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ANNUAL REPORT

OF THE

COMMISSIONER OF NAVIGATION

TO THE

SECRETARY OF COMMERCE

FOR THE

FISCAL YEAR ENDED JUNE 30, 1919

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919

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CONTENTS.

	Page.
General conditions	7
American shipping growth since 1914	8
American seagoing ships	9
Origins of this fleet	9
Size of ocean steamers	10
World's shipping, 1914–1919	11
Growth of American shipbuilding	13
Monthly output	15
World's shipbuilding, 1911–1918	16
Current shipbuilding	17
Shipping losses	18
Activity of shipping	20
Activity of British shipping	22
Coal and oil	23
Administrative situation	24
Radio communication	25
Tonnage measurement	25
Loadlines	26
Bulkheads	26
Statistics for the year	27
Summary, ships of 1,000 tons or over built since 1915	29
Shipping commissioners	29
Men shipped and discharged	31
Nationality of crew	31
Desertion of seamen	32
Allotment notes	33
Wages of seamen	33
Navigation receipts	33
Radio communication	34
Current conditions	35
Cost of radio service since 1915	36
Increase in radio communication	36
Summary of work by districts for past year	38
Enforcement of the navigation laws	39
Prevention of overcrowding of passenger vessels	42
Numbering of motor boats	43
Inspection vessels	43
Passenger act of 1882	44
Recognition of heroism	44

APPENDIXES.

A. Reports of shipping commissioners	45
1. Shipments, discharges, and expenditures	45
2. Shipments and reshipments of seamen	46
3. Discharges	46
4. Nationality of seamen	47
5. Failures to join	49
6. Men shipped to be discharged in foreign ports	49
7. Allotments of wages	50
8. Seamen shipped and discharged by collectors	50
B. Wages of seamen	51
1. Average monthly wages paid in the American merchant marine for the year ended June 30, 1919	52
2. Average monthly wages paid to able seamen on American vessels, 1895–1919	58
3. Average monthly wages paid to first mates on American vessels, 1895–1919	66
4. Average monthly wages paid to firemen and first engineers on American steam vessels, 1895–1919	74
5. Shipping Board scale of wages	80
6. British wage tables at principal ports of the United Kingdom	88

Page.

D. Tonnage tax—Law and collections 93
1. Tonnage tax collections, 1884–1919 94
2. Tonnage tax collected, fiscal year ended June 30, 1919, by customs districts 94
3. Tonnage tax collected, fiscal year ended June 30, 1919, by nationality of vessels 95
4. Tonnage tax collected, fiscal year ended June 30, 1919, by countries from which the vessels entered 96
E. Steel-shipbuilding in the United States 98
F. The world's tonnage, motive power, and materials of construction 101
1. Report of the British Board of Trade 101
2. Report of the Bureau Veritas 103
3. Report of Lloyd's Register, world's shipping in 1919 and for comparison in 1914 104
4. Motive power and materials of construction of the world's merchant marine (Lloyd's) 110
5. Tonnage for a period of years, with potential tonnage (Bureau Veritas) 116
6. Vessels of over 100 tons built during 10 recent years 117
Size of ocean steamers 119
7. Summary of the world's shipbuilding for 1918 120
8. Construction in progress June 30, 1919 (Lloyd's) 126
9. Vessels lost or broken up during 1914 (Lloyd's) 129
G. Progress of British, German, and Japanese shipping 133
1. Progress of British shipping 133
2. Progress of German shipping 139
3. Progress of Japanese shipping 140
H. Square-rigged American vessels on June 30, 1919 142
I. Foreign-built vessels admitted to American registry during the year ended June 30, 1919 145
J. War losses 146
K. Miscellaneous 151
1. Foreign carrying trade of the United States, 1821–1919 151
2. Tonnage of American and foreign vessels entered and cleared in the foreign trade, 1821–1919 154
3. Imports and exports of the United States, by vessels, 1915–1918 156
4. Imports and exports of the United States by water during the years 1915–1919 157
5. Activity of British shipping 158
6. Statement of American vessels sold to aliens, June 30, 1919 159
7. Vessels of 500 gross tons and over adapted for merchant service transferred to the Navy or the War Department since Apr. 6, 1917 161

STATISTICAL TABLES.

1. Documented vessels, by customs districts and ports, on June 30, 1919 163
2. Summary of Table 1, by States 166
3. Documented steam and gas vessels, by customs districts and ports, on June 30, 1919 167
4. Documented metal vessels, by customs districts and ports, on June 30, 1919 172
5. Documented steam and gas metal vessels, by customs districts and ports, on June 30, 1919 174
6. Documented metal sail, steam, and gas vessels, by customs districts and ports, on June 30, 1919 178
7. Total number, by classes, of documented wooden and metal vessels, on June 30, 1919 180
8. Balance sheet showing increase and decrease of documented vessels, June 30, 1919 180
9. Balance sheet showing increase and decrease in each class of vessels, June 30, 1919 181
10. Documented sail and steam vessels, by years, 1789–1919 182
10a. Documented canal boats and barges, by years, 1868–1919 186
10b. Number and gross tonnage of documented sail vessels, steam vessels, canal boats, and barges on the northern lakes, 1868–1919 187
11. Sail, steam, and gas vessels, canal boats, and barges, by customs districts and ports, on June 30, 1919 188
12. Summary of Table 11, by States 193

Page.
13. Size of sail, steam, and gas vessels, by coasts, on June 30, 1919..... 194
14. Sail, steam, and gas vessels in cod and mackerel fisheries on June 30, 1918.. 195
15. Sail, steam, and gas vessels in whale fisheries on June 30, 1919..... 195
16. Vessels in foreign, coasting, and fishing trades, by years, 1789–1919..... 196
17. Employment of tonnage on June 30, 1919..... 200
18. Construction of sail, steam, and gas vessels, canal boats, and barges, by customs districts and ports, during year ended June 30, 1919..... 201
19. Rig of sail vessels, by coasts, built during year ended June 30, 1919..... 203
20. River, lake, and ocean steam and gas vessels, by coasts, built during year ended June 30, 1919..... 203
21. Metal vessels (sail, steam, gas, barges) built during year ended June 30, 1919..... 204
22. Metal sail, steam, and gas vessels and barges built, by years, 1838–1919.... 204
23. Sail and steam vessels, canal boats, and barges built, by years, 1797–1919.. 206
24. Tonnage built annually on the seaboard, western rivers, and Great Lakes, by years, 1857–1919..... 209
25. Vessels built, captured, admitted to registry by acts of Congress, lost, abandoned, and sold to aliens since 1812..... 211
26. Yachts (documented) on June 30, 1919..... 214
27. Yachts (documented), metal, June 30, 1919..... 214
28. Yachts (documented), built during the year ended June 30, 1919..... 216
29. Yachts lost, abandoned, and sold to aliens during year ended June 30, 1919. 216

REPORT

OF THE

COMMISSIONER OF NAVIGATION.

DEPARTMENT OF COMMERCE,
BUREAU OF NAVIGATION,
Washington, September 15, 1919.

