797
31, 368				31, 368		898, 328				898, 328	2. 44		1798
31, 782				31, 782		939, 408				939, 408	4. 57		1799
34, 317				34, 317		972, 492				972, 492	3. 52		1800
36, 398				36, 398		947, 576				947, 576	- 2. 56		1801
37, 614				37, 614		892, 106				892, 106	- 5. 85		1802
38, 780				38, 780		949, 172				949, 172	6. 39		1803
39, 623				39, 623		1, 042, 404				1, 042, 404	1		1804
40, 283				40, 283		1, 140, 367				1, 140, 367	9. 40		1805
33, 393				39, 393		1, 208, 737				1, 208, 737	5. 99		1806
40, 454				40, 454		1, 268, 548				1, 268, 548	4. 95		1807
41, 535				41, 535		1, 242, 595				1, 242, 595	- 2. 04		1808
42, 039				42, 039		1, 350, 282				1, 350, 282	8. 66		1809
42, 810				42, 810		1, 424, 783				1, 424, 783	5. 51		1810
42, 976				42, 976		1, 232, 502				1, 232, 502	- 13. 49		1811
43, 428				43, 428		1, 269, 997				1, 269, 997	2. 95		1812
46, 326				46, 326		1, 166, 628				1, 166, 628	- 8. 14		1813
49, 437				49, 437		1, 159, 209				1, 159, 209	- .63		1814
51, 026				51, 026		1, 368, 128				1, 368, 128	18. 02		1815
52, 433				52, 433		1, 372, 219				1, 372, 219	.29		1816
54, 389				54, 389		1, 399, 912				1, 399, 912	2. 02		1817
56, 789				56, 789		1, 225, 185				1, 225, 185	- 12. 48		1818
58, 534				58, 534		1, 200, 752				1, 260, 752	2. 90		1819
60, 142				60, 142		1, 280, 167				1, 280, 167	1. 54		1820
66, 350				66, 3. 0		1, 298, 958				1, 298, 958	1. 47		1821
61, 930				61, 930		1, 324, 699				1, 324, 699	1. 98		1822
62, 610				62, 610		1, 311, 687		24, 879		1, 336, 566	.89		1823
61, 548				61, 548		367, 553		21, 610		1, 389, 163	3. 94		1824
64, 424				64, 424		1, 400, 050		23, 061		1, 423, 111	2. 44		1825
65, 031				66, 031		1, 500, 132		34, 059		1, 534, 191	7. 80		1826
65, 451				66, 451		1, 550, 409		40, 198		1, 620, 607	5. 63		1827
66, 602				66, 602		1, 701, 974		39, 418		1, 741, 392	7. 45		1828
22, 298				22, 298		1, 206, 761		54, 037		1, 260, 798	- 27. 60		1829
23, 854				23, 854		1, 127, 304			64, 472	1, 191, 776	- 5. 47		1830
27, 377				27, 377		1, 198, 401			69, 445	1, 267, 846	6. 38		1831
28, 771				28, 771		1, 348, 636			90, 814	1, 439, 450	13. 53		1832
30, 928				30, 928		1, 504, 300			101, 851	1, 606, 151	11. 59		1833
32, 087				32, 087		1, 636, 093			122, 814	1, 758, 907	9. 15		1834
32, 507				32, 507		1, 702, 127			122, 814	1, 824, 941	3. 75		1835
31, 800				31, 800		1, 736, 546			145, 556	1, 882, 102	3. 13		1836
35, 228				35, 228		1, 741, 921			154, 765	1, 896, 686	.77		1837
39, 049				39, 049		1, 802, 217			193, 423	1, 995, 640	5. 22		1838
40, 332				40, 332		1, 901, 451			195, 028	2, 096, 479	5. 05		1839
40, 139				40, 139		1, 978, 425			202, 339	2, 180, 764	4. 02		1840
37, 028				37, 028		1, 955, 656			175, 088	2, 130, 744	- 2. 30		1841
32, 363				32, 363		1, 862, 643			229, 751	2, 092, 391	- 1. 80		1842
34, 270				34, 270		1, 921, 736			236, 867	2, 158, 603	3. 16		1843
37, 793				37, 793		2, 007, 916			272, 180	2, 280, 096	5. 63		1844
39, 486				39, 486		2, 070, 983			326, 019	2, 417, 002	6		1845
32, 508				32, 508		2, 214, 192			347, 893	2, 562, 085	6		1846
43, 481				43, 481		2, 434, 205			404, 841	2, 839, 046	10. 81		1847
45, 523				45, 523		2, 726, 151			427, 891	3, 154, 042	11. 09		1848
46, 839				46, 839		2, 871, 621			462, 395	3, 334, 016	5. 71		1849

<sup>f</sup> Joseph Nourse, Register of the Treasury, under date of Feb. 1, 1812, stated: "As there were not any accounts kept at the Treasury of the district tonnage of the United States prior to the operation of the acts of Dec. 31, 1792, and Feb. 18, 1793, the statement in which is exhibited the tonnage for the years 1789, 1790, 1791, and 1792 has been formed from the accounts of tonnage on which duties were collected for those years."

## No. 10.—DOCUMENTED SAILING AND STEAM TONNAGE CONSTITUTING THE

Year ended—	Registered vessels.						Enrolled vessels.					
	Sailing.		Steam. <sup>a</sup>		Total.		Sailing.		Steam. <sup>a</sup>		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
June 30, 1850.	1,543	769	44	942	1,585	711	1,418	550	481	005	1,809	555
1851.	1,663	917	62	390	1,726	307	1,471	116	521	217	1,992	333
1852.	1,819	744	79	704	1,899	448	1,619	691	563	536	2,183	227
1853.	2,013	154	90	520	2,103	674	1,728	524	514	098	2,242	622
1854.	2,238	783	95	036	2,333	819	1,299	564	581	571	2,411	135
1855.	2,420	091	115	045	2,535	136	1,960	491	655	240	2,615	731
1856.	2,401	688	89	715	2,491	403	1,754	524	583	362	2,337	886
1857.	2,337	095	86	573	2,463	968	1,814	459	618	911	2,433	370
1858.	2,421	715	78	027	2,499	742	1,850	723	651	363	2,502	086
1859.	2,414	654	92	748	2,507	402	1,910	962	676	005	2,586	967
1860.	2,448	941	97	296	2,546	237	1,982	297	770	641	2,752	938
1861.	2,540	020	102	608	2,642	628	2,064	803	774	596	2,839	399
1862.	2,177	283	113	998	2,291	251	2,175	540	596	465	2,772	005
1863.	1,892	899	133	215	2,026	114	2,633	889	442	304	3,076	193
1864.	1,459	888	122	006	1,581	894	2,496	517	855	954	3,352	471
1865.	1,504	575	98	008	1,602	583	2,484	962	969	131	3,454	093
1866.	1,294	637	198	289	1,492	926	1,893	314	885	223	2,778	537
1867.	1,369	917	198	115	1,563	032	1,701	593	993	765	2,695	358
1868.	3,181	1,343	793	235	221,939	3,416	1,565	732	17,233	1,758	025	3,205
1869.	3,054	1,353	170	227	213	252	3,281	1,566	422	16,633	1,638	692
									3,099		887	401
1870.	2,742	1,324	256	200	192	544	2,942	1,516	800	18,431	1,798	418
1871.	2,545	1,244	228	176	180	914	2,721	1,425	142	19,229	1,901	731
1872.	2,516	1,232	982	183	177	666	2,599	1,410	648	20,204	2,041	347
1873.	2,553	1,229	863	206	193	423	2,750	1,423	288	21,426	2,257	498
1874.	2,553	1,233	678	193	195	245	2,723	1,428	923	20,864	2,326	577
1875.	2,769	1,362	133	212	191	689	2,981	1,553	827	20,297	2,266	584
1876.	2,821	1,304	594	188	198	227	3,009	1,592	821	18,735	1,656	504
1877.	2,807	1,421	960	181	190	133	2,988	1,611	193	12,961	1,592	834
1878.	2,866	1,458	209	173	170	838	3,037	1,629	047	12,635	1,528	979
1879.	2,549	1,335	211	168	166	323	2,717	1,491	534	1,654	1,598	792
									3,840		1,012	810
1880.	2,246	1,206	206	132	146	604	2,378	1,352	810	12,331	1,509	766
1881.	2,191	1,182	817	135	152	769	2,326	1,333	586	11,590	1,551	244
1882.	2,051	1,137	725	134	154	570	2,185	1,292	265	11,611	1,612	837
1883.	2,006	1,130	190	168	171	905	2,174	1,302	095	11,432	1,630	834
1884.	1,939	1,120	932	188	184	182	2,127	1,304	221	11,218	1,628	196
1885.	1,937	1,101	593	182	186	406	2,119	1,287	999	11,050	1,605	578
1886.	1,584	934	546	185	176	633	1,769	1,111	179	10,866	1,611	184
1887.	1,436	841	992	185	173	571	1,621	1,015	563	10,508	1,659	891
1888.	1,330	760	386	200	183	398	1,530	943	784	10,531	1,72	923
1889.	1,462	827	124	219	194	471	1,681	1,021	595	10,409	1,651	437
									4,744		1,550	441
1890.	1,294	749	965	233	197	630	1,527	946	695	10,320	1,752	241
1891.	1,316	765	955	271	239	995	1,587	1,005	645	10,358	1,837	810
1892.	1,270	765	776	254	228	899	1,532	994	675	10,391	1,857	522
1893.	1,094	638	700	249	261	103	1,343	899	803	10,404	1,904	855
1894.	1,104	650	898	246	266	911	1,350	916	180	9,473	1,776	243
1895.	1,021	586	142	239	252	045	1,260	838	187	9,206	1,768	900
1896.	1,013	580	072	244	264	882	1,257	844	954	8,753	1,744	351
1897.	983	547	110	247	258	474	1,230	805	584	8,505	1,791	067
1898.	824	443	645	312	294	664	1,136	737	709	8,517	1,864	380
1899.	964	488	216	367	360	030	1,331	848	246	8,274	1,830	477
									5,232		2,090	821
1900.	992	485	352	338	341	342	1,330	826	694	8,415	1,949	744
1901.	972	459	407	355	429	722	1,327	889	129	8,629	0,701	415
1902.	885	423	730	341	458	825	1,226	882	555	8,522	1,222	923
1903.	816	361	366	357	527	410	1,170	888	776	8,474	2,243	661
1904.	856	344	612	348	554	155	1,204	898	763	8,347	2,278	861
1905.	992	353	333	380	601	180	1,372	954	513	8,136	2,291	539
1906.	1,032	348	201	406	591	255	1,441	939	486	8,090	2,283	706
1907.	992	269	021	442	602	125	1,434	871	146	7,931	2,327	020
1908.	1,113	341	331	478	598	737	1,591	940	068	7,755	2,252	644
1909.	1,135	308	979	498	578	526	1,633	887	505	7,654	2,273	987
									4,418		1,107	066
1910.	1,029	234	848	497	556	977	1,526	791	825	7,482	2,321	207
1911.	1,145	286	941	558	585	730	1,703	872	671	7,179	2,230	215
1912.	1,311	312	395	701	619	706	2,012	932	101	6,910	2,177	485
1913.	1,478	356	628	827	671	148	2,305	1,027	776	6,786	2,153	144
1914.	1,521	351	278	884	724	874	2,405	1,076	776	6,520	2,112	933
1915.	1,687	521	697	1107	1,349	846	2,704	1,871	543	6,021	1,889	674
1916.	1,810	592	054	1324	1,599	661	3,134	2,191	715	5,762	1,775	665
									7,203		4,371	381

<sup>a</sup> Includes gasoline vessels since 1897.

For a separate report of canal boats and barges, see Statement No. 10A.