SIR: I have the honor to submit herewith my annual report for the fiscal year ended June 30, 1919.

GENERAL CONDITIONS.

The first four and one-third months of the fiscal year up to the armistice of November 11, 1918, with the three immediately preceding months, was the period of our greatest effort to win the war. All our ships structurally available for military purposes were so employed; they were officered and manned by the commissioned officers and enlisted men of the Navy rather than by merchant crews; our shipyards were turning out tonnage as rapidly as possible to win the war, with the purposes of trade only remotely in view or not at all; and civil authority and commercial considerations were in all phases of maritime affairs subordinated to military exigencies. The momentum thus acquired in these directions could not be checked at once by the armistice, and, of course, should not have been; but the machinery was swung around to bring back to the United States as rapidly as possible the millions comprising our forces in Europe. Though this task was accomplished with remarkable expedition and success, it consumed, nevertheless, practically the rest of the fiscal year, and the movement of supplies for those at whose side we fought took the place, to an extent, of the movement of supplies for our armies abroad. During the fiscal year covered by this report the largest and most important part of our merchant marine was not an instrument of commerce, but a weapon of war. The extent of our maritime effort since 1917, culminating, but not ceasing, with this year's victory, may be measured by the fact that the sums Congress authorized the Shipping Board to expend have been greater than the book value of all the merchant tonnage of the world before the outbreak of the war in 1914. These general observations are made at the outset for the reason that they qualify nearly all the statements in the following pages and serve to make clearer much that would otherwise call for repeated qualification and explanation.

AMERICAN SHIPPING GROWTH SINCE 1914.

It is opportune to show, first, what changes have taken place year by year since 1914 in our merchant shipping under register for the foreign trade and under enrollment and license for the coasting trade and fisheries, giving the gross tonnage (100 cubic feet of closed-in space equaling a gross ton) on June 30 for each year:

June 30—	Foreign trade.	Coasting trade.		Total.
		Great Lakes.	Sea and river.	
1914	1,076,152	2,882,922	3,969,614	7,928,688
1915	1,871,543	2,818,000	3,699,886	8,389,429
1916	2,191,715	2,760,815	3,517,119	8,469,649
1917	2,446,399	2,769,824	3,654,814	8,871,037
1918	3,603,706	2,708,523	3,612,289	9,924,518
1919	6,669,723	2,635,680	3,601,894	12,907,300

American shipping registered for foreign trade is over 600 per cent of the corresponding tonnage in 1914, while in each branch of the coasting trade the decline has been nearly 10 per cent, because the shipping of the Great Lakes and of the coasting trade along the seaboard was drawn upon heavily to meet war needs. With the return of normal times such ships will be restored to the trades for which they were designed; furthermore, much of the shipping built in the United States with public funds is adapted to the shorter voyages of the home trade and will find there its opportunities. The decline of tonnage in all branches of the coasting trade will be more than made good during the coming year, and should thus reduce the pressure on our railway systems and become a factor in restoring more normal conditions of life.

Many of the most useful ocean steamers employed from our entry into the war in transporting troops, supplies, and munitions across the Atlantic were withdrawn from our coasting trade and may continue in the foreign trade, which offers at present greater profit than the domestic trade.

Under authority already vested in the Secretary of Commerce and under other authority later bestowed also upon the Shipping Board, foreign ships have engaged to a slight extent in the coasting trade, and, to help meet the demands for food, foreign vessels were permitted to engage also in the fisheries.

The tonnage of shipping registered for the foreign trade just stated can not all remain in that column, because many of the ships comprised in it are too small to engage profitably in that trade, and for that reason, and others, part of it has not, in fact, been so employed. Any subtraction on this account, however, even now can be made good by the return to trade of a considerable number of large steamships, particularly the largest of the seized German ships, which have been employed as Army transports, operated by the Navy and not under the register granted to ships in trade. On June 30, 1919, these ships numbered 45 of 400,000 gross tons. (See Appendix K.) The Army transport service will have to be maintained at least during the current year, and only part of this tonnage, to be determined by Congress, will become available for commercial purposes.

AMERICAN SEAGOING SHIPS.

In these five years our merchant shipping has increased 5,000,000 gross tons, and the increase has been wholly in seagoing vessels of 1,000 gross tons or over. The table below shows the number and gross tons of seagoing vessels of 1,000 gross tons or over of the several types on June 30 at the end of each fiscal year (except 1915) and also on September 30, 1919, showing the current rate of progress. Sailing tonnage has been virtually stationary, the increase in seagoing wooden steamers from[a] 8 of 10,595 gross tons on June 30, 1914, to 293 of 693,541 gross tons on June 30, this year, is to be regarded more as a sacrifice in the effort to put forth all our resources than as a permanent addition to our commercial fleet. The substantial addition has been in steel steamers, of which the tonnage is fourfold greater than in 1914.

June 30—	Sailing and schooner barges, wood and steel.		Steam and gas vessels.				Total.	
			Wood.		Steel.			
	No.	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
1914	318	528,403	8	10,595	429	1,589,733	755	2,128,731
1916	315	523,204	13	17,799	601	2,354,557	929	2,895,560
1917	327	538,196	41	58,895	660	2,696,368	1,028	3,293,459
1918	315	518,216	91	161,425	874	3,627,251	1,280	4,306,892
1919	329	533,580	293	693,541	1,436	6,072,901	2,058	7,300,022
1919, Sept. 30	350	558,835	360	876,811	1,628	7,051,449	2,334	8,487,095

ORIGINS OF THE FLEET.

The seagoing fleet of ships of 1,000 gross tons or over as it existed on June 30, 1919, was of several distinct origins. It included ships under the flag before the war and still remaining on the register on the date named, aggregating 1,698,750 gross tons; foreign built ships admitted to registry under the ship-registry act of 1914 and remaining on the register, 658,115 gross tons; also 11,580 gross tons of foreign-built wrecks admitted to register. The seized former German ships, so far as registered, aggregated only 248,406 gross tons, the larger portion, not included, being in the Army transport service. The remainder of the fleet were ships built in the United States during the fiscal years beginning July 1, 1914. The ships built include those built for private owners before June, 1917, when Congress made the first of its great appropriations for the Shipping Board, and those building for or ordered by American and foreign owners requisitioned and retained by the Shipping Board which appear in the statement of those built since June 30, 1917. Included in these are 66 of 301,112 gross tons for American owners, 135 of 520,663 gross tons for British owners, 26 of 120,633 gross tons for French owners, 28 of 121,836 gross tons for Norwegians, 3 of 15,371 gross tons for Italians, 4 of 10,686 gross tons for Danes, and 2 of 10,270 gross tons for Russians.

Out of the 7,300,022 gross tons, accordingly, only 2,616,851 gross tons, slightly more than one-third, were built before 1914. Of the remainder, as indicated, 1,110,571 gross tons were building or under

[a] These figures were increased to 19 vessels of 26,121 gross tons on June 30, 1919, due chiefly to transfers from the Great Lakes and the rebuilding and enlarging of vessels previously measuring less than 1,000 tons.

contract in 1917 for American or foreign owners according to their plans, though completed under war conditions in the United States, so that, broadly speaking, half the larger seagoing tonnage under the flag on June 30, 1919, had a more or less substantial commercial basis. The balance of the fleet, all new ships built from Government design under Government direction and wholly with public funds, represents our effort to win the war so far as recorded on the registry books of the customhouse. Following are details:

Sources of tonnage now in lists.	Sailing vessels and schooner barges, wood and steel.		Steam and gas vessels.				Total.	
			Wood.		Steel.			
	No.	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
In fleet of June 30, 1914	210	347,959	19	26,121	372	1,324,670	601	1,698,750
Admitted from foreign flags:								
British	11	20,857	.....	.....	58	246,103	69	266,960
German	.....	.....	.....	.....	25	130,350	25	130,350
Japanese	.....	.....	.....	.....	16	89,772	16	89,772
Austrian	.....	.....	.....	.....	14	56,930	14	56,930
Dutch	.....	.....	.....	.....	6	26,577	6	26,577
Cuban	.....	.....	.....	.....	7	21,173	7	21,173
Danish	.....	.....	.....	.....	3	10,805	3	10,805
Chilean	3	5,832	.....	.....	1	4,725	4	10,557
Norwegian	.....	.....	.....	.....	2	8,188	2	8,188
French	.....	.....	.....	.....	2	6,595	2	6,595
All other flags	3	4,484	.....	.....	9	25,724	12	30,208
Repaired foreign wrecks, act Feb. 24, 1915	6	8,728	.....	.....	1	2,852	7	11,580
Seized German vessels	7	15,795	.....	.....	44	232,611	51	248,406
Built year ended June 30—								
1915	.....	.....	.....	.....	12	62,222	12	62,222
1916	6	9,495	2	3,063	34	170,942	42	183,500
1917	15	22,288	18	26,047	61	317,436	94	365,771
1918	33	46,510	47	91,623	190	852,916	270	991,049
1919	35	51,632	207	546,687	579	2,482,310	821	3,080,629
Total	329	533,580	293	693,541	1,436	6,072,901	2,058	7,300,022

SIZE OF OCEAN STEAMERS.

The ocean steamers included in the table above number 1,729 of 6,766,442 gross tons, of which 1,436 of 6,072,901 gross tons are steel and 293 of 693,541 gross tons are wood. The steel steamers are of the following gross tonnages:

Gross tons.	No.	Total tons.	Gross tons.	No.	Total tons.
1,000–2,000	112	186,069	8,000– 9,000	26	217,468
2,000–3,000	474	1,153,093	9,000–10,000	3	28,392
3,000–4,000	180	627,336	10,000–11,000	18	186,797
4,000–5,000	133	609,897	11,000–12,000	1	11,440
5,000–6,000	215	1,192,207	12,000–13,000	2	24,463
6,000–7,000	208	1,324,640	13,000–14,000	3	40,608
7,000–8,000	60	449,979	20,000 and over	1	20,602

The wooden ocean steamers are of the following tonnages:

Gross tons.	No.	Total tons.
1,000–2,000	74	110,457
2,000–3,000	178	455,978
3,000–4,000	41	127,106

WORLD'S SHIPPING, 1914–1919.

The preceding tables are meant to show more important changes in American merchant shipping, especially in ocean steamers, by which over 90 per cent of the world's foreign commerce by sea is carried, wrought between June, 1914, and June, 1919, by nearly five years of war. The changes which have taken place in the fleets of the rest of the world affect materially the consideration of most questions relating to our own ships. The best available returns of the world's shipping for the periods named are those of Lloyds' Register, which include ships of 100 gross tons or over, including those launched, but not yet registered. The following is the summary in round numbers [a] of Lloyds' returns of steam vessels of the several nations on June 30, 1914 and 1919, with losses or gains, respectively:

Country.	June, 1914.	June, 1919.	Increase (+) or decrease (−).
	Gross tons.	*Gross tons.*	*Gross tons.*
United Kingdom	18,892,000	16,345,000	−2,547,000
British Dominions	1,632,000	1,863,000	+ 231,000
United States:			
Seagoing	2,027,000	9,773,000	+7,746,000
Great Lakes	2,260,000	2,160,000	− 100,000
Austria-Hungary	1,052,000	713,000	− 339,000
Denmark	770,000	631,000	− 139,000
France	1,922,000	1,962,000	+ 40,000
Germany	5,135,000	3,247,000	−1,888,000
Greece	821,000	291,000	− 530,000
Holland	1,472,000	1,574,000	+ 102,000
Italy	1,430,000	1,238,000	− 192,000
Japan	1,708,000	2,325,000	+ 617,000
Norway	1,957,000	1,597,000	− 360,000
Spain	884,000	709,000	− 175,000
Sweden	1,015,000	917,000	− 98,000
Other countries	2,427,000	2,552,000	+ 125,000
Total steam tonnage	45,404,000	47,897,000	+2,493,000
Sail tonnage (net)	3,686,000	3,022,000	− 664,000
Grand total	49,090,000	50,919,000	+1,829,000

It will be noted that the total tonnage of seagoing American steamers is much larger than the totals given in the earlier statements in this report or statements in detail in later pages. This difference is due to the fact that merchant vessels of the United States are not included in the returns of the Bureau of Navigation until they have received at the customhouses registers or enrollments entitling them to engage in trade. They come within Federal jurisdiction, and they remain under that jurisdiction by virtue of those documents. The great tonnage employed as Army transports, as has been stated, is not included in the returns of this Bureau, but finds an appropriate place in Lloyds' figures. Lloyds' returns include many ships launched, but not ready for registry, or not registered, while the returns of the Bureau of Navigation include only ships lawfully qualified for trade.

The ratification and execution of the treaty of peace by which Germany in reparation for submarine warfare surrenders all her former ships over 1,600 gross tons and from one-half to one-fourth of smaller ships will reduce to about 700,000 gross tons the 3,247,000 tons

[a] For ful ldetails ,see Appendix F.

assigned to Germany in the table and will increase correspondingly the tonnage of the allied nations, and the same is true of the 713,000 tons assigned to Austria-Hungary.

The net losses of Europe in steamers are 4,000,000 gross tons, excluding German and Austrian losses, which are mainly due to capture and transfer to the American and allied flags under which they have contributed to gains. In America we gave most thought, naturally, to submarine assaults on the great ocean liners, many of which we knew, but the bulk of the European war losses were of the smaller ships, with which the trade by sea between European countries is conducted. These ships were almost constantly subject to attack. A glance at the map will show the great geographical difference between the sea trade between European countries and that of the Americas. Europe in all directions is deeply penetrated by arms of the sea—the Baltic and North Seas, and the Mediterranean, Adriatic, Aegean, and Black Seas. These give to the salt-water foreign trade of densely populated countries of Europe an importance not always appreciated, and they determine, too, the types of ships required, for the voyages are relatively short and frequent, and smaller ships are at an advantage in such trades. The longer voyages of the foreign trade and even of the coasting trade of America require larger ships. It is a mistake, therefore, to condemn as wholly wasteful the construction of smaller ships—say, under 3,000 gross tons—in this country during the war. While they are not as well adapted to our own trade as larger ships, they are of the tonnage with which the trades of the several seas which penetrate Europe are usually conducted and in the proper places may be serviceable, especially in the near future. The merchant marine of a country is not to be judged by its total gross tonnage alone, but by its adaptability to the country's needs, and one of the sources of Britain's commercial importance has been the willingness of her shipowners to dispose of ships which on account of size, age, or other factors had ceased to become the most efficient instruments of commerce and to build newer, larger, and better ships. Broadly speaking, the geographical reasons which suggest smaller ships for much of the trade of the Eastern Hemisphere and larger ships for the Western, point to tramp management for the former and liner management for the latter. Just as agriculture in Europe takes the form of intensive cultivation of small areas and with us the form of cultivation of large areas by machinery, so in shipping we are likely to do better through the organization of large corporations and large fleets rather than by undertaking the tramp line of business with many smaller companies.