## TOTAL MERCHANT MARINE OF THE UNITED STATES, 1789-1916—Continued.

Licensed vessels under 20 tons.										Total merchant marine.						Annual increase or de- crease (-).	Year.			
Sailing.		Steam. <sup>a</sup>		Total.		Sailing.		Steam. <sup>a</sup>		Total.										
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	Per ct.								
50,188	50,188	53,799	53,799	55,765	55,765	60,714	60,714	57,948	57,948	61,134	61,134	50,188	3,099,507	525,947	3,535,454	6.04	1850			
53,799	53,799	55,765	55,765	60,714	60,714	57,948	57,948	4,126,295	4,126,295	42,364	42,364	53,799	3,188,832	583,607	3,772,439	6.70	1851			
55,765	55,765	60,714	60,714	57,948	57,948	40,106	40,106	4,235,059	4,235,059	43,505	43,505	55,765	3,495,200	643,240	4,138,440	9.70	1852			
60,714	60,714	57,948	57,948	40,106	40,106	39,315	39,315	4,320,418	4,320,418	47,980	47,980	57,948	4,441,716	604,618	4,407,010	6.49	1853			
57,948	57,948	40,106	40,106	39,315	39,315	41,097	41,097	4,376,285	4,376,285	50,669	50,669	57,948	4,198,576	676,607	4,802,902	8.96	1854			
61,134	61,134	42,364	42,364	41,097	41,097	50,669	50,669	4,376,285	4,376,285	50,669	50,669	61,134	4,441,716	770,285	5,212,001	8.52	1855			
42,364	42,364	43,505	43,505	50,669	50,669	54,693	54,693	4,485,931	4,485,931	47,980	47,980	42,364	4,198,576	673,077	4,871,653	— 6.53	1856			
43,505	43,505	47,980	47,980	50,669	50,669	54,693	54,693	4,485,931	4,485,931	50,669	50,669	47,980	4,235,059	705,784	4,940,843	1.42	1857			
47,980	47,980	50,669	50,669	54,693	54,693	54,693	54,693	4,485,931	4,485,931	50,669	50,669	54,693	4,320,418	729,390	5,049,808	2.20	1858			
50,669	50,669	54,693	54,693	54,693	54,693	54,693	54,693	4,485,931	4,485,931	50,669	50,669	54,693	4,376,285	768,753	5,145,038	1.90	1859			
54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693	4,485,931	4,485,931	54,693	54,693	54,693	4,485,931	867,937	5,353,888	4.06	1860			
57,786	57,786	57,786	57,786	57,786	57,786	57,786	57,786	4,662,609	4,662,609	57,786	57,786	57,786	4,662,609	877,204	5,539,813	3.47	1861			
48,908	48,908	52,749	52,749	52,035	52,035	40,106	40,106	4,008,440	4,008,440	40,106	40,106	48,908	4,401,701	710,463	5,112,164	— 7.72	1862			
52,749	52,749	52,035	52,035	40,106	40,106	40,106	40,106	4,008,440	4,008,440	40,106	40,106	52,749	4,357,537	575,519	5,155,056	.84	1863			
52,035	52,035	40,106	40,106	40,106	40,106	40,106	40,106	4,008,440	4,008,440	40,106	40,106	52,035	4,029,643	1,067,139	4,986,400	— 3.27	1864			
40,106	40,106	39,315	39,315	39,315	39,315	39,315	39,315	3,227,206	3,227,206	39,315	39,315	40,106	3,157,206	1,083,512	4,310,778	— 15.42	1866			
39,315	39,315	39,315	39,315	39,315	39,315	39,315	39,315	3,227,206	3,227,206	39,315	39,315	39,315	3,227,206	1,191,880	4,304,457	— 14	1867			
41,097	41,097	41,097	41,097	41,097	41,097	41,097	41,097	3,112,607	3,112,607	41,097	41,097	41,097	3,112,607	1,191,880	4,351,759	1.10	1868			
4,134	50,526	179	2,334	4,313	52,860	24,548	3,152	344	3,619	1,191	415,28,167	1,191	415,28,167	1,191	568,27,487	4,144,641	— 4.76	1869		
4,254	50,526	179	2,334	4,313	52,860	24,548	3,152	344	3,619	1,041	3,073,429	1,041	3,073,429	1,041	3,566,429	1,191	568,27,487	4,144,641	— 4.76	1869
4,301	48,738	230	3,029	4,531	51,767	25,474	3,171	412	3,524	1,075	9,095,28,998	1,075	9,095,28,998	1,075	10,246,507	2,41	1870			
4,310	49,011	210	3,180	4,550	52,191	26,084	3,194	170	3,567	1,087	6,377,24,651	1,087	6,377,24,651	1,087	6,282,607	.85	1871			
4,641	51,865	297	3,925	4,938	55,792	27,361	3,326	194	3,753	1,111	553,31,114	1,111	553,31,114	1,111	4,437,747	3.62	1872			
4,678	52,221	351	4,603	5,029	56,824	28,657	3,539	579	4,015	1,155	443,27,672	1,155	443,27,672	1,155	4,696,027	5.82	1873			
4,901	54,787	311	4,796	5,270	59,583	28,300	6,161	042	4,186	1,185	610,22,486	1,185	610,22,486	1,185	4,800,652	2.23	1874			
4,984	56,342	407	5,173	5,391	61,515	28,050	3,685	064	4,235	1,185	668,32,285	1,185	668,32,285	1,185	4,853,732	1.10	1875			
5,058	55,988	458	5,845	5,517	61,833	21,614	3,107	086	4,320	1,172	372,25,934	1,172	372,25,934	1,172	4,279,458	— 11.83	1876			
5,223	57,509	482	6,031	5,705	63,540	20,991	3,071	043	4,395	1,171	197,25,386	1,171	197,25,386	1,171	4,242,600	.86	1877			
5,293	57,899	519	6,458	5,812	64,357	20,792	3,045	087	4,472	1,167	678,25,264	1,167	678,25,264	1,167	4,212,765	.70	1878			
5,439	59,426	561	6,000	6,000	64,645	20,642	2,993	429	4,569	1,176	172,25,211	1,176	172,25,211	1,176	4,169,601	— 1.02	1879			
5,418	59,504	506	6,367	5,924	65,871	19,995	2,856	476	4,717	1,211	558,24,712	1,211	558,24,712	1,211	4,068,034	— 2.43	1880			
5,424	58,673	498	6,274	5,922	64,947	19,205	2,792	736	4,860	1,264	98,24,065	1,264	98,24,065	1,264	4,057,734	— 2.25	1881			
5,516	59,545	541	6,873	6,057	66,416	18,177	2,521	10,10	5,191	1,355	826,24,368	1,355	826,24,368	1,355	4,165,933	2.66	1882			
5,530	61,272	722	13,550	6,252	72,822	18,965	3,822	522	5,293	1,413	194,24,217	1,413	194,24,217	1,413	4,235,487	1.67	1883			
5,524	62,091	918	18,389	6,443	80,480	18,581	2,405	352	5,401	1,465	906,24,052	1,465	906,24,052	1,465	4,271,229	.84	1884			
5,577	62,846	872	18,516	6,449	81,362	18,564	2,717	017	5,399	1,494	917,23,963	1,494	917,23,963	1,494	4,265,934	.12	1885			
5,617	62,425	865	18,769	6,482	81,194	18,067	2,608	512	5,467	1,522	984,23,534	1,522	984,23,534	1,522	4,131,136	— 3.16	1886			
5,638	62,055	900	19,463	6,538	81,518	17,582	2,563	128	5,481	1,542	717,23,063	1,542	717,23,063	1,542	4,105,845	— .61	1887			
5,726	62,536	929	20,238	6,655	82,774	17,587	2,543	846	5,694	1,648	703,23,281	1,648	703,23,281	1,648	4,191,916	2.10	1888			
5,828	63,364	961	21,035	6,789	84,399	17,696	2,541	924	5,924	1,765	551,23,623	1,765	551,23,623	1,765	4,307,475	2.75	1889			
5,888	64,103	989	21,815	6,877	85,918	17,502	2,565	409	5,965	1,859	985,23,467	1,859	985,23,467	1,859	4,467,497	2.71	1890			
6,009	64,730	1,041	22,852	7,050	87,582	17,683	2,686	495	6,216	2,016	264,23,899	2,016	264,23,899	2,016	4,684,759	5.88	1891			
6,322	67,206	1,068	23,521	7,390	90,727	17,991	2,600	504	6,392	2,074	417,24,383	2,074	417,24,383	2,074	4,764,921	1.71	1892			
6,439	68,244	1,096	24,191	7,549	92,435	17,951	2,641	799	6,561	2,183	272,24,512	2,183	272,24,512	2,183	4,825,071	1.26	1893			
6,483	68,267	1,108	24,366	7,591	92,633	17,060	2,494	599	6,526	2,189	430,23,586	2,189	430,23,586	2,189	4,684,029	— 2.90	1894			
6,459	68,117	1,113	24,552	7,572	92,669	16,686	2,423	159	6,554	2,212	801,23,240	2,212	801,23,240	2,212	4,685,960	— 1.03	1895			
6,547	72,249	1,105	24,177	7,652	96,426	16,313	2,396	672	6,595	2,307	205,22,908	2,307	205,22,908	2,307	4,703,880	1.47	1896			
6,546	72,285	1,135	24,615	7,681	96,900	16,034	2,410	462	6,599	2,358	558,22,633	2,358	558,22,633	2,358	4,769,020	1.38	1897			
6,652	69,790	1,192	24,649	7,844	94,439	15,993	2,377	815	6,712	2,371	923,22,705	2,371	923,22,705	2,371	4,749,738	— .40	1898			
6,653	69,534	1,238	25,160	7,891	94,694	15,891	2,388	227	6,837	2,476	811,22,728	2,476	811,22,728	2,476	4,864,238	2.41	1899			
6,873	71,946	1,344	26,630	8,217	98,576	16,280	2,507	042	7,052	2,657	797,23,333	2,657	797,23,333	2,657	5,164,839	6.18	1900			
7,042	73,447	1,517	24,147	8,559	102,594	16,643	2,603	2,741	7,290	2,955	24,057	2,955	24,057	5,524,218	6.96	1901				
7,129	74,375	1,693	31,277	8,382	102,652	16,542	2,621	2,028	7,727	3,176	874,24,273	3,176	874,24,273	3,176	4,797,902	4.95	1902			
7,084	74,230	1,936	33,843	9,020	102,073	16,371	2,679	257	8,054	3,408	988,24,425	3,408	988,24,425	3,408	4,087,345	4.99	1903			
6,892	72,644	2,195	36,334	9,087	108,728	16,095	2,696	117	8,463	3,595	418,24,558	3,595	418,24,558	3,595	4,291,535	3.35	1904			
6,656	70,177	2,527	40,051	9,183	110,228	15,784	2,715	049	8,897	3,741	494,24,681	3,741	494,24,681	3						

## No. 10A.—NUMBER AND GROSS TONNAGE OF CANAL BOATS AND BARGES DOCUMENTED IN THE UNITED STATES, IN SPECIFIED YEARS, 1868-1917.

[These vessels are included in Statement No. 10.]

Year ended June 30—	Canal boats.		Barges.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1868.....	4,847	430,672	1,463	213,156	6,310	643,828
1869.....	4,678	420,143	1,423	220,958	6,101	641,101
1870.....	6,410	567,915	1,530	240,411	7,940	808,326
1871.....	7,314	648,471	1,472	260,343	8,786	908,814
1872.....	8,085	704,713	1,621	296,106	7,706	1,000,819
1873.....	8,970	820,328	1,738	335,455	10,708	1,155,783
1874 <sup>a</sup> .....	8,245	751,612	1,908	389,714	10,153	1,141,326
1875.....	7,808	709,996	1,888	390,158	9,696	1,100,154
1876.....	1,581	117,708	1,776	380,686	3,357	498,394
1877.....	996	81,394	1,914	409,620	2,910	491,014
1878.....	1,071	88,691	2,198	435,076	3,269	523,767
1879.....	1,206	103,737	2,394	466,878	3,600	570,615
1880 <sup>b</sup> .....	1,235	106,590	1,930	383,629	3,165	490,219
1885.....	1,027	97,681	1,005	299,451	2,032	397,132
1890.....	1,097	114,953	1,241	341,042	2,338	455,995
1895.....	680	75,051	1,363	382,632	2,043	457,683
1896.....	682	75,225	1,357	393,188	2,039	468,413
1897.....	650	73,786	1,480	432,523	2,130	506,309
1898.....	660	74,640	1,667	467,348	2,327	541,988
1899.....	629	71,101	1,962	491,808	2,591	562,909
1900.....	647	73,333	2,362	548,817	3,009	622,200
1901.....	735	83,068	2,677	586,840	3,412	669,908
1902.....	703	79,408	2,770	599,742	3,473	679,150
1903.....	695	78,406	2,840	634,927	3,535	713,333
1904.....	692	77,553	2,917	673,578	3,609	751,161
1905.....	643	71,953	3,022	681,512	3,665	753,465
1906.....	717	80,137	3,171	720,911	3,888	801,048
1907.....	731	81,773	3,264	763,209	3,995	844,982
1908.....	746	82,469	3,453	810,732	4,199	893,201
1909.....	745	80,951	3,590	847,504	4,335	928,455
1910.....	674	74,068	3,667	878,180	4,341	952,248
1911.....	659	72,370	3,821	894,528	4,480	966,998
1912.....	665	72,567	4,016	922,911	4,681	995,478
1913.....	698	76,619	4,245	969,022	4,943	1,045,641
1914.....	700	76,454	4,293	992,168	4,993	1,068,622
1915.....	560	61,970	4,327	999,166	4,887	1,061,145
1916.....	555	61,639	4,446	1,027,010	5,001	1,088,649
1917.....	532	59,740	4,669	1,099,472	5,201	1,159,212

<sup>a</sup> See act Apr. 18, 1874.<sup>b</sup> See act June 30, 1879.

No. 10B.—NUMBER AND GROSS TONNAGE OF SAILING VESSELS, STEAM VESSELS, CANAL BOATS, AND BARGES DOCUMENTED ON THE NORTHERN LAKES, IN SPECIFIED YEARS, 1868–1917.

[These vessels are included in Statement No. 10.]