The absolute and relative increase of American tonnage, it is repeated, is the gratifying evidence of our determination to help win the war, in its way as noteworthy as was the raising and transportation of our armies to Europe, but in neither case were commercial considerations involved and in neither case were commercial results obtained. A considerable part of the tonnage now under the flag is not a source of maritime strength to us, but, if treated as our general business good sense would treat an analogous matter ashore, such tonnage may be so disposed as to add to the world's comfort and wealth, in which we shall share.

GROWTH OF AMERICAN SHIPBUILDING.

Up to the outbreak of the war the largest annual output of American shipyards was 1,457 vessels of 614,216 gross tons during the fiscal year ended June 30, 1908, of which 216 of 341,165 gross tons were built on the Great Lakes. The largest recent annual output of the seaboard yards had been 291,516 gross tons in 1901. Two-thirds of the seagoing tonnage now under the American flag have been built since 1914, while of the tonnage now under foreign flags more than two-thirds was built before 1914. At first blush these facts would seem to give our present fleets a greater advantage than even the tonnage figures alone indicate, but we shall fare better in the future if we face at once facts as they stand. Of necessity, during the war the main object sought was the construction of the largest amount of tonnage in the shortest possible time. To accomplish this result all ordinary commercial considerations had to yield place. Usually ships are built in the United States with a view to their employment in particular trades, and, while this adds to cost and time of construction, it has made our ships hitherto especially long-lived. Our war construction was confined to cargo boats of a few types, and of each the maximum output was sought. In taking an account of stock now we find, as was anticipated, that we have more of some types than our commerce requires and less of others. Our greatest advantage lies in the fact that many of our new ships use oil as fuel.

Again, it is at least a question whether the fabricated ship, so called, the ship of which the elements are manufactured in the steel plants and then assembled in the shipyard, are not, from their simpler construction handicapped through life by inability to carry the full cargoes of ships constructed in the usual manner. The great speed with which some of our ships were built, or put together, helped to win the war; but it tells, of course, against careful and durable construction and has, in fact, already given to repairs a larger place in marine economy and finance than has been usual with American ships. The number of shipyard employees could not have been increased about tenfold in five years, and the output increased virtually twentyfold without lowering somewhat American standards of construction. These matters were the necessary incidents of war, and they are considered only for their bearing on a fair appreciation of our maritime resources. On the other hand, it should be borne in mind that two-thirds of the shipping of European countries was built five years or more ago, and it has undergone not merely five years of ordinary wear, tear, and depreciation, but five years of the severest strain, of almost constant employment, with little or no opportunity for repairs and overhaul at regular intervals, with little of the usual care which the prudent and successful shipowner bestows constantly upon his fleet, and much of it still is bearing the scars of conflict.

During the fiscal year ended June 30, 1915, the total output of American shipyards was only 1,157 vessels of 225,122 gross tons, the smallest in 17 years, and of this total only 23 were over 1,000 gross tons, aggregating 127,844 gross tons. In the fiscal year ended June 30, 1916, the total was only 1,030 vessels of 347,147 gross tons. During the 12 months ended April, 1917, when we entered the war, we had built 683,725 gross tons of shipping, which was a record output, and during April itself 79,045 gross tons. Near the end of

that month the British war mission headed by Mr. Balfour and the French war mission headed by Mr. Viviani and Gen. Joffre visited Washington and, with other suggestions, expressed the hope that the United States could increase to 400,000 gross tons monthly its output of merchant ships, or at the rate of 4,800,000 gross tons a year. The full force of this request will appear when it is recalled that the world's largest previous output of ships launched was 3,332,882 gross tons in 1913.

The two following tables will show the progress made toward attaining the end desired by our allies.

The plainest way, perhaps, to show that progress, is to state the output for 12-month periods ending with each successive month for the period starting with June 30, 1916. The following statement in that form includes ships built in the United States for foreign owners which early in 1917 were becoming an important factor. The date in the ship's life chosen for the record is the date of the award of its official number, following some time after the launching, but in ordinary times shortly preceding the issue of the register. The rate of construction increased so rapidly during the war and delays in machinery were so frequent that awards for last year outstripped the registers by half a million tons.

Month.	Seagoing.						Grand total, including nonseagoing.	
	Steel.		Wood.		Total.			
1916.	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*
June							1,030	347,147
July							1,012	361,313
August							1,042	398,671
September							1,057	424,058
October							1,086	476,922
November							1,124	537,683
December							1,179	555,262
1917.								
January							1,230	602,449
February							1,258	606,891
March							1,314	630,508
April							1,367	683,725
May							1,445	713,071
June	114	468,502	80	131,449	194	599,951	1,546	812,659
July	124	513,567	84	143,778	208	657,345	1,630	871,080
August	128	537,804	93	152,765	221	690,569	1,681	904,354
September	132	547,325	100	162,646	232	709,971	1,688	942,516
October	130	553,975	115	184,287	245	738,262	1,693	962,969
November	129	538,206	123	192,515	252	730,721	1,701	949,601
December	142	605,738	137	211,830	279	817,568	1,699	1,034,296
1918.								
January	144	607,404	137	211,626	281	819,030	1,657	1,025,496
February	157	682,867	146	222,723	303	905,590	1,669	1,106,093
March	180	759,354	153	238,051	333	997,405	1,670	1,194,127
April	203	845,338	157	236,498	360	1,081,836	1,668	1,278,132
May	232	966,850	151	219,947	383	1,186,797	1,661	1,381,369
June	252	1,031,976	158	215,716	410	1,247,692	1,622	1,430,793
July	275	1,124,066	189	274,330	464	1,398,396	1,610	1,571,572
August	315	1,268,452	214	354,172	529	1,622,624	1,612	1,781,379
September	352	1,411,144	256	465,327	608	1,876,471	1,681	2,013,264
October	396	1,594,927	287	546,613	683	2,141,540	1,760	2,280,111
November	437	1,771,560	331	657,487	768	2,429,047	1,814	2,560,503
December	460	1,861,321	361	735,705	821	2,597,026	1,882	2,721,281
1919.								
January	490	1,982,372	392	810,194	882	2,792,566	1,957	2,920,832
February	520	2,094,236	404	850,415	924	2,944,651	2,008	3,074,661
March	538	2,178,939	436	916,037	974	3,094,976	2,056	3,225,521
April	582	2,364,479	451	947,117	1,033	3,311,596	2,092	3,438,076
May	626	2,558,249	458	965,643	1,084	3,523,892	2,157	3,639,020
June	656	2,725,196	481	1,021,020	1,137	3,746,216	2,241	3,860,484
July	691	2,908,309	476	1,004,072	1,167	3,912,381	2,293	4,028,181
August	728	3,117,735	462	948,206	1,190	4,065,941	2,354	4,187,670

MONTHLY OUTPUT.