Year.	Sailing.		Steam. <sup>a</sup>		Canal boats.		Barges.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1868.....	1,555	293,978	624	144,117	2,822	241,553	64	15,956	5,365	695,604
1869.....	1,752	277,893	636	146,236	2,384	215,165	103	22,072	4,875	661,366
1870.....	1,699	284,609	642	142,973	2,894	249,553	114	27,569	5,349	684,704
1871.....	1,662	267,154	682	149,467	3,037	264,198	132	31,208	5,513	712,027
1872.....	1,654	270,051	708	162,523	2,814	254,056	161	37,863	5,337	724,493
1873.....	1,663	298,002	802	180,250	2,934	267,601	177	42,559	5,576	788,412
1874.....	1,696	336,802	876	198,121	2,812	261,135	216	46,323	5,600	842,381
1875.....	1,710	339,787	891	202,307	2,702	250,657	193	45,140	5,496	837,891
1876.....	1,643	331,498	921	201,742	441	34,386	188	45,555	3,193	613,211
1877.....	1,604	324,394	923	201,085	472	37,474	192	47,207	3,191	610,160
1878.....	1,546	315,908	618	201,550	519	41,902	183	45,296	3,166	604,656
1879.....	1,473	307,078	896	203,298	548	44,774	170	42,226	3,087	597,376
1880.....	1,459	304,933	931	212,045	572	47,159	165	40,965	3,127	605,102
1885.....	1,322	313,129	1,175	355,859	771	70,150	111	30,810	3,379	749,948
1890.....	1,272	328,656	1,527	652,923	657	67,574	54	13,910	3,510	1,063,063
1895.....	1,100	300,642	1,755	857,735	406	44,074	81	39,008	3,342	1,241,459
1896.....	1,044	309,152	1,792	924,631	416	45,109	81	45,175	3,333	1,324,067
1897.....	993	334,104	1,775	977,235	361	37,978	101	60,755	3,230	1,410,102
1898.....	960	333,704	1,764	993,644	384	40,456	148	69,696	3,256	1,437,500
1899.....	874	318,175	1,732	1,014,561	366	38,630	190	74,982	3,162	1,446,348
1900.....	832	335,183	1,731	1,110,565	392	41,430	204	78,409	3,167	1,565,587
1901.....	784	332,289	1,778	1,243,500	476	50,362	215	80,143	3,253	1,706,294
1902.....	726	318,032	1,795	1,377,872	454	47,888	197	72,719	3,172	1,816,511
1903.....	676	315,195	1,796	1,467,992	453	47,750	185	71,761	3,110	1,902,698
1904.....	623	308,820	1,820	1,592,270	451	47,160	181	70,958	3,075	2,019,208
1905.....	583	301,115	1,820	1,647,793	418	43,775	190	69,464	3,011	2,062,147
1906.....	519	269,136	1,844	1,841,438	480	50,599	209	73,259	3,052	2,234,432
1907.....	466	256,104	1,873	2,044,553	529	55,889	235	83,195	3,103	2,439,741
1908.....	429	248,752	1,942	2,341,686	546	57,609	255	81,122	3,172	2,729,169
1909.....	389	238,491	1,982	2,399,925	557	58,753	271	85,312	3,199	2,782,481
1910.....	362	236,656	2,107	2,508,469	480	50,912	324	99,065	3,273	2,895,102
1911.....	324	228,519	2,174	2,564,060	449	48,065	339	102,879	3,286	2,943,523
1912.....	303	225,114	2,269	2,575,914	451	48,208	344	100,688	3,367	2,949,924
1913.....	272	210,401	2,333	2,568,983	472	51,048	370	109,354	3,447	2,939,786
1914.....	241	198,531	2,339	2,523,517	448	48,397	378	112,447	3,046	2,882,892
1915.....	220	190,928	2,348	2,487,945	208	22,729	385	116,407	3,161	2,818,009
1916.....	191	182,225	2,335	2,444,518	141	15,644	384	118,428	3,051	2,760,815
1917.....	165	172,836	2,309	2,471,727	127	14,172	400	120,352	3,001	2,779,087

<sup>a</sup> Includes gasoline vessels since 1897.

No. 16.—DOCUMENTED TONNAGE OF THE UNITED STATES MERCHANT MARINE  
1789—

Year ended—	Foreign trade.		Coasting trade.				Whale fisheries.	
	Registered vessels.		Enrolled vessels.	Licensed vessels under 20 tons.	Total.		Registered vessels.	
	No.	Tons.			No.	Tons.		
Dec. 31, 1789.	123, 893	68, 607	68, 607	7, 218	122, 071	272, 492	2, 814	2, 814
1790.	346, 254	103, 775	103, 775	106, 494	106, 494	274, 551	2, 349	2, 349
1791.	363, 110	106, 494	106, 494	120, 957	120, 957	289, 623	2, 621	2, 621
1792.	411, 438	114, 853	114, 853	145, 601	16, 977	162, 578	184, 398	184, 398
1793.	367, 734	145, 601	145, 601	164, 796	19, 602	217, 841	22, 417	22, 417
1794.	438, 863	164, 796	164, 796	195, 424	24, 326	237, 403	24, 099	24, 099
1795.	529, 471	214, 077	214, 077	227, 344	24, 099	251, 443	25, 736	25, 736
1796.	576, 733	227, 344	227, 344	220, 904	25, 736	246, 640	26, 602	26, 602
1797.	597, 777	220, 904	220, 904	25, 736	25, 736	246, 640	25, 055	25, 055
1798.	603, 376	345, 295	345, 295	309, 977	31, 297	332, 663	27, 197	27, 197
1799.	657, 142	246, 255	246, 255	318, 190	30, 563	340, 540	28, 908	28, 908
1800.	667, 107	260, 543	260, 543	318, 190	30, 563	349, 028	29, 080	29, 080
1801.	a 630, 558	268, 676	268, 676	387, 684	33, 135	420, 819	30, 602	30, 602
1802.	a 557, 760	286, 840	286, 840	371, 501	33, 662	405, 163	31, 297	31, 297
1803.	585, 910	301, 366	301, 366	371, 114	34, 233	405, 347	32, 197	32, 197
1804.	660, 514	309, 977	309, 977	386, 259	34, 103	420, 362	34, 233	34, 233
1805.	744, 224	318, 190	318, 190	443, 181	34, 791	477, 972	35, 060	35, 060
1806.	798, 507	318, 190	318, 190	443, 405	37, 704	471, 109	35, 662	35, 662
1807.	840, 163	387, 684	387, 684	425, 714	40, 445	466, 159	37, 221	37, 221
1808.	765, 252	418, 458	418, 458	435, 067	40, 599	475, 666	38, 135	38, 135
1809.	906, 855	481, 458	481, 458	480, 760	42, 186	522, 165	40, 602	40, 602
1810.	981, 019	503, 140	503, 140	480, 760	43, 572	525, 030	42, 233	42, 233
1811.	a 763, 607	486, 233	486, 233	503, 140	46, 234	549, 374	44, 107	44, 107
1812.	758, 636	523, 556	523, 556	503, 140	47, 502	571, 058	45, 060	45, 060
1813.	672, 700	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1814.	674, 633	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1815.	824, 295	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1816.	800, 760	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1817.	804, 851	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1818.	b 589, 944	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1819.	581, 230	523, 556	523, 556	523, 556	47, 502	571, 058	45, 060	45, 060
1820.	583, 657	539, 080	539, 080	539, 080	48, 945	558, 025	35, 391	35, 391
1821.	593, 825	559, 436	559, 436	559, 436	55, 409	614, 845	26, 071	26, 071
1822.	582, 701	573, 080	573, 080	573, 080	51, 109	624, 189	45, 449	45, 449
1823.	600, 003	566, 409	566, 409	566, 409	51, 396	617, 805	39, 918	39, 918
1824.	638, 807	589, 223	589, 223	589, 223	52, 340	641, 563	33, 166	33, 166
1825.	665, 409	587, 273	587, 273	587, 273	53, 588	640, 861	35, 379	35, 379
1826.	696, 221	666, 420	666, 420	666, 420	55, 910	722, 330	41, 757	41, 757
1827.	701, 517	732, 938	732, 938	732, 938	56, 221	789, 159	45, 653	45, 653
1828.	757, 998	787, 226	787, 226	787, 226	55, 680	842, 906	54, 621	54, 621
1829.	b 592, 859	490, 468	490, 468	490, 468	18, 390	508, 858	57, 284	57, 284
Sept. 30, 1833 (9 mos.)	b 537, 553	496, 640	496, 640	20, 339	516, 979	38, 912	38, 912	38, 912
1831.	538, 136	516, 086	516, 086	23, 638	539, 724	82, 316	82, 316	82, 316
1832.	614, 121	624, 159	624, 159	25, 468	649, 627	72, 869	72, 869	72, 869
1833.	648, 869	717, 423	717, 423	26, 776	744, 199	101, 158	101, 158	101, 158
1834.	749, 378	755, 463	755, 463	28, 156	783, 619	108, 060	108, 060	108, 060
1835.	788, 173	769, 795	769, 795	27, 543	797, 338	97, 649	97, 649	97, 649
1836.	753, 094	846, 116	846, 116	26, 907	873, 023	144, 681	144, 681	144, 681
1837.	683, 205	927, 250	927, 250	29, 731	956, 981	127, 242	127, 242	127, 242
1838.	702, 962	1, 008, 146	1, 008, 146	32, 959	1, 041, 105	119, 630	131, 845	131, 845
1839.	702, 400	1, 120, 311	1, 120, 311	33, 241	1, 153, 552	131, 845	131, 845	131, 845
1840.	762, 838	1, 144, 664	1, 144, 664	32, 030	1, 176, 694	136, 927	136, 927	136, 927
1841.	788, 398	1, 076, 036	1, 076, 036	31, 032	1, 107, 068	157, 405	157, 405	157, 405
1842.	832, 746	1, 018, 253	1, 018, 253	27, 500	1, 045, 753	151, 613	151, 613	151, 613
June 30, 1843 (9 mos.)	856, 930	1, 048, 209	1, 048, 209	27, 947	1, 076, 156	152, 375	152, 375	152, 375
1844.	900, 471	1, 078, 868	1, 078, 868	30, 747	1, 109, 615	168, 294	168, 294	168, 294
1845.	904, 476	1, 190, 898	1, 190, 898	32, 320	1, 223, 218	190, 696	190, 696	190, 696
1846.	943, 307	1, 289, 871	1, 289, 871	25, 706	1, 315, 577	186, 980	186, 980	186, 980
1847.	1, 047, 454	1, 452, 623	1, 452, 623	35, 978	1, 488, 601	193, 859	193, 859	193, 859
1848.	1, 168, 707	1, 620, 988	1, 620, 988	38, 329	1, 659, 317	192, 180	192, 180	192, 180
1849.	1, 258, 756	1, 731, 411	1, 731, 411	38, 965	1, 770, 376	180, 186	180, 186	180, 186

<sup>a</sup> The decrease of registered tonnage for the years 1801, 1802, and 1811 is due largely, if not entirely, to clerical corrections. (American State Papers, Commerce and Navigation 1801-2, vol. 1, pp. 494-499, 528-546.)

<sup>b</sup> The decrease of tonnage in the years 1818, 1829, and 1833 arises principally from the registered tonnage, having been corrected by striking off all vessels the registers of which were granted prior to 1815, which were supposed by the collectors to have been lost at sea, captured, etc.—Joseph Nourse, Register of the Treasury (American State Papers, Vol. II, p. 648), and Pitkin (Commerce of the United States, edition 1835, p. 351).

## EMPLOYED IN THE FOREIGN TRADE, THE COASTING TRADE, AND THE FISHERIES, 1916.

Whale fisheries.			Cod and mackerel fisheries.						Total merchant marine.		Year.
Enrolled vessels.	Total.		Enrolled vessels.	Licensed vessels under 20 tons.		Total.		No.	Tons.		
Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
4,129	4,129	9,062	28,348	28,348	28,348	9,062	201,562	201,562	c 1789		
3,163	3,163	32,542	32,542	32,542	32,542	502,146	478,377	478,377	c 1790		
2,364	2,364	32,062	32,062	32,062	32,062	564,457	520,764	520,764	c 1791		
1,104	1,104	28,974	28,974	1,985	30,959	564,457	628,618	628,618	c 1792		
763	763	17,498	17,498	5,550	23,048	564,457	747,965	747,965	c 1793		
592	5,647	24,887	24,887	6,046	30,933	502,146	831,900	831,900	c 1794		
4,129	4,129	28,509	28,509	6,453	34,962	502,146	876,912	876,912	c 1795		
3,163	3,163	33,406	33,406	7,222	40,628	502,146	889,328	889,328	c 1796		
2,364	2,364	35,477	35,477	7,269	42,746	502,146	939,408	939,408	c 1797		
1,104	1,104	23,933	23,933	6,046	29,979	502,146	1,042,404	1,042,404	c 1798		
763	763	22,307	22,307	7,120	29,427	502,146	972,492	972,492	c 1799		
592	5,647	31,280	31,280	8,102	39,382	502,146	947,576	947,576	c 1800		
652	3,466	32,988	32,988	8,534	41,522	502,146	892,106	892,106	c 1801		
736	3,085	43,416	43,416	8,396	51,812	502,146	949,172	949,172	c 1802		
580	3,201	43,088	43,088	8,926	52,014	502,146	1,042,404	1,042,404	c 1803		
1,143	12,390	48,479	48,479	8,986	57,465	502,146	1,140,367	1,140,367	c 1804		
323	12,339	50,353	50,353	8,830	59,183	502,146	1,208,737	1,208,737	c 1805		
898	6,015	60,690	60,690	9,616	70,306	502,146	1,268,548	1,268,548	c 1806		
729	10,507	43,598	43,598	8,400	51,998	502,146	1,242,595	1,242,595	c 1807		
907	9,051	26,110	26,110	8,377	34,487	502,146	1,350,282	1,350,282	c 1808		
573	3,777	33,589	26,251	8,577	34,828	502,146	1,424,783	1,424,783	c 1809		
339	5,299	34,361	8,873	43,234	1,232,502	502,146	1,232,502	1,232,502	c 1810		
54	2,930	21,822	8,637	30,459	1,209,997	502,146	1,209,997	1,209,997	c 1811		
789	2,942	11,255	8,622	19,877	1,166,628	502,146	1,166,628	1,166,628	c 1812		
562	562	8,863	8,992	17,855	1,159,209	502,146	1,159,209	1,159,209	c 1813		
1,230	1,230	26,510	10,427	36,937	1,368,128	502,146	1,368,128	1,368,128	c 1814		
1,168	1,168	37,879	10,247	48,126	1,372,219	502,146	1,372,219	1,372,219	c 1815		
350	5,224	53,990	10,817	64,807	1,399,912	502,146	1,399,912	1,399,912	c 1816		
615	16,750	58,552	10,555	69,107	1,225,185	502,146	1,225,185	1,225,185	c 1817		
686	32,386	65,045	11,033	76,078	1,260,752	502,146	1,260,752	1,260,752	c 1818		
1,054	36,445	60,843	11,197	72,040	1,280,167	502,146	1,280,167	1,280,167	c 1819		
1,924	27,995	51,352	10,941	62,293	1,298,958	502,146	1,298,958	1,298,958	c 1820		
3,134	48,583	58,405	10,821	69,226	1,324,699	502,146	1,324,699	1,324,699	c 1821		
585	40,503	67,041	11,214	78,255	1,336,566	502,146	1,336,566	1,336,566	c 1822		
180	33,346	68,239	9,208	77,447	1,389,163	502,146	1,389,163	1,389,163	c 1823		
33	35,379	70,626	10,836	81,462	1,423,111	502,146	1,423,111	1,423,111	c 1824		
227	41,984	63,535	10,121	73,656	1,534,191	502,146	1,534,191	1,534,191	c 1825		
339	45,992	73,709	10,230	83,939	1,620,607	502,146	1,620,607	1,620,607	c 1826		
180	54,801	74,765	10,922	85,687	1,741,392	502,146	1,741,392	1,741,392	c 1827		
57,284	97,889	3,908	101,797	101,797	1,260,798	502,146	1,260,798	1,260,798	c 1828		
793	39,705	94,014	3,515	97,529	1,191,776	502,146	1,191,776	1,191,776	c 1829		
481	82,797	103,450	3,739	107,189	1,267,846	502,146	1,267,846	1,267,846	c 1830		
377	73,246	99,153	3,303	102,456	1,439,450	502,146	1,439,450	1,439,450	c 1831		
478	101,636	107,295	4,152	111,447	1,606,151	502,146	1,606,151	1,606,151	c 1832		
364	108,424	113,555	3,931	117,486	1,758,907	502,146	1,758,907	1,758,907	c 1833		
97,649	136,817	4,964	141,781	1,824,941	502,146	1,824,941	1,824,941	1,824,941	c 1834		
1,573	146,254	104,838	4,893	109,731	1,882,102	502,146	1,882,102	1,882,102	c 1835		
1,895	129,137	121,866	5,497	127,363	1,896,686	502,146	1,896,686	1,896,686	c 1836		
5,230	124,860	120,623	6,090	126,713	1,995,640	502,146	1,995,640	1,995,640	c 1837		
440	132,285	101,151	7,091	108,242	2,096,479	502,146	2,096,479	2,096,479	c 1838		
136,927	96,196	8,109	104,305	2,180,764	502,146	2,180,764	2,180,764	2,180,764	c 1839		
157,405	71,877	5,996	77,783	2,130,744	502,146	2,130,744	2,130,744	2,130,744	c 1840		
377	151,990	66,039	4,863	70,902	2,092,391	502,146	2,092,391	2,092,391	c 1841		
142	152,517	66,677	6,323	73,000	2,158,603	502,146	2,158,603	2,158,603	c 1842		
320	163,614	94,350	7,046	101,396	2,280,096	502,146	2,280,096	2,280,096	c 1843		
207	190,903	91,240	7,165	98,405	2,417,002	502,146	2,417,002	2,417,002	c 1844		
440	187,420	108,979	6,802	115,781	2,562,085	502,146	2,562,085	2,562,085	c 1845		
193	193,859	101,629	7,503	109,132	2,839,046	502,146	2,839,046	2,839,046	c 1846		
433	192,613	126,210	7,195	133,405	3,154,042	502,146	3,154,042	3,154,042	c 1847		
180,186	116,824	7,874	124,698	3,334,016	502,146	3,334,016	3,334,016	3,334,016	c 1848		

e Joseph Nourse, Register of the Treasury, under date of Feb. 1, 1812, stated: "As there were not any accounts kept at the Treasury of the district tonnage of the United States prior to the operation of the acts of Dec. 31, 1792, and Feb. 18, 1793, the statement in which is exhibited the tonnage for the years 1789, 1790, 1791, and 1792 has been formed from the accounts of tonnage on which duties were collected for those years."

No. 16.—DOCUMENTED TONNAGE OF THE UNITED STATES MERCHANT MARINE  
1789-1916—

Year ended—	Foreign trade.				Coasting trade.				Whale fisheries.	
	Registered vessels.		Enrolled vessels.		Licensed vessels under 20 tons.		Total.		Registered vessels.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
June 30, 1850	1,439,694	1,755,797	42,028	1,797,825	146,017					
1851	1,544,663	1,854,318	45,658	1,899,976	181,644					
1852	1,705,650	2,008,022	47,551	2,055,873	193,798					
1853	1,910,471	2,082,782	51,476	2,134,258	193,203					
1854	2,151,918	2,273,900	48,214	2,322,114	181,901					
1855	2,348,358	2,491,108	52,147	2,543,255	186,778					
1856	2,302,190	2,211,935	35,728	2,247,663	189,213					
1857	2,268,196	2,300,399	36,210	2,336,609	195,772					
1858	2,301,148	2,361,596	39,624	2,401,220	193,594					
1859	2,321,674	2,439,320	41,609	2,489,929	185,728					
1860	2,379,396	2,599,319	45,548	2,644,867	166,841					
1861	2,496,894	2,657,293	47,251	2,704,544	145,734					
1862	2,173,537	2,578,546	38,170	2,616,716	117,714					
1863	1,926,886	2,918,614	42,019	2,960,633	99,228					
1864	1,486,749	3,204,227	41,038	3,245,265	95,145					
1865	1,518,350	3,353,657	27,365	3,381,522	84,233					
1866	1,387,756	2,689,152	30,469	2,719,621	105,170					
1867	1,515,648	2,627,151	33,239	2,660,390	52,384					
1868	3,067	1,487,246	18,971	2,658,404	3,500	43,736	22,531	2,702,140	349	78,486
1869	2,970	1,496,220	18,630	2,470,928	3,853	44,587	22,492	2,515,515	311	70,202
1870	2,643	1,448,846	19,964	2,595,328	3,800	42,919	23,764	2,638,247	299	67,954
1871	2,472	1,363,652	20,817	2,722,372	3,687	42,946	24,504	2,764,600	249	61,490
1872	2,482	1,359,040	21,991	2,883,906	4,039	45,646	26,030	2,929,552	217	51,608
1873	2,572	1,378,533	23,326	3,116,373	4,134	46,847	27,460	3,163,220	187	44,755
1874	2,566	1,359,815	23,258	3,243,656	4,401	49,783	27,659	3,293,439	162	39,108
1875	2,816	1,515,598	22,651	3,169,687	4,462	50,011	27,118	3,219,698	165	33,229
1876	2,838	1,553,705	16,025	2,547,490	4,589	51,345	20,614	2,598,835	171	39,116
1877	2,809	1,570,600	15,428	2,488,189	4,682	52,133	20,110	2,540,322	179	40,593
1878	2,855	1,539,248	15,082	2,444,804	4,710	52,369	19,792	2,497,170	182	39,700
1879	2,532	1,451,506	15,286	2,545,059	4,763	53,123	20,049	2,598,182	185	40,028
1880	2,204	1,314,402	15,233	2,584,418	4,748	53,268	20,011	2,637,686	174	38,408
1881	2,153	1,297,035	14,602	2,590,836	5,017	55,175	19,619	2,646,011	173	38,551
1882	2,039	1,259,492	15,007	2,740,206	5,086	55,570	20,093	2,795,776	146	32,802
1883	2,033	1,269,681	14,546	2,774,248	5,248	64,106	19,794	2,838,354	141	32,414
1884	2,006	1,276,972	14,372	2,813,919	5,482	70,149	19,854	2,884,063	121	27,249
1885	2,006	1,262,814	14,306	2,822,598	5,735	72,773	20,041	2,895,371	113	25,184
1886	1,665	1,088,941	14,187	2,865,317	5,839	73,935	20,026	2,939,252	104	23,138
1887	1,512	989,412	13,871	2,935,527	5,978	55,205	19,849	3,010,735	109	26,151
1888	1,433	919,302	14,128	3,096,212	6,034	75,908	20,162	3,172,120	97	24,482
1889	1,595	999,619	14,221	3,133,512	6,180	77,604	20,401	3,211,416	88	21,976
1890	1,451	928,062	14,223	3,330,377	6,258	70,058	20,481	3,409,435	76	18,633
1891	1,516	988,719	14,426	3,529,315	6,403	80,561	20,829	3,609,876	71	17,231
1892	1,459	977,624	14,646	3,617,700	6,657	83,073	21,303	3,700,773	73	17,052
1893	1,272	833,199	14,814	3,770,096	6,788	84,597	21,602	3,854,693	71	16,604
1894	1,279	899,698	13,834	3,611,723	6,787	84,553	20,630	3,696,276	71	16,482
1895	1,193	822,347	13,641	3,644,276	6,741	84,447	20,382	3,728,714	67	15,839
1896	1,193	829,833	13,250	3,702,393	6,780	87,903	20,030	3,790,296	64	15,121
1897	1,176	922,370	12,998	3,805,433	6,804	88,393	19,802	3,896,826	54	12,714
1898	1,084	726,213	13,154	3,873,594	6,936	86,108	20,090	3,959,702	52	11,496
1899	1,283	837,229	12,961	3,878,397	7,019	86,916	19,980	3,965,313	48	11,017
1900	1,288	816,795	13,241	4,195,875	7,327	90,641	20,568	4,286,516	42	9,899
1901	1,286	879,595	13,632	4,488,421	7,637	94,228	21,269	4,582,645	41	9,534
1902	1,190	873,235	13,643	4,761,888	7,873	96,826	21,516	4,858,714	36	9,320
1903	1,134	879,264	13,660	5,041,533	8,086	99,504	21,746	5,141,037	36	9,512
1904	1,166	888,628	13,700	5,234,807	8,159	100,357	21,859	5,335,164	38	10,140
1905	1,333	943,750	13,560	5,340,499	8,228	101,189	21,788	5,441,688	39	10,763
1906	1,401	928,466	13,617	5,570,682	8,428	103,362	22,045	5,674,044	40	11,020
1907	1,399	861,466	13,607	5,906,798	8,420	103,803	22,027	6,010,601	35	9,680
1908	1,553	930,413	13,643	6,263,209	8,808	108,653	22,451	6,371,862	38	9,655
1909	1,600	878,523	13,640	6,339,842	9,069	111,200	22,709	6,451,042	33	8,982
1910	1,490	782,517	13,654	6,554,649	9,328	114,317	22,982	6,668,966	36	9,308
1911	1,669	863,495	13,558	6,602,748	9,566	117,565	23,124	6,720,313	34	9,176
1912	1,977	923,225	13,563	6,615,493	9,829	121,556	23,392	6,737,046	35	8,876
1913	2,261	1,019,163	13,682	6,692,280	10,022	124,700	23,704	6,816,980	39	8,611
1914	2,360	1,066,288	13,577	6,692,274	9,985	126,089	23,562	6,818,363	45	9,864
1915	2,755	1,862,714	13,115	6,360,105	9,957	126,279	23,072	6,486,384	39	8,829
1916	3,101	2,185,008	12,727	6,119,048	9,900	125,502	22,627	6,244,550	33	6,707

EMPLOYED IN THE FOREIGN TRADE, THE COASTING TRADE, AND THE FISHERIES,  
Continued.