For the permanent record the monthly output of ships built and officially numbered and those built for foreigners is stated below for the past three fiscal years; the monthly output of 400,000 gross tons requested in May, 1917, was, in fact, attained within two years, and is temporarily the current rate of construction.

Month.	Seagoing.						Nonseagoing.		Grand total.	
	Steel.		Wood.		Total.					
1916.	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*
July	4	9,826	3	1,784	7	11,610	114	19,121	121	30,731
August	5	22,479	5	3,168	10	25,647	114	27,121	124	52,768
September	5	25,552	5	2,632	10	28,184	84	10,239	94	38,423
October	15	37,770	7	14,238	22	52,008	95	18,224	117	70,232
November	20	66,429	3	2,644	23	69,073	86	21,563	109	90,636
December	4	18,385	2	1,296	6	19,681	81	18,205	87	37,886
Total	53	180,441	25	25,762	78	206,203	574	114,473	652	320,676
1917.										
January	10	52,082	6	6,672	16	58,754	83	14,841	99	73,595
February	4	18,779	5	6,777	9	25,556	63	11,448	72	37,004
March	6	38,553	5	5,448	11	44,001	126	15,110	137	59,111
April	8	44,653	11	22,570	19	67,223	148	11,822	167	79,045
May	11	36,086	19	33,004	30	69,090	162	22,137	192	91,227
June	22	97,908	9	31,216	31	129,124	196	22,877	227	152,001
Total	61	288,061	55	105,687	116	393,748	778	98,235	894	491,983
July	14	54,891	7	14,113	21	69,004	184	20,148	205	89,152
August	9	46,716	14	12,155	23	58,871	152	27,171	175	86,042
September	9	35,073	12	12,513	21	47,586	80	28,999	101	76,585
October	13	44,420	22	35,879	35	80,299	87	10,386	122	90,685
November	19	50,660	11	10,872	30	61,532	87	15,736	117	77,268
December	17	85,917	16	20,611	33	106,528	52	16,053	85	122,581
Total	81	317,677	82	106,143	163	423,820	642	118,493	805	542,313
Total, 1917	142	605,738	137	211,830	279	817,568	1,420	216,728	1,699	1,034,296
1918.										
January	12	53,748	6	6,468	18	60,216	39	4,579	57	64,795
February	17	94,242	14	17,874	31	112,116	53	5,485	84	117,601
March	29	115,040	12	20,776	41	135,816	97	11,329	138	147,145
April	31	130,637	15	21,017	46	151,654	119	11,396	165	163,050
May [a]	[a] 40	157,598	13	16,453	53	174,051	132	20,413	185	194,464
June	42	163,034	16	26,985	58	190,019	130	11,406	188	201,425
Total	171	714,299	76	109,573	247	823,872	570	64,608	817	888,480
July [b]	37	146,981	38	72,727	75	219,708	[b] 118	10,223	193	229,931
August	49	191,102	39	91,997	88	283,099	89	12,750	177	295,849
September	46	177,765	54	123,668	100	301,433	70	7,037	170	308,470
October	57	228,203	53	117,165	110	345,368	91	12,164	201	357,532
November [c]	60	227,293	55	121,746	115	349,039	[c] 56	8,621	171	357,660
December	40	175,678	46	98,829	86	274,507	67	8,852	153	283,359
Total	289	1,147,022	285	626,132	574	1,773,154	491	59,647	1,065	1,832,801
Total, 1918	460	1,861,321	361	735,705	821	2,597,026	1,061	124,255	1,882	2,721,281
1919.										
January [d]	42	174,799	37	80,957	79	255,756	[d] 53	8,590	132	264,346
February	47	206,106	26	58,095	73	264,201	62	7,229	135	271,430
March	47	199,743	44	86,398	91	286,141	95	11,864	186	298,005
April [e]	75	316,177	30	52,097	105	368,274	[e] 96	7,331	201	375,605
May [f]	[f] 84	351,368	20	34,979	104	386,347	146	9,061	250	395,408
June	72	329,981	39	82,362	111	412,343	161	10,546	272	422,889
Total	367	1,578,174	196	394,888	563	1,973,062	613	54,621	1,176	2,027,683
July [g]	72	330,094	33	55,779	105	385,873	[g] 140	11,755	245	397,628
August [h]	86	400,528	[h] 25	36,131	111	436,659	127	18,679	238	455,338

[a] Includes 1 concrete vessel of 3,427 gross tons.
[b] Includes 1 concrete vessel of 325 gross tons.
[c] Includes 1 concrete vessel of 11 gross tons.
[d] Includes 3 concrete vessels of 1,004 gross tons.
[e] Includes 2 concrete vessels of 588 gross tons.
[f] Includes 1 concrete vessel of 2,481 gross tons.
[g] Includes 3 concrete vessels of 909 gross tons.
[h] Includes 1 concrete vessel of 2,795 gross tons.

The preceding pages have presented some of the main phases of the development of American shipping and shipbuilding during the war, but one must not hastily conclude therefrom we were impotent on the sea before the war and that the initiative and enterprise of our people had done nothing until over three billions of dollars were voted by Congress for shipping, starting June, 1917. Before it we were the third, now we are the second, maritime power. The war has enabled us to change places with Germany. The development of steel shipbuilding in the United States on a commercial basis, supplemented by the usual orders for warships from 1900 to July 1, 1917, when the great appropriations of Congress for ships became available was satisfactory, though not phenomenal, as shown by the following table of steel ships building or ordered at the beginning of each fiscal year since 1900:

Date.	Merchant.						Government.		Total.	
	Great Lakes, etc.		Seaboard.		Total.					
	No.	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Tons.a*	*No.*	*Tons.*
Aug. 15, 1900	20	70,119	48	207,561	68	277,680	47	113,329	115	391,009
June 15, 1901	26	81,780	63	273,865	89	355,645	71	281,148	160	636,793
July 1, 1902	39	124,537	65	222,949	104	347,486	67	269,890	171	617,376
July 1, 1903	30	109,020	58	146,655	88	255,675	47	334,147	135	589,822
July 1, 1904	1	400	56	94,588	57	94,988	38	331,435	95	426,423
July 1, 1905	27	104,067	49	86,836	76	190,903	39	308,702	115	499,605
July 1, 1906	33	175,472	78	159,299	111	334,771	29	237,814	140	572,585
July 1, 1907	50	253,949	84	149,524	134	403,473	45	151,993	179	555,466
July 1, 1908	.....	.....	13	14,775	13	14,775	82	136,091	95	150,866
July 1, 1909	13	41,395	52	127,453	65	168,848	52	164,184	117	333,032
July 1, 1910	36	59,692	63	86,075	99	145,767	45	184,096	144	329,863
July 1, 1911	53	71,769	26	28,626	79	100,395	130	119,449	209	219,844
July 1, 1912	51	78,353	80	192,960	131	271,313	85	234,923	216	506,236
July 1, 1913	63	40,849	71	169,580	134	210,429	123	230,673	257	441,102
July 1, 1914	17	39,337	24	104,631	41	143,968	58	142,910	99	286,878
July 1, 1915	14	15,951	62	294,138	76	310,089	69	190,790	145	500,879
July 1, 1916	175	228,345	210	997,439	385	1,225,784	60	79,802	445	1,305,586
July 1, 1917	117	293,161	322	1,603,361	499	1,896,522	.....	.....	.....	.....

a Displacement.