Whale fisheries.			Cod and mackerel fisheries.						Total merchant marine.		Year.
Enrolled vessels.	Total.	Enrolled vessels.	Licensed vessels under 20 tons.			Total.			No.	Tons.	Year.
Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
146,017	143,758	8,160	151,918	3,555,454	1850						
181,644	138,015	8,141	146,156	3,772,439	1851						
193,798	175,205	7,914	183,119	4,138,440	1852						
193,203	159,840	9,238	169,078	4,407,010	1853						
181,901	137,235	9,734	146,969	4,802,902	1854						
70	186,848	124,553	8,987	133,540	5,212,001	1855					
248	189,461	125,703	6,636	132,339	4,871,653	1856					
70	195,842	132,901	7,295	140,196	4,940,843	1857					
198,594	140,490	8,356	148,846	5,049,808	1858						
185,728	147,647	9,060	156,707	5,145,038	1859						
166,841	153,619	9,145	162,764	5,353,868	1860						
145,734	182,106	10,535	192,641	5,539,813	1861						
117,714	193,459	10,738	204,197	5,112,164	1862						
99,228	157,579	10,730	168,309	5,155,056	1863						
95,145	148,244	10,997	159,241	4,986,400	1864						
84,233	100,436	12,241	112,677	5,096,782	1865						
105,170	89,386	8,845	98,231	4,310,778	1866						
52,384	68,207	7,858	76,065	4,304,487	1867						
349	78,486	1,467	74,763	2,220	83,887	28,167	4,351,759	1868			
311	70,202	1,093	55,165	621	7,589	1,714	62,704	27,487	4,144,641	1869	
299	67,954	1,561	82,612	731	8,848	2,292	91,460	28,998	4,246,507	1870	
249	61,490	1,563	82,902	863	9,963	2,426	92,865	29,651	4,282,607	1871	
217	51,608	1,486	87,403	899	10,144	2,385	97,547	31,114	4,437,747	1872	
187	44,755	1,558	99,542	895	9,977	2,453	109,519	32,672	4,606,027	1873	
162	39,108	1,230	68,490	860	9,800	2,099	78,290	32,486	4,800,652	1874	
165	38,229	1,259	68,703	929	11,504	2,188	80,207	32,285	4,833,732	1875	
171	39,116	1,383	77,314	928	10,488	2,311	87,802	25,934	4,279,458	1876	
179	40,593	1,265	79,678	1,023	11,407	2,288	91,085	25,386	4,242,600	1877	
182	39,700	1,333	74,560	1,102	11,987	2,535	86,547	25,264	4,212,765	1878	
185	40,028	1,208	66,543	1,237	13,342	2,445	79,885	25,211	4,169,601	1879	
174	38,408	1,147	64,935	1,176	12,603	2,323	77,538	24,712	4,068,034	1880	
173	38,551	1,215	66,365	905	9,772	2,120	76,137	24,065	4,057,734	1881	
146	32,802	1,119	67,015	971	10,848	2,090	77,863	21,368	4,165,933	1882	
141	32,414	1,245	84,322	1,004	10,716	2,249	95,038	24,217	4,235,487	1883	
121	27,249	1,140	72,609	961	10,331	2,101	82,940	24,082	4,271,229	1884	
113	25,184	1,089	73,975	714	8,590	1,803	82,565	23,963	4,265,934	1885	
104	23,138	1,096	73,445	643	7,260	1,269	80,705	23,534	4,131,136	1886	
109	26,151	1,033	73,237	560	6,310	1,593	79,547	23,063	4,105,845	1887	
97	24,482	968	69,146	621	6,866	1,589	76,012	23,281	4,191,916	1888	
88	21,976	932	67,669	609	6,795	1,541	74,464	23,623	4,307,475	1889	
76	18,633	840	61,507	619	6,860	1,459	68,367	23,467	4,424,497	1890	
71	17,231	836	61,912	647	7,021	1,483	68,933	23,899	4,684,759	1891	
73	17,052	815	61,819	733	7,653	1,548	69,472	24,333	4,764,921	1892	
71	16,604	806	62,737	761	7,838	1,567	70,575	24,512	4,825,071	1893	
71	16,482	803	63,493	804	8,080	1,606	71,573	23,586	4,684,029	1894	
67	15,839	767	60,838	831	8,222	1,598	69,060	23,240	4,635,960	1895	
64	15,121	749	60,107	872	8,523	1,621	68,630	22,908	4,703,880	1896	
54	12,714	724	58,103	877	8,507	1,601	66,610	22,633	4,769,020	1897	
52	11,496	571	43,996	908	8,331	1,479	52,327	22,705	4,749,738	1898	
48	11,017	545	42,901	872	7,778	1,417	50,679	22,728	4,864,238	1899	
42	9,899	545	43,694	890	7,935	1,435	51,629	23,333	5,164,839	1900	
41	9,534	539	44,074	922	8,370	1,461	52,444	24,057	5,524,218	1901	
36	9,320	572	47,807	959	8,826	1,531	56,633	24,273	5,797,902	1902	
36	9,512	575	48,963	934	8,569	1,509	57,532	24,425	6,087,345	1903	
38	10,140	567	48,982	928	8,621	1,495	57,603	24,558	6,291,535	1904	
39	10,763	566	51,303	955	9,039	1,521	60,342	24,681	6,456,543	1905	
40	11,020	560	52,251	960	9,188	1,520	61,439	25,006	6,674,960	1906	
35	9,680	503	47,908	947	9,139	1,450	57,047	24,911	6,938,794	1907	
38	9,655	472	44,730	911	8,785	1,383	53,515	25,425	7,365,445	1908	
33	8,982	432	41,211	914	8,997	1,346	50,208	25,688	7,388,755	1909	
36	9,308	395	39,079	837	8,212	1,232	47,291	25,740	7,508,082	1910	
34	9,176	375	38,072	789	7,734	1,164	45,806	25,991	7,638,790	1911	
35	8,876	349	37,196	775	7,840	1,124	45,036	26,528	7,714,183	1912	
39	8,611	320	34,060	742	7,702	1,062	41,762	27,070	7,886,518	1913	
45	9,864	259	26,700	717	7,433	976	34,173	26,943	7,928,688	1914	
39	8,829	233	24,620	602	6,882	835	31,502	26,701	8,389,429	1915	
33	6,707	238	27,998	445	5,386	683	33,354	26,444	8,469,649	1916	

No. 23.—CLASS, NUMBER, AND GROSS TONNAGE OF VESSELS BUILT IN THE UNITED STATES AND DOCUMENTED, 1797-1916.

1833.....	144	169	624	185	1, 122	150, 758				65	10, 734					1, 187	161, 492	1833
1834.....	98	94	497	180	869	105, 332				88	13, 057					957	118, 389	1834
Sept. 30, 1835.....	43	55	391	164	653	64, 338				72	10, 769					725	75, 107	1835
1836.....	93	65	444	164	766	93, 016				145	23, 214					911	116, 230	1836
1837.....	67	72	507	168	814	92, 458				158	33, 455					972	115, 905	1837
1838.....	66	79	510	153	808	91, 747				105	24, 158					913	125, 913	1838
1839.....	83	89	439	124	735	100, 363				164	24, 897					899	125, 260	1839
1840.....	97	109	378	224	808	106, 518				87	14, 685					895	121, 203	1840
1841.....	114	102	319	150	685	100, 117				108	23, 543					793	123, 660	1841
1842.....	116	91	274	406	887	105, 256				140	24, 550					1, 027	129, 806	1842
June 30, 1843.....	58	34	138	174	404	50, 050				79	13, 830					483	63, 888	1843
1844.....	73	47	204	279	603	71, 507				163	32, 030					766	103, 537	1844
1845.....	124	87	322	342	875	112, 362				163	33, 680					1, 038	146, 042	1845
1846.....	100	164	576	355	1, 195	141, 844				225	46, 359					1, 420	188, 203	1846
1847.....	151	168	689	392	1, 400	193, 403				197	50, 230					1, 597	243, 633	1847
1848.....	254	174	701	547	1, 676	265, 549				175	52, 526					1, 851	318, 075	1848
1849.....	198	148	623	370	1, 339	213, 970				215	43, 018					1, 554	256, 988	1849
1850.....	247	117	554	307	1, 225	227, 997				197	51, 258					1, 422	279, 255	1850
1851.....	211	65	522	325	1, 123	221, 146				245	78, 326					1, 368	299, 472	1851
1852.....	255	79	585	265	1, 184	269, 822				268	85, 534					1, 452	355, 356	1852
1853.....	270	95	681	391	1, 437	332, 339				280	95, 155					1, 717	427, 494	1853
1854.....	334	112	661	386	1, 493	447, 216				284	88, 830					1, 777	536, 046	1854
1855.....	381	126	605	669	1, 781	510, 690				246	72, 760					2, 027	583, 450	1855
1856.....	306	103	594	479	1, 482	404, 054				232	65, 239					1, 714	469, 293	1856
1857.....	251	58	504	358	1, 171	304, 345				263	74, 459					1, 434	378, 804	1857
1858.....	122	46	431	400	999	179, 338				226	65, 374					1, 225	244, 712	1858
1859.....	89	28	297	284	698	121, 297				172	35, 305					870	156, 602	1859
1860.....	110	36	372	289	807	145, 427				264	69, 370					1, 071	214, 797	1860
1861.....	110	38	360	371	879	172, 208				264	60, 986					1, 143	233, 194	1861
1862.....	60	17	207	397	681	119, 626				183	55, 449					864	175, 075	1862
1863.....	97	34	212	1, 113	1, 456	216, 812				367	94, 233					1, 823	311, 045	1863
1864.....	112	45	322	1, 389	1, 868	268, 240				498	147, 500					2, 366	415, 740	1864
1865.....	109	46	369	853	1, 377	238, 109				411	143, 696					1, 788	383, 805	1865
1866.....	96	61	457	926	1, 540	210, 963				348	125, 183					1, 888	336, 146	1866
1867.....	95	70	517	657	1, 339	231, 518				180	72, 010					1, 519	303, 528	1867
1868.....	80	48	590	192	910	142, 742	88	62	86	236	63, 940	414	35, 585	242	43, 037	1, 802	285, 304	1868
1869.....	91	36	502	245	874	149, 029	69	76	134	279	65, 066	382	35, 113	191	26, 022	1, 726	275, 230	1869
1870.....	73	27	519	197	816	146, 340	96	90	104	290	70, 621	350	30, 256	162	29, 736	1, 618	276, 953	1870
1871.....	40	14	498	204	756	97, 176	78	128	96	302	87, 842	468	41, 386	229	46, 822	1, 755	273, 226	1871
1872.....	15	10	426	194	645	76, 291	154	24	114	292	62, 210	538	46, 017	168	24, 534	1, 643	209, 052	1872
1873.....	28	9	611	156	804	144, 629	57	96	249	402	88, 010	835	78, 288	230	48, 318	2, 271	359, 245	1873
1874.....	71	22	655	213	961	216, 316	63	106	235	404	101, 930	473	48, 403	309	66, 076	2, 147	432, 725	1874
1875.....	114	22	502	160	798	206, 884	43	95	185	323	62, 460	62	6, 515	118	21, 779	1, 301	297, 638	1875
1876.....	76	5	424	193	698	118, 672	53	98	187	338	69, 252	28	3, 110	48	12, 551	1, 112	203, 585	1876
1877.....	71	4	337	169	581	106, 331	45	107	113	265	47, 514	29	3, 022	154	19, 724	1, 029	176, 591	1877
1878.....	81	7	279	165	532	106, 066	58	112	164	334	81, 860	19	1, 908	373	45, 669	1, 258	235, 503	1878
1879.....	37	10	256	165	468	66, 867	57	121	157	335	86, 361	36	4, 060	293	35, 733	1, 132	193, 030	1879

a Including canal boats and barges prior to 1868.

b No record.