WORLD'S SHIPBUILDING 1911–1918.

Just as with tonnage afloat, some comparison of the shipbuilding in other countries is necessary to place in proper perspective the progress of American shipbuilding. Lloyd's figures for ships of over 100 gross tons launched during a period of years afford the only satisfactory standard of comparison, and those issued in February, 1919, show the tonnage launched annually since 1911, by countries, the tonnage except for the United States and Canada being practically all steel, and sail tonnage being less than 4 per cent of the total.

Year.	United Kingdom.		Dominions.		Austria-Hungary.		Denmark.		France.		Germany.		Holland.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1911	772	1,803,844	62	19,662	16	37,836	18	18,689	79	125,472	154	255,532	113	93,050
1912	712	1,738,514	84	34,790	12	38,821	22	26,103	80	110,734	165	375,317	112	99,439
1913	688	1,932,153	91	48,339	17	61,757	31	40,932	89	176,095	162	465,226	95	104,296
1914	656	1,683,553	80	47,534	11	a34,335	25	32,815	33	114,052	89	a387,192	130	118,153
Total.	2,828	7,158,064	317	150,325	56	172,749	96	118,539	281	526,353	570	1,483,267	450	414,938
1915	327	650,919	31	22,014	....	.....	23	45,198	6	25,402	....	.....	120	113,075
1916	306	608,235	40	31,571	....	.....	28	35,277	9	42,752	....	.....	201	180,197
1917	286	1,162,896	105	94,471	....	.....	23	20,445	6	18,828	....	.....	146	148,779
1918	301	1,348,120	206	279,904	....	.....	13	26,150	3	13,715	....	.....	74	74,026
Total.	1,220	3,770,170	382	427,960	....	.....	87	127,070	24	100,697	....	.....	541	516,077

Year.	Italy.		Japan.		Norway.		Sweden.		United States.		Other countries.		World total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1911	14	17,401	109	44,359	71	35,435	11	9,427	142	171,569	38	17,864	1,599	2,650,140
1912	27	25,196	168	57,755	89	50,255	22	13,968	174	284,223	52	46,654	1,719	2,901,769
1913	38	50,356	152	64,664	74	50,637	25	18,524	205	276,448	83	43,455	1,750	3,332,882
1914	47	42,981	32	85,861	61	54,204	26	15,163	94	200,762	35	a 36,148	1,319	a2,852,753
Total..	126	135,934	461	252,639	295	190,531	84	57,082	615	933,002	208	144,121	6,387	11,737,544
1915	30	22,132	26	49,408	59	62,070	27	20,319	84	177,460	10	a 13,641	743	a1,201,638
1916	10	56,654	55	145,624	52	42,458	34	26,769	211	504,247	18	a 14,296	964	a1,688,080
1917	11	38,906	104	350,141	44	46,103	34	26,760	326	997,919	27	a 32,538	1,112	a2,937,786
1918	15	60,791	198	489,924	51	47,723	36	39,583	929	3,033,030	40	a 34,478	1,866	a5,447,444
Total..	66	178,483	383	1,035,097	206	198,554	131	113,431	1,550	4,712,656	95	94,953	4,685	11,274,948

a Returns not complete.

CURRENT SHIPBUILDING.

On July 1, 1917, American shipyards had under construction, or contracted for by owners other than the Government of the United States, 499 steel vessels of 1,896,522 gross tons, a prospective output equal to the average prewar output of British yards. Soon after that date the American Government, through the Shipping Board, virtually took control of the yards and their output, and for the past two years shipbuilding has been almost wholly an enterprise of this Government. The new fiscal year opens under substantially the same conditions, as the shipyards are almost wholly occupied with the completion of the remainder of the construction program of the Shipping Board, amounting to upward of 4,500,000 gross tons and covering the calendar year 1920. The details of this program, of course, are covered by the reports of the Shipping Board, but the following summary has been furnished:

Vessel.	Number.	Deadweight tons.	Approximate gross tons.
Steel ships	926	6,357,707	4,400,000
Wooden ships	311	784,048	520,000
Concrete ships	14	84,000	56,000
Total	1,251	7,225,755	4,976,000

A few of the shipyards, however, have begun to accept private orders, and on July 1, 1919, such orders reported to this Bureau covered 16 steel ships of 83,910 gross tons. The best available returns of the shipbuilding in progress throughout the world on June 30, 1919, are those furnished by Lloyds' Register, covering a total of 8,017,767 gross tons, which may be compared with the largest prewar construction in progress, 3,445,000 gross tons on June 30, 1913:

Country.	Steamers and motor vessels.				Sailing vessels.				Total.	
	Steel.		Wood.		Steel.		Wood.			
	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.
United States:										
Atlantic coast	357	1,763,551	36	56,240	2	4,600	34	60,728	994	3,874,143
Gulf ports	34	141,340	53	126,300	1	4,500	31	68,983		
Pacific coast	156	933,805	98	238,400	.....	.....	59	148,950		
Great Lakes	133	326,746	.....	.....	.....	.....	.....	.....		
British Empire:										
United Kingdom	711	2,492,276	8	2,293	63	29,481	.....	.....	782	2,524,050
Canada—										
Great Lakes	27	63,493	.....	.....	.....	.....	.....	.....	209	346,453
Coast	28	100,600	70	81,050	2	975	31	15,525		
Other dominions	26	70,256	13	11,647	.....	.....	12	2,907	.....	.....
Belgium	4	7,063	.....	.....	.....	.....	.....	.....	4	7,063
China	7	33,300	.....	.....	.....	.....	.....	.....	7	33,300
Denmark	36	56,001	5	1,770	.....	.....	.....	.....	41	57,771
France	34	107,215	2	1,920	.....	.....	2	480	38	109,615
Greece	1	900	1	600	.....	.....	.....	.....	2	1,500
Italy (including Trieste)	42	243,940	35	21,605	.....	.....	19	6,075	96	271,620
Japan	63	282,060	.....	.....	.....	.....	.....	.....	63	282,060
Netherlands	88	219,332	.....	.....	.....	.....	.....	.....	88	219,332
Norway	40	55,586	24	6,855	.....	.....	.....	.....	64	62,441
Portugal	.....	.....	.....	.....	.....	.....	29	12,320	29	12,320
Spain	37	118,269	.....	.....	.....	.....	3	585	40	118,854
Sweden	42	88,650	19	7,155	.....	.....	8	1,440	69	97,245
Total	1,866	7,104,383	364	555,835	68	39,556	228	317,993	2,526	[a]8,017,767

[a] Including 52 ferroconcrete vessels of 62,323 gross tons.

The foregoing table does not include shipbuilding in Germany, as the figures for that country are not yet available or important.

SHIPPING LOSSES.

The losses of American shipping during the past five years have been 1,909 vessels of 1,122,725 gross tons, and, in addition, 3,431 vessels of 252,005 gross tons have been abandoned and stricken from the register. The following statement shows separately marine losses, war losses, and abandonments:

	1915		1916		1917		1918		1919		Total.	
	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.
Marine losses	301	123,590	337	128,209	345	110,264	409	180,497	372	217,414	1,764	759,974
War losses	3	8,792	2	8,084	22	71,382	75	180,502	43	93,991	145	362,751
Total	304	132,382	339	136,293	367	181,646	484	360,999	415	311,405	1,909	1,122,725
Abandoned	972	79,047	623	56,811	774	48,984	552	35,181	510	31,982	3,431	252,005
Grand total	1,276	211,429	962	193,104	1,141	230,630	1,036	396,180	925	343,387	5,340	1,374,730

The losses of merchant steamers of the principal maritime nations from August, 1914, to the armistice of November, 1918, according to Lloyds' Register, were as follows:

Country.	War losses.	Marine losses.	Total.
	Gross tons.	*Gross tons.*	*Gross tons.*
United Kingdom	7,753,311	1,032,779	8,786,090
British Dominions	169,712	99,866	269,578
American	343,090	187,948	531,038
Belgian	85,842	19,239	105,081
Brazilian	20,328	10,951	31,279
Danish	210,880	34,422	245,302
Dutch	201,797	27,244	229,041
French	722,939	84,138	807,077
Greek	349,661	65,014	414,675
Italian	745,766	115,669	861,435
Japanese	119,764	150,269	270,033
Norwegian	976,516	195,244	1,171,760
Spanish	157,527	80,335	237,862
Swedish	180,415	83,586	264,001
Total	12,037,548	2,186,704	14,224,252

The marine casualties of steamers were only a trifle above the average, as for the five years from 1909 to 1913, inclusive, they aggregated 2,160,346 gross tons. When it is recalled that for nearly five years in European waters ships ran at night much of the time without lights, and that for part of this period they ran across the Atlantic and along our own coasts without these precautionary signals, the comparative results are a high tribute to the vigilance and skill of the masters and deck officers of the ships. That the losses from both causes were not greater is also due, first, to naval convoys and, second, to the courage and endurance of officers and men who brought many stricken ships to port which under ordinary conditions would have been justifiably abandoned at sea, and did, doubtless, appear in German statements of submarine ruthlessness. During the four years and four months of war the total losses were 14,224,252 gross tons of steamers. During the five calendar years covering that period the world's output of ships was 14,127,701 gross tons, of which less than 3 per cent were sailing vessels.

The effect of war, however, went beyond the mortality among ships, for many vessels which under ordinary conditions would have been broken up and sold as junk were patched up and are included in the world's outstanding tonnage. The world's merchant tonnage afloat to-day, as already shown, is greater than ever before, and undoubtedly would more than suffice to conduct the world's diminished foreign commerce consequent upon diminished production and vast national debts, if it were as efficient as the tonnage of 1914. Allowances for the customary growth of merchant shipping in ordinary times are quite out of place under present conditions, for such growth is based on increased ocean trade and increased international exchanges of products by sea. There has been no such increase, and there can not be until production has become at least normal abroad as well as at home. Freights must be higher than usual, because under present conditions the European countries with which we fought side by side have not yet been able, through death and devastation, to supply the usual return cargoes of their own production with which to pay for the products of countries remote from the scene of conflict. The

outward cargo, accordingly, pays to a much greater extent than usual the entire charges of the ship's round voyage, and those charges fall, of course, upon the consumer. The interruptions of commerce through strikes on shipboard and along the docks, through the congestion of freight at seaports of lading and discharge, and through like extraneous causes reduce still further the inherent relative inefficiency of the ships afloat.

ACTIVITY OF SHIPPING.

The statements on the preceding pages have dealt with the gross tonnage of ships and its growth since the outbreak of the war early in August, 1914. The activity of those ships, the part they were actually taking in the foreign trade of the United States before the war, and the part they have taken since are shown by the clearances for foreign ports. Clearances are stated in net tons (the net ton being 100 cubic feet available for cargo or passengers), and if a ship clears more than once during a year its net tonnage, of course, will reappear in the total for the year as many times as it departs on a voyage. Attention at the present time is centered on ships on the longer voyages between the United States and Europe, Africa, Asia, Oceania, and South America rather than on those ships which make frequent voyages to the near-by ports of North and Central America, Mexico, and the West Indies. The total net tonnage of all ships, American and foreign, steam and sail, which cleared from the United States for the other continents, during the fiscal years ended June 30, 1914, the year before the war; 1918, the complete year of our participation in the war; and 1919, the year of our maximum effort, of the armistice, and of a partial resumption of commerce, is as follows:

To—	1914	1918	1919
Europe	16,144,118	14,263,547	16,431,123
South America	2,429,659	2,237,976	2,705,365
Asia and Oceania	1,990,105	2,095,324	2,529,998
Africa	406,457	235,649	393,971
Total	20,970,339	18,832,496	22,060,457

During 1918, of course, there were no clearances for German ports, and during 1919 only 9,734 net tons; so clearances for Germany are excluded, which in 1914 aggregated 3,902,073 net tons. During 1918 and 1919, however, the movement of troops, munitions, and supplies called for a net tonnage of transports, not required to clear, larger than the net tonnage which before the war cleared for German ports. In fact, therefore, the ships which left American ports for the continents across the sea during the past two fiscal years were of greater net tonnage than in any previous year.

The total shipping facilities for trade between the United States and Europe, as shown by actual voyages, accordingly, were substantially equal to the facilities of 1914. But the share of American ships in the totals just stated reflects the increase in American shipping and shipbuilding already indicated. The clearance figures are always a more useful indication of the participation of our ships in foreign trade than are percentages of the money value of exports and imports carried in such ships, especially in these times of inflated prices. The following statement shows the net tonnage of American ships included in the total net tonnages just stated for 1914, 1918, and 1919:

To—	1914	1918	1919
Europe	439,261	1,671,081	2,535,265
South America	192,479	823,354	1,290,248
Asia and Oceania	100,833	287,386	494,548
Africa	4,263	49,460	99,034
Total	736,836	2,831,281	4,419,095

As in the preceding statement clearances for Germany are excluded, which in 1914 amounted to 8,406 net tons, in 1919 to 9,734 net tons, and none, of course, in 1918. American ships thus furnished during the past fiscal year six times the carrying capacity they furnished in 1914 for trade with the continents named, and, in addition, helped to transport to Europe our armies and their munitions and supplies and to bring most of the men home again.