## No. 23.—CLASS, NUMBER, AND GROSS TONNAGE OF VESSELS BUILT IN THE UNITED STATES AND DOCUMENTED, 1797–1916—Continued.

Year ended—	Sailing vessels.						Steam vessels. <sup>a</sup>					Canal boats.		Barges.		Grand total.		Year.
	Ships, barks, and barks.	Brigs.	Schooners.	Sloops. <sup>b</sup>	Number. <sup>b</sup>	Gross tons. <sup>b</sup>	Side- wheel.	Stern- wheel.	Pro- peller.	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.	
	1881.	29	3	318	143	493	81,209	55	105	284	444	118,070	57	10,190	114	70,989	1,108	280,458
June 30, 1880.....	23	2	286	149	460	59,057	71	95	182	348	78,853	17	1,887	77	17,612	902	157,409	1880
1881.....	29	3	318	143	493	81,209	55	105	284	444	118,070	57	10,190	114	70,989	1,108	280,458	1881
1882.....	31	2	473	160	666	118,793	61	126	315	502	121,843	68	7,882	135	33,746	1,371	282,269	1882
1883.....	33	2	567	119	721	137,046	46	90	303	439	107,229	42	4,711	66	16,443	1,268	265,429	1883
1884.....	24	2	533	147	706	120,621	32	103	275	410	91,328	33	3,456	41	10,109	1,190	225,514	1884
1885.....	11	0	379	143	533	65,362	39	86	213	338	84,332	21	2,283	28	7,079	920	159,056	1885
1886.....	8	1	276	120	405	41,237	18	80	142	240	44,646	23	2,979	47	6,770	715	195,453	1886
1887.....	7	1	258	181	447	34,633	24	69	206	299	100,074	36	4,180	62	11,563	844	150,450	1887
1888.....	4	0	275	144	423	48,590	33	84	313	430	142,006	40	4,263	121	23,227	1,014	218,086	1888
1889.....	1	0	296	192	489	50,570	28	87	325	440	159,318	88	9,452	60	11,794	1,077	231,134	1889
1890.....	10	0	347	148	505	102,873	26	99	285	410	159,045	40	4,346	96	27,858	1,051	294,122	1890
1891.....	13	1	447	272	733	144,290	28	111	349	488	185,037	57	7,059	106	32,916	1,384	369,302	1891
1892.....	8	0	423	415	846	83,217	26	105	307	438	92,531	37	4,580	74	19,305	1,395	199,633	1892
1893.....	8	1	303	181	493	49,348	19	93	268	380	134,308	28	3,791	55	24,132	956	211,630	1893
1894.....	3	0	253	221	477	37,827	26	61	206	293	83,720	14	1,522	54	8,126	838	131,195	1894
1895.....	1	0	188	208	397	34,900	17	70	161	248	69,754	11	1,225	38	5,723	694	111,602	1895
1896.....	2	0	215	152	369	65,236	25	84	177	286	138,028	13	1,495	55	22,337	723	227,096	1896
1897.....	1	0	160	177	338	64,308	20	88	180	288	106,153	70	10,216	195	51,555	891	232,232	1897
1898.....	1	0	159	199	359	34,416	15	170	209	394	105,838	20	2,386	179	37,818	952	180,458	1898
1899.....	3	0	223	194	420	98,073	14	182	243	439	151,058	13	1,411	401	49,496	1,273	300,038	1899
1900.....	4	0	281	219	504	116,416	19	117	286	422	202,528	38	4,492	483	70,310	1,447	393,790	1900
1901.....	6	0	259	261	526	126,163	21	131	354	506	273,591	79	9,078	469	74,655	1,580	483,489	1901
1902.....	9	0	316	256	581	97,698	27	137	415	579	308,178	44	4,539	287	58,416	1,491	468,831	1902
1903.....	3	0	298	169	470	89,979	28	131	392	551	271,781	19	2,215	271	72,177	1,311	436,152	1903
1904.....	0	0	203	127	330	64,908	13	161	439	613	255,744	25	2,753	216	55,137	1,184	378,542	1904
1905.....	0	0	195	115	310	79,418	10	164	386	560	197,702	30	3,248	202	49,948	1,102	330,316	1905
1906.....	0	0	154	75	229	35,209	16	147	487	650	315,707	83	8,832	259	58,997	1,221	418,745	1906
1907.....	0	0	81	66	147	24,907	15	149	510	674	365,405	62	6,577	274	74,443	1,157	471,332	1907
1908.....	0	0	76	58	134	31,981	12	193	718	923	481,624	46	4,970	354	95,641	1,457	614,216	1908
1909.....	0	0	81	60	141	28,950	12	167	642	821	148,208	21	2,292	264	58,640	1,247	238,090	1909
1910.....	0	1	82	44	127	19,358	6	134	796	936	257,993	50	5,720	248	58,997	1,361	342,068	1910
1911.....	0	0	45	37	82	10,092	6	138	825	969	227,231	51	5,862	320	47,977	1,422	291,162	1911
1912.....	0	0	60	35	95	21,221	8	150	893	1,051	153,493	27	2,978	332	54,977	1,505	232,669	1912
1913.....	0	0	53	19	72	28,610	19	141	844	1,004	243,408	39	4,641	360	69,496	1,475	346,155	1913
1914.....	0	0	36	15	51	13,749	21	70	687	778	224,225	25	2,558	297	75,718	1,151	316,250	1914
1915.....	0	0	30	21	51	8,021	12	109	630	751	154,990	40	4,457	315	57,654	1,157	225,122	1915
1916.....	0	0	24	10	34	14,765	5	83	536	624	250,125	21	2,551	258	57,972	937	325,413	1916

<sup>a</sup> Includes gasoline vessels since 1897.<sup>b</sup> Including canal boats and barges prior to 1868.

For a separate report of metal vessels built, see Statement No. 22.

No. 24.—NUMBER AND GROSS TONNAGE OF VESSELS BUILT IN THE UNITED STATES AND DOCUMENTED, 1857-1916, BY GEOGRAPHIC DIVISIONS.

Year ended June 30—	New England coast.		Middle Atlantic and Gulf coasts.		Pacific coast.		Total seaboard.		Northern lakes.		Western rivers.		Total United States.		Year.
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
1857.	412	183,685	100,583	12	1,185	285,453	51,498	41,854	1,434	378,805	1857				
1858.	321	103,862	71,426	18	2,124	177,412	31,642	35,659	1,225	244,713	1858				
1859.	247	79,322	51,916	24	2,056	133,294	6,180	17,128	870	156,602	1859				
1860.	348	134,289	33,524	30	2,023	169,836	11,992	32,970	1,071	214,798	1860				
1861.	364	104,675	70,376	49	4,716	179,767	23,467	29,960	1,143	233,194	1861				
1862.	126	45,595	64,368	28	2,524	112,487	53,804	8,785	864	175,076	1862				
1863.	173	79,576	133,420	32	2,671	215,667	67,972	27,407	1,823	311,046	1863				
1864.	292	112,611	192,957	53	4,853	310,421	49,151	56,169	2,366	415,741	1864				
1865.	328	135,252	152,238	41	3,816	291,306	36,041	66,576	1,788	394,523	1865				
1866.	407	121,333	104,931	41	6,124	232,388	33,204	70,555	1,888	336,147	1866				
1867.	451	135,189	91,297	40	4,324	230,810	39,679	35,106	1,519	305,595	1867				
1868.	358	98,915	70,046	65	6,851	175,812	56,798	52,695	1,802	285,305	1868				
1869.	328	103,604	72,059	127	15,531	191,194	49,460	34,576	1,726	275,230	1869				
1870.	351	110,584	619	59,532	111	12,720	1,081	182,836	320	37,258	217	55,859	1,618	276,953	
1871.	339	64,366	811	86,559	44	5,324	1,194	156,249	274	43,897	287	73,081	1,755	273,227	
1872.	243	46,269	926	79,552	26	2,276	1,195	128,097	252	44,611	196	36,344	1,643	209,052	
1873.	302	76,406	1,233	133,258	52	5,475	1,587	218,139	445	92,448	229	48,659	2,261	359,246	
1874.	377	135,251	994	129,983	63	10,859	1,404	277,093	417	91,986	326	63,646	2,147	432,725	
1875.	353	151,497	540	79,549	70	13,428	963	244,474	177	29,871	161	23,294	1,301	297,639	
1876.	286	95,288	450	51,716	102	16,822	838	163,826	140	16,124	134	23,636	1,112	203,580	
1877.	237	90,992	363	29,286	88	12,718	708	132,996	89	8,903	232	34,693	1,029	176,592	
1878.	231	90,386	403	53,419	63	11,333	697	155,138	101	11,438	460	68,928	1,258	235,504	
1879.	163	55,874	429	48,602	65	11,207	657	115,683	95	15,135	380	62,213	1,132	193,031	
1880.	184	46,374	405	46,403	41	8,943	630	101,720	137	22,899	135	32,791	902	157,410	
1881.	187	54,888	466	59,801	58	11,417	711	125,766	215	73,504	182	81,189	1,108	280,459	
1882.	304	93,965	586	78,342	75	15,777	965	188,084	254	58,369	152	35,817	1,371	282,270	
1883.	342	110,226	539	83,335	91	16,738	972	210,349	171	28,638	125	26,443	1,268	265,430	
1884.	250	84,046	627	83,753	85	10,620	962	178,419	135	30,431	93	16,664	1,190	225,514	
1885.	173	48,128	473	61,844	76	11,038	722	121,010	117	26,826	81	11,220	920	159,056	
1886.	111	30,624	385	27,920	58	5,914	554	64,458	85	20,400	76	10,595	715	95,453	
1887.	101	24,035	439	49,886	73	9,140	613	83,061	152	56,488	79	10,901	844	150,450	
1888.	150	33,813	454	49,356	104	21,956	708	105,125	222	101,103	84	11,859	1,014	218,087	
1889.	174	39,983	483	53,930	112	17,939	769	111,852	225	107,080	83	12,202	1,707	231,134	
1890.	208	78,577	455	78,179	93	12,335	756	169,091	191	108,526	104	16,506	1,051	294,123	
1891.	327	105,491	617	112,901	122	19,070	1,066	237,462	204	111,856	114	19,984	1,384	369,302	
1892.	366	60,624	622	57,469	139	20,770	1,127	138,863	169	45,909	99	14,801	1,395	199,633	
1893.	152	37,091	447	52,018	91	13,721	690	102,830	175	99,271	91	9,538	956	211,639	
1894.	192	28,665	400	46,042	58	5,392	650	80,099	106	41,985	82	9,111	838	131,195	
1895.	145	26,783	308	33,200	74	7,144	527	67,127	93	38,353	74	8,122	694	111,602	
1896.	163	39,582	255	52,143	93	10,819	511	102,544	117	108,782	95	15,771	723	227,097	
1897.	98	21,942	511	74,067	64	7,495	673	103,504	120	116,937	98	11,792	891	232,233	
1898.	127	23,944	387	39,146	228	49,789	742	112,879	87	54,084	123	13,495	952	180,458	
1899.	144	68,761	487	85,825	306	41,534	937	196,120	122	80,366	214	23,552	1,273	300,038	

No. 24.—NUMBER AND GROSS TONNAGE OF VESSELS BUILT IN THE UNITED STATES AND DOCUMENTED, 1857-1916, BY GEOGRAPHIC DIVISIONS—Continued.

Year ended June 30—	New England coast.		Middle Atlantic and Gulf coasts.		Pacific coast.		Total seaboard.		Northern lakes.		Western rivers.		Total United States.		Year.
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	
1900.....	199	72,179	605	135,473	303	41,354	1,107	249,006	125	130,611	215	14,173	1,447	393,790	1900
1901.....	201	82,971	622	153,977	271	54,568	1,094	291,516	175	169,055	311	22,888	1,580	483,489	1901
1902.....	225	75,852	748	161,211	224	53,059	1,197	290,122	133	168,873	161	9,536	1,491	468,831	1902
1903.....	203	66,973	644	177,887	191	43,336	1,038	288,196	123	136,844	150	11,112	1,311	436,152	1903
1904.....	170	51,417	532	135,263	176	21,608	878	208,288	119	159,433	187	10,821	1,184	378,542	1904
1905.....	192	119,377	469	91,224	162	20,115	823	230,716	101	93,123	178	6,477	1,102	330,316	1905
1906.....	146	32,311	507	94,311	197	20,261	850	146,883	204	265,271	167	6,591	1,221	418,745	1906
1907.....	106	44,428	502	140,134	207	35,191	815	219,753	177	244,291	165	7,288	1,157	471,332	1907
1908.....	151	70,903	524	138,984	359	57,050	1,034	266,937	216	341,165	207	6,114	1,457	614,216	1908
1909.....	130	27,237	460	81,752	276	22,759	866	131,748	174	100,402	207	5,940	1,247	238,000	1909
1910.....	111	23,442	497	127,517	279	16,870	887	167,829	281	168,751	193	5,488	1,361	342,068	1910
1911.....	94	23,653	503	139,725	407	27,234	1,004	190,612	216	94,157	202	6,393	1,422	291,162	1911
1912.....	93	23,052	462	81,329	521	32,104	1,076	136,485	224	90,898	205	5,286	1,505	232,669	1912
1913.....	95	27,131	516	175,523	411	44,664	1,022	247,318	219	90,907	234	7,930	1,475	346,155	1913
1914.....	88	14,985	469	200,220	332	36,495	889	251,700	130	56,514	132	8,009	1,151	316,250	1914
1915.....	89	18,551	456	152,906	321	31,699	866	203,156	147	16,467	144	5,499	1,157	225,122	1915
1916.....	62	37,568	363	188,550	246	49,631	671	275,749	126	44,691	140	4,973	937	325,413	1916

No. 25.—TONNAGE OF VESSELS OF THE UNITED STATES WHICH HAVE BEEN BUILT, ADMITTED TO REGISTRY BY ACTS OF CONGRESS, ETC., AND THOSE WHICH HAVE BEEN LOST, ABANDONED, SOLD TO ALIENS, ETC., 1813-1916.

Year ended—	Built.	Special acts.	General act (Dec. 23, 1852).	Renationalized (act, Mar. 3, 1897).	Purchased from United States.	Captured from enemy. (a)	Other sources. (b)	Total increase.	Lost.	Abandoned.	Sold to aliens.	Sold to United States.	Captured by enemy.	Exempt (act, Apr. 18, 1874).	Other causes. (b)	Total decrease.	Annual increase or decrease (—).	Year.
Dec. 31, 1813.	32,583				1,390	8,817		33,973	45,273	2,955	56,954		28,556		c 1,739	135,477	-103,369	1813
1814.	29,751															38,652	-7,419	1814
1815.	155,579				3,887	44,233		203,699	17,503	3,303	9,582		16,146			61,162	208,919	1815
1816.	135,186				1,687	3,689		140,562	22,591	6,701	23,379		30,774			52,671	4,091	1816
1817.	87,626					389	802	88,817	20,673	8,411	14,228					43,312	27,693	1817
1818.	87,346					196	1,616	89,158	31,396	10,722	15,107					57,225	-174,727	1818
1819.	86,670					729	1,273	88,672	24,164	13,029	11,364					48,557	35,567	1819
1820.	51,394				81	834		52,309	23,833	13,656	6,062					43,551	19,415	1820
1821.	57,275					162	245	57,682	27,175	17,364	8,350					52,889	18,791	1821
1822.	77,569					67	137	77,773	21,263	12,075	5,710					39,048	25,741	1822
1823.	75,857					74	66	75,997	24,744	13,316	9,268	74				47,402	11,867	1823
1824.	92,798	183			109	211		93,301	22,880	13,236	12,818	317				49,251	52,597	1824
1825.	116,464					376		116,840	46,993	11,055	9,948					67,996	33,948	1825
1826.	130,373					743		131,116	20,954	12,063	13,994	1,765				48,776	111,080	1826
1827.	106,456					59	237	106,752	29,266	13,739	19,043					62,048	86,416	1827
1828.	98,964	279				48		99,291	24,062	11,810	14,677	113				50,662	120,785	1828
1829.	79,408					79		79,487	17,692	11,454	14,093	158				43,397	-480,594	1829
1830.	58,560				125			58,685	17,751	11,543	10,058	75				39,427	-69,022	1830
1831.	85,556	53				94		85,703	23,808	8,859	9,750					42,417	76,070	1831
1832.	144,544					210		144,754	24,596	6,877	6,083	107				37,663	171,604	1832
1833.	161,492	280				270		162,042	15,395	5,236	2,932					23,563	166,701	1833
1834.	118,389							118,389	11,914	5,130	4,725					21,769	152,756	1834
Sept. 30, 1835.	75,107							75,107	(d)	(d)	7,617					7,617	66,034	1835
1836.	116,230					86		116,316	19,109	5,836	10,509					35,454	57,161	1836
1837.	125,913							125,913	24,365	8,946	9,916					43,227	14,584	1837
1838.	115,905					117		116,022	21,606	5,489	5,386					32,481	98,954	1838
1839.	125,260	40				213		125,513	21,114	8,095	5,769	81				35,059	100,839	1839
1840.	121,203	40				260		121,503	31,406	10,067	13,837	117				55,427	84,285	1840
1841.	123,660	70				88		123,818	19,668	5,692	12,713					38,073	-50,202	1841
1842.	129,806	196				102		130,104	28,420	11,476	7,770					47,666	-38,353	1842
June 30, 1843.	63,888					131		64,019	23,033	6,953	9,203	199				39,388	66,212	1843
1844.	103,537					614		104,151	18,273	7,976	7,227	73				33,549	121,493	1844
1845.	146,042					426		146,468	21,540	7,279	8,369					37,188	136,906	1845

<sup>a</sup> Including alien vessels forfeited for violation of United States laws.<sup>b</sup> Not fully reported prior to 1901.<sup>c</sup> Commissioned as privateers.<sup>d</sup> Included in report for 1836.

No. 25.—TONNAGE OF VESSELS OF THE UNITED STATES WHICH HAVE BEEN BUILT, ADMITTED TO REGISTRY BY ACTS OF CONGRESS, ETC., AND THOSE WHICH HAVE BEEN LOST, ABANDONED, SOLD TO ALIENS, ETC., 1813-1916—Continued.

Year ended—	Built.	Special acts.	General act (Dec. 23, 1852).	Renationalized (act Mar. 3, 1897).	Purchased from United States.	Captured from enemy.	Other sources.	Total increase.	Lost.	Abandoned.	Sold to aliens.	Sold to United States.	Captured by enemy.	Exempt (act Apr. 18, 1874).	Other causes.	Total decrease.	Annual increase or decrease (-).	Year.
June 30, 1846.	188,203	255						188,458	31,212	7,080	10,932				49,224	145,083	1846	
1847.	243,633	285			83	243		244,244	33,279	10,100	16,969	9,176			69,524	276,961	1847	
1848.	318,075	1,650			80	255		320,060	41,667	7,154	12,456	765			62,042	314,996	1848	
1849.	256,988	997			9,983			267,968	30,309	10,549	12,621				53,479	179,974	1849	
1850.	279,255	409			1,144			280,808	34,748	6,753	13,468				54,969	201,438	1850	
1851.	299,472	481			1,191			301,144	30,825	5,853	15,247				51,925	236,985	1851	
1852.	355,356	721						356,077	38,940	5,606	17,921				62,467	366,001	1852	
1853.	427,494	1,019	1,528		136			430,177	45,670	9,608	10,035				65,313	288,570	1853	
1854.	536,046	261	1,521					537,828	63,073	9,513	60,033				132,619	395,892	1854	
1855.	583,450	1,708	327		617			586,102	61,217	7,834	65,887	53			<sup>a</sup> 42,598	177,589	1855	
1856.	469,293	1,276	100					470,669	75,062	11,376	42,168	962			<sup>a</sup> 681,135	810,703	1856	
1857.	378,804	600	1,559					380,936	82,489	11,248	52,649	146			<sup>a</sup> 164,367	310,899	1857	
1858.	244,712	296	126					245,308	63,462	16,036	26,305	762			<sup>a</sup> 57,131	163,696	1858	
1859.	156,602	4,607	996					162,205	52,568	13,872	30,850	1,363			98,653	95,230	1859	
1860.	214,797	295	256		135			215,483	65,561	15,080	17,418	35			98,094	208,830	1860	
1861.	233,194	370	362			828		234,754	59,567	7,964	26,649	9,964			<sup>a</sup> 39,412	143,556	1861	
1862.	175,075	521	541			4,646		180,783	41,352	14,802	117,756	61,309			<sup>b</sup> 355,544	590,763	1862	
1863.	311,045	2,279	476		289	13,074		327,163	52,041	10,817	222,199	35,946			321,003	42,892	1863	
1864.	415,740	585	634		1,109	13,997		432,065	64,851	13,210	300,865	55,774			<sup>b</sup> 187,878	622,578	1864	
1865.	383,805	602	2,236		2,299	14,214		403,156	47,033	4,678	133,832	29,553			215,096	110,382	1865	
1866.	336,146	5,067	9,654		131,786	29,236		511,889	36,893	2,176	22,117	4,772			65,958	786,004	1866	
1867.	303,528	3,002	4,743		25,489	2,556		339,318	28,041	14,958	9,088	961			53,048	6,291	1867	
1868.	285,304	2,040	3,087		6,163	2,154		298,748	95,075	13,489	13,757	752			123,073	47,272	1868	
1869.	275,230	4,211	3,826		8,588	1,421		293,276	106,198	22,830	19,063	901			148,992	-207,118	1869	
1870.	276,953	148	4,672		3,063	1,933		286,769	134,098	34,683	17,079	843			186,703	101,866	1870	
1871.	273,226	1,926	2,771		2,716	364		281,003	90,761	32,420	13,534	597			137,312	36,100	1871	
1872.	209,052	1,875	2,154		259	467		213,807	78,587	33,071	19,572	40			131,270	155,140	1872	
1873.	359,245	1,445	2,033		1,082			363,805	84,080	35,530	29,763	294			150,667	258,280	1873	
1874.	432,725	3,235	1,538		3,542	89		441,129	86,108	33,758	77,054	514			267,509	104,625	1874	
1875.	297,638	1,682	1,145		711			301,176	91,740	39,627	25,541	2,069			70,075	40,334	1875	
1876.	203,585	930	1,540					206,055	103,415	48,845	33,253	941			843,119	1,029,573	1876	
1877.	176,591	163	1,129					177,883	126,627	38,947	24,724	814			1,647	192,750	1877	
1878.	235,503	2,452	1,325		161			239,441	165,547	56,194	43,607	201			1,184	266,733	1878	
1879.	193,030	318	2,746		832			196,926	152,946	63,785	42,312	91			1,413	261,547	-43,164	1879

1880..	157,409	997	2,393		174		160,973	98,439	40,390	26,883	274		129,149		295,135	-101,567	1880	
1881..	280,458	294	1,078	322		281,152	88,507	42,308	28,671	500		85,328		245,314	-10,300	1881		
1882..	282,269	1,367	2,172	606		286,414	89,573	38,928	18,257	478		5,179		152,415	108,199	1882		
1883..	265,429		2,099	245		267,773	96,389	31,022	37,385	368		21,721		186,885	69,554	1883		
1884..	225,514		2,926	1,287		229,727	110,318	39,222	28,722	266		3,894		182,422	35,742	1884		
1885..	159,056	211	2,024	80		161,371	86,527	26,111	26,213	1,074		9,400		149,325	-5,295	1885		
1886..	95,453	2,817	2,675	70	573	101,588	144,193	33,982	33,063	300		2,469		214,007	-134,798	1886		
1887..	150,450	860	7,317	425		159,052	115,579	33,375	22,122	135		5,015		176,226	-25,291	1887		
1888..	218,086	2,429	10,725	431		231,671	106,772	29,117	11,116	178		8,150		155,333	86,071	1888		
1889..	231,134	2,384	6,855	53		240,426	101,130	25,645	9,871	350		3,109		140,105	115,559	1889		
1890..	294,122	8,297	7,092	49		309,560	135,599	29,908	13,322	1,670		5,760		186,259	117,022	1890		
1891..	369,302	18,123	2,555	1,376		391,400	96,608	22,808	9,410	119		12,445		141,390	260,262	1891		
1892..	199,633		3,108	592		203,333	89,570	24,892	15,329	660		1,995		132,446	80,162	1892		
1893..	211,639	22,761	2,859	464		237,723	127,886	29,213	15,395	946		3,251		176,691	60,150	1893		
1894..	131,195	997	2,549	588		135,329	167,588	33,206	20,578	385		30,174		251,931	-141,042	1894		
1895..	111,602	6,855	7,521		125,978	123,477	26,810	13,994	336		14,006		178,623	-48,069	1895			
1896..	227,096	7,486	5,704	454		240,740	108,832	34,905	21,797	220		7,205		172,959	67,920	1896		
1897..	232,232	2,438	5,276	568		240,514	100,780	51,251	8,243		16,364		176,638	65,140	1897			
1898..	180,458	27,945	14,304	1,868	568	225,143	103,696	33,912	35,411	66,732		4,609		244,360	-19,282	1898		
1899..	300,038	12,126	13,330	38,584	433	373,994	174,906	45,355	22,609	8,801		9,922		261,593	114,500	1899		
1900..	393,790	21,393	8,005	5,077	7,757	2,991	26,643	465,656	92,778	34,740	12,081	5,130		11,985	7,841	164,555	300,601	1900
1901..	483,489	41,838	12,382	1,196	682		9,097	548,684	101,655	39,304	14,567	5,223		27,046	1,510	189,305	359,379	1901
1902..	468,831	4,554	5,038	4,128	4,569		5,625	492,745	130,967	40,623	7,400	374		39,275	422	219,061	273,684	1902
1903..	436,152	1,219	12,821	4,782	4,106		12,437	471,517	106,731	35,574	17,086	1,019		21,007	657	182,074	289,443	1903
1904..	378,542	40	5,273	2,688	1,560		81,451	469,554	121,938	43,288	8,744	823		8,471	82,000	265,264	204,290	1904
1905..	330,316	5,881	10,795	2,975	1,843		88,287	440,097	103,885	29,207	10,894	85		48,854	82,164	275,089	165,008	1905
1906..	418,745	3,831	9,081	2,685	1,820		98,196	534,358	157,790	36,180	21,734	794		4,847	94,587	315,932	218,426	1906
1907..	471,332	8,073	(c)	6,451	1,848		109,004	596,708	157,115	35,128	16,625	296		26,740	97,069	332,883	263,825	1907
1908..	614,216	97		4,504	3,875		95,991	718,683	126,313	44,995	12,165	1,210		18,954	88,395	292,032	426,651	1908
1909..	238,090			1,128	1,531		66,324	307,073	111,921	37,023	47,219	1,010		17,077	69,513	283,763	23,310	1909
1910..	342,068			26	503		77,888	420,485	125,788	48,085	25,624	17,313		22,773	61,575	301,158	119,327	1910
1911..	291,162			3,400	814		94,882	390,258	89,353	54,597	15,738	610		17,645	81,607	259,550	130,708	1911
1912..	232,669			26,002	1,985		97,712	358,368	113,774	35,988	17,409	11,009		18,239	86,556	282,975	75,393	1912
1913..	346,155	4,989		1,142	809		111,893	464,988	74,695	36,561	51,373	12,189		21,362	96,473	196,180	172,355	1913
1914..	316,250			514	1,585		85,838	404,187	174,588	52,669	36,676	113		25,113	72,858	362,017	42,170	1914
1915..	225,122	d513,306		310	1,417		164,137	904,292	132,382	79,047	18,595	12,273		45,942	155,312	443,551	460,741	1915
1916..	325,413	d69,697	11,489	2,294	2,726		492,999	904,618	136,293	56,811	102,479	24,433		20,027	f484,355	824,398	80,220	1916

<sup>a</sup> The Register of the Treasury reports: " This difference \* \* \* arises from corrections made by striking from the balance of outstanding tonnage such vessels as have been sold to foreigners, lost, and condemned in previous years not heretofore reported to this office by the collectors."

<sup>b</sup> The Register of the Treasury reports: " This difference arises \* \* \* from no returns of tonnage being received from the rebel districts."

<sup>c</sup> Act Dec. 23, 1852, repealed Feb. 22, 1906, reenacted Feb. 24, 1915.

<sup>d</sup> Act Aug. 18, 1914.

<sup>e</sup> Including 2 vessels of 1,159 gross tons, admitted under R. S. 4132, certificate of record.

<sup>f</sup> Including 4 vessels of 11,103 gross tons, condemned by foreign governments.

## No. 26.—CLASS, NUMBER, AND GROSS TONNAGE OF DOCUMENTED YACHTS OF THE UNITED STATES, BY PORTS, JUNE 30, 1917.

Port at which documented.	Sailing yachts.		Steam yachts.		Gas yachts.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Eastport, Me.					2	31	2	31
Machias, Me.					1	19	1	19
Ellsworth, Me.	3	58	2	45	5	118	10	221
Southwest Harbor, Me.	3	135	1	21	2	98	6	254
Castine, Me.	1	18			5	138	6	156
Bangor, Me.			1	192			1	192
Belfast, Me.					3	74	3	74
Vinal Haven, Me.	2	39			1	21	3	60
Rockland, Me.	2	38	2	55	5	231	9	324
Boothbay, Me.					1	66	1	66
Bath, Me.			1	28			1	28
Portland, Me.	4	263	1	39	4	102	9	404
Gloucester, Mass.	1	16			1	31	2	47
Salem, Mass.	2	190	1	30	6	275	9	495
Marblehead, Mass.	8	216	1	174	17	682	26	1,072
Boston, Mass.	39	1,906	17	1,936	70	2,750	126	6,592
Plymouth, Mass.			1	41			1	41
Barnstable, Mass.			1	39			1	39
Vineyard Haven, Mass.	1	16					1	16
New Bedford, Mass.	6	141	1	141	9	270	16	552
Fall River, Mass.					4	87	4	87
Providence, R. I.	5	121	5	738	7	200	17	1,059
Newport, R. I.			1	173	5	261	6	434
New London, Conn.	5	357	3	371	4	108	12	836
Hartford, Conn.			1	25	7	261	8	286
New Haven, Conn.	3	52	1	92	5	148	9	292
Bridgeport, Conn.	2	39	3	245	11	347	16	631
New York, N. Y.	59	3,068	99	24,742	316	13,121	474	40,931
Albany, N. Y.					3	150	3	150
Patchogue, N. Y.	1	33			17	713	18	746
Greenport, N. Y.	1	22	1	200	11	369	13	591
Newark, N. J.	1	17			8	355	9	372
Perth Amboy, N. J.	1	32	1	67	5	176	7	275
Tuckerton, N. J.	1	31			1	60	2	91
Somers Point, N. J.					1	21	1	21
Philadelphia, Pa.	6	529	7	912	121	4,938	134	6,379
Wilmington, Del.			3	580	10	517	13	1,097
Baltimore, Md.	2	91	4	674	26	828	32	1,593
Annapolis, Md.					2	40	2	40
Crisfield, Md.					5	142	5	142
Washington, D. C.			5	376	12	368	17	744
Reedville, Va.					3	88	3	88
Richmond, Va.	1	31					1	31
Newport News, Va.					1	55	1	55
Norfolk, Va.					1	30	1	30
Elizabeth City, N. C.					1	21	1	21
Washington, N. C.					1	49	1	49
Beaufort, N. C.					1	16	1	16
Wilmington, N. C.					1	24	1	24
Georgetown, S. C.			1	43	1	33	2	76
Charleston, S. C.					4	109	4	109
Beaufort, S. C.					1	24	1	24
Savannah, Ga.			1	49	4	88	5	137
Fernandina, Fla.					2	121	2	121
Jacksonville, Fla.					21	643	21	643
St. Augustine, Fla.					17	652	17	652
Miami, Fla.	1	45			17	665	18	710
Key West, Fla.			2	105	12	366	14	471
Tampa, Fla.					12	370	12	370
Apalachicola, Fla.			1	89	1	46	2	135
Mobile, Ala.					2	59	2	59
Gulfport, Miss.					2	55	2	55
New Orleans, La.			1	42	16	804	17	846
Port Arthur, Tex.			1	233	2	106	3	339
Galveston, Tex.					4	206	4	206
Houston, Tex.					5	215	5	215
Port Lavaca, Tex.					1	157	1	157
Port Aransas, Tex.					1	32	1	32
San Juan, P. R.					2	58	2	58
Memphis, Tenn.					1	31	1	31
Nashville, Tenn.					1	32	1	32
Chattanooga, Tenn.			1	66			1	66
St. Louis, Mo.			3	208	10	283	13	491
Kansas City, Mo.			1	33	2	35	3	68
Des Moines, Iowa	1	207	1	98	1	16	3	321
Dubuque, Iowa					1	18	1	18
St. Paul, Minn.					4	219	4	219
Evansville, Ind.					1	26	1	26
Cincinnati, Ohio					1	30	1	30
Pittsburgh, Pa.			2	197	2	94	4	291
Burlington, Vt.			1	146	5	154	6	300
Plattsburg, N. Y.			1	61	1	42	2	103

## No. 26.—CLASS, NUMBER, AND GROSS TONNAGE OF DOCUMENTED YACHTS OF THE UNITED STATES, BY PORTS, JUNE 30, 1917—Continued.

Port at which documented.	Sailing yachts.		Steam yachts.		Gas yachts.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Rouses Point, N. Y.			1	21	1	201	2	222
Ogdensburg, N. Y.			2	69	1	79	3	148
Cape Vincent, N. Y.	13	1,260	20	1,042	7	161	40	2,463
Oswego, N. Y.	1	15	3	124	1	26	5	165
Rochester, N. Y.	1	6	1	131	3	110	5	247
Buffalo, N. Y.	2	40	4	397	7	312	13	749
Erie, Pa.	1	160			1	17	2	177
Cleveland, Ohio.	1	75			9	480	10	555
Sandusky, Ohio.					2	51	2	51
Toledo, Ohio.			1	339	1	54	2	393
Detroit, Mich.	4	203	11	2,510	33	1,079	48	3,792
Port Huron, Mich.			2	266	1	37	3	303
Marquette, Mich.	1	7	4	173	3	149	8	329
Grand Haven, Mich.					8	195	8	195
Chicago, Ill.	4	91	7	1,172	45	1,732	56	2,995
Milwaukee, Wis.			6	246	26	755	32	1,001
Duluth, Minn.					5	241	5	241
San Diego, Cal.					3	54	3	54
Los Angeles, Cal.	2	41	3	487	14	573	19	1,101
San Francisco, Cal.	3	132	1	128	9	587	13	847
Portland, Oreg.					2	71	2	71
Seattle, Wash.	3	61	2	134	46	1,170	51	1,365
Honolulu, Hawaii.					2	47	2	47
Total.	198	9,802	249	40,545	1,109	42,369	1,556	92,716

## RECAPITULATION OF YACHTS, BY DOCUMENTS.

Documents.	Sailing yachts.		Steam yachts.		Gas yachts.		House boats.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Enrolled.	127	7,134	225	39,932	691	33,936	21	1,804	1,064	82,806
Licensed.	50	864	24	613	418	8,433			492	9,910
Total.	177	7,998	249	40,545	1,109	42,369	21	1,804	1,556	92,716

## No. 27.—CLASS, NUMBER, AND GROSS TONNAGE OF DOCUMENTED METAL YACHTS OF THE UNITED STATES, BY PORTS, JUNE 30, 1917.

[These yachts are included in statement No. 26.]

Port at which documented.	Sailing yachts.		Steam yachts.		Gas yachts.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Bangor, Me.			1	192			1	192
Portland, Me.	1	62			2	110	1	62
Marblehead, Mass.							2	110
Boston, Mass.	4	616	4	1,298	6	694	14	2,608
New Bedford, Mass.	1	27	1	141			2	168
Providence, R. I.			2	587			2	587
Newport, R. I.			1	173	1	125	2	298
New London, Conn.	1	206	2	337			3	543
Hartford, Conn.					1	115	1	115
New York, N. Y.	13	1,538	62	22,578	18	2,419	93	26,535
Philadelphia, Pa.	3	393	4	702	3	351	10	1,446
Wilmington, Del.			3	580	2	205	5	785
Baltimore, Md.			3	579			3	579
Washington, D. C.			2	197	1	20	3	217
New Orleans, La.					1	66	1	66
Port Arthur, Tex.			1	233			1	233
Galveston, Tex.					1	114	1	114
St. Louis, Mo.					1	39	1	39
Kansas City, Mo.			1	33			1	33
St. Paul, Minn.					1	62	1	62
Burlington, Vt.			1	146			1	146
Plattsburg, N. Y.					1	42	1	42
Cape Vincent, N. Y.			1	135			1	135
Rochester, N. Y.			1	131			1	131
Buffalo, N. Y.			3	362	1	123	4	485
Cleveland, Ohio.	1	75			2	322	3	397
Toledo, Ohio.			1	339			1	339
Detroit, Mich.			6	2,313	1	141	7	2,454
Port Huron, Mich.			2	266			2	266
Marquette, Mich.			1	32			1	32
Chicago, Ill.			4	808	3	133	7	941
Los Angeles, Cal.			1	299			1	299
San Francisco, Cal.	1	75	1	128	1	53	3	256
Seattle, Wash.			1	102			1	102
Total.	25	2,992	110	32,691	47	5,134	182	40,817

No. 28.—CLASS, NUMBER, AND GROSS TONNAGE OF YACHTS BUILT IN THE UNITED STATES AND DOCUMENTED DURING YEAR ENDED JUNE 30, 1917, BY CUSTOMS DISTRICTS.

[These yachts are not included in statements Nos. 8 and 9 or 18 to 21, inclusive.]

Port at which built.	Sailing yachts.		Steam yachts.		Gas yachts.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Belfast, Me.					2	40	2	40
Rockland, Me.					1	41	1	41
Boothbay, Me.					2	44	2	44
Marblehead, Mass.					2	190	2	190
Boston, Mass.					10	616	10	616
Barnstable, Mass.					1	12	1	12
Providence, R. I.	2	44	1	75	4	219	7	338
Bridgeport, Conn.					3	133	3	133
New York, N. Y.					27	1,327	27	1,327
Perth Amboy, N. J.					1	34	1	34
Philadelphia, Pa.					17	862	17	862
Wilmington, Del.			1	872	1	82	2	954
Crisfield, Md.					3	122	3	122
Washington, N. C.					1	49	1	49
Tampa, Fla.					2	102	2	102
Gulfport, Miss.					1	28	1	28
New Orleans, La.					6	302	6	302
St. Louis, Mo.					1	29	1	29
Buffalo, N. Y.					1	19	1	19
Sandusky, Ohio.					6	173	6	173
Detroit, Mich.					2	36	2	36
Port Huron, Mich.					2	78	2	78
Chicago, Ill.					3	64	3	64
Milwaukee, Wis.					2	65	2	65
Los Angeles, Cal.					1	33	1	33
San Francisco, Cal.					2	52	2	52
Seattle, Wash.					1	15	1	15
Honolulu, Hawaii.					1	26	1	26
Total.....	2	44	2	947	106	4,793	110	5,784

No. 29.—CLASS, NUMBER, AND GROSS TONNAGE OF METAL YACHTS BUILT IN THE UNITED STATES AND DOCUMENTED DURING YEAR ENDED JUNE 30, 1917, BY PORTS.

[These yachts are included in statement No. 28.]

Port.	Sailing yachts.		Steam yachts.		Gas yachts.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Boston, Mass.					1	204	1	204
Providence, R. I.					1	128	1	128
New York, N. Y.			1	872	2	447	2	447
Wilmington, Del.					1	82	1	954
New Orleans, La.					1	142	1	142
Total.....			1	872	6	1,003	7	1,875

No. 30.—CLASS, NUMBER, AND GROSS TONNAGE OF DOCUMENTED YACHTS LOST, ABANDONED, SOLD TO ALIENS, ETC., YEAR ENDED JUNE 30, 1917.

[These yachts are not included in statements Nos. 8 and 9.]

	Sailing yachts.		Steam yachts.		Gas yachts.		House boats.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Lost.....			1	16	6	139	1	214	7	155
Abandoned.....	7	406	6	240	16	440			30	1,300
Sold to aliens.....			14	4,662	8	333	1	17	23	5,012
Sold to United States.....			11	2,805	40	1,698			51	4,503
Exempt, under 16 tons.....					4	56			4	56
Exempt, used in harbor only.....							2	257	2	257
Total.....	7	406	32	7,723	74	2,666	4	488	117	11,283