For convenience, the net tonnage of the clearances of foreign ships from American ports for the continents beyond the seas and for the years indicated, is separately stated:

To—	1914	1918	1919
Europe	15,704,857	12,592,466	13,895,858
South America	2,237,180	1,414,622	1,415,117
Asia and Oceania	1,889,272	1,807,938	2,035,450
Africa	402,194	186,189	294,937
Total	20,233,503	16,001,215	17,641,362

For reasons given, clearances of foreign ships for Germany, amounting in 1914 to 3,893,667 net tons, are again excluded. Including such clearances, the total decrease since 1914 in the clearances of foreign ships has been 6,485,808 gross tons in 1919, but in 1914 the clearances of German ships from the United States for the continents named aggregated 4,198,952 net tons, so that the decline in the shipping of foreign maritime nations in our overseas trade has, in fact, been 2,286,865 net tons. When the transport home of foreign troops is completed and troopships have been converted to their ordinary uses—processes now being pushed rapidly—the net tonnage employed in the overseas trade of the United States will be equal to, or greater, than was needed to conduct that trade in 1914, with American ships taking the place formerly held by German ships.

Voyages between the United States and foreign ports of North America are relatively short, and the same vessel clears many times during the year, especially in trade on the Great Lakes, where daily trips are possible. To complete the showing of the activity of shipping in the foreign trade of the United States during the fiscal years 1914, 1918, and 1919, the following statement of the total net tonnage of clearances to foreign ports in North America may be desirable:

	1914	1918	1919
Dominion of Canada	16,710,114	18,233,675	15,318,327
Rest of North America, Central America and West Indies, etc.	11,596,999	8,947,946	10,534,212
Total	28,307,113	27,181,621	25,852,539

The share of American shipping in the total net tonnage of clearances just stated was:

	1914	1918	1919
Dominion of Canada	9,861,180	9,776,788	9,206,827
Rest of North America, Central America and West Indies, etc	3,133,396	6,598,164	7,673,086
Total	12,994,576	16,374,952	16,879,913

Much of the trade with the Dominion of Canada and with Mexico is carried, of course, by rail.

ACTIVITY OF BRITISH SHIPPING.

Virtually all American ships in overseas trades at present depart with cargoes, while a much larger tonnage than usual returns to the United States in ballast owing to diminished production throughout Europe. The inevitable result is that the freights on the outward cargoes have to pay the expenses of the entire round voyage, which, of course, handicaps not only the European consumer, but also the American producer, by increasing the ultimate cost of articles exported. The European aspect of this situation is illustrated by British shipping returns which cover the period up to the end of last July. The following compilation from a British Board of Trade return (reprinted in Appendix K) shows the net tonnage of ships, British and total, which cleared with cargoes from the United Kingdom for foreign countries or British dominions and possessions during the seven months ended July 31, 1914, and for the corresponding period in 1919:

For—	British.		Total.	
	1914	1919	1914	1919
United States	3,060,626	1,654,453	4,253,959	1,881,245
Rest of North America, Central America and West Indies, Mexico, etc	1,715,444	759,973	1,798,896	772,775
South America	2,778,916	707,074	3,486,385	898,139
Australia and New Zealand	1,016,200	510,207	1,037,348	510,202
Asia	1,819,187	1,069,274	2,504,479	1,381,998
Africa	1,780,174	836,550	2,092,196	985,165
Minor British possessions	400,661	254,149	425,460	261,402
Total	12,571,208	5,791,680	15,598,723	6,690,926
Europe	9,354,549	6,458,305	20,662,752	12,595,330
Grand total	21,925,757	12,249,985	36,261,475	19,286,256
Germany	1,656,757	17,181	3,306,654	32,404
	23,572,567	12,267,166	39,568,129	19,318,660

The world's tonnage is greater now than in 1914, but less efficient, and British tonnage has declined from 20,500,000 gross tons on June 30, 1914, to 18,600,000 gross tons on June 30, 1919, according to Lloyd's Register, a loss of about 10 per cent. Yet the clearances of British ships with cargoes during the seven months since the beginning of 1919 from the United Kingdom in overseas trade were less than half the corresponding net tonnage in the seven correspond-

ing months ended July 31, 1194, and in trade with Europe that tonnage had decreased one-third. The situation thus does not arise in Great Britain from lack of ships, but from lack of outward cargoes and other causes. The situation is of importance not only to American shipping and shipbuilding, but equally so to American foreign trade and domestic production. Foreign trade is, of course, a direct or indirect exchange of products, and its successful and economical conduct, so far as ships are involved, depends on cargoes both outward and homeward, so that the ship all the time may be earning money, not spending it, as when it sails in ballast.

COAL AND OIL.

British trade and shipping for years were developed, looking only at the material side of it, on the production of an excess of coal for export beyond domestic demands. During the seven months ended July 31, 1914, covered by the clearance table above, the exports of coal (including coke, etc.) from the United Kingdom amounted to 43,000,000 tons, and 12,000,000 additional tons were despatched for ships' fuel. During the seven months since January 1, 1919, the coal exports were only 23,675,000 tons, and only 6,815,000 tons were exported in the form of ships' fuel, a decline of over 25,000,000 tons in all and of 19,500,000 tons in coal as cargo. As a net ton of shipping 100 cubic feet will hold about two tons of coal, the deficit in cargo is equivalent to nearly 10,000,000 net tons of shipping. The clearances of British ships with cargoes was 9,676,000 net tons less during the seven months of 1919 than for the same seven months in 1914, and for all ships 17,000,000 net tons less. The world's loss of torpedoed passenger ships has not yet been made good, and though coal is the largest and bulkiest article of ocean commerce, manufactured goods have, of course, a large part in the British export trade. The product of the coal mines of the United Kingdom for 1914 was 265,664,000 tons, and the product for 1919, on the basis of the output thus far, is estimated at 228,000,000 tons, a decline of 37,600,000 tons, equivalent to cargoes for clearances of ships during the year aggregating about 19,000,000 net tons, approaching an equivalent of the total overseas clearances from the United States during the past fiscal year. Whether the British coal industry is again to become a normal factor in ocean trade, or to become the greatest suicide club on record, is thus one of the considerable elements in the determination of plans for the employment and future of an American merchant marine, for it affects the type of ships to be built, the ports to which they can profitably ply, the financial arrangements at home and abroad which steamship companies and exporters should make, and even the directions in which capital and labor should turn for the most satisfactory employment. The impression, probably, is no longer general that there is a shortage in shipping and still a demand for "more ships" merely as ships, regardless of type. We have every reason to be satisfied with the manner in which the country responded to that urgent prayer in April, 1917, but the problem directly ahead of us is one of ship operation—of the activity of our own and foreign ships.

The converse of the British situation in respect of coal is the American oil-export situation. The United States is the largest

exporter of oil, which in the world's navies and passenger ships is rapidly taking the place of coal as fuel, and as fuel for cargo boats offers such advantages and economies to the steel ships built in the United States during the past three years, a large percentage of which burn oil, as to offset structural disadvantages inevitable from the haste with which they were built.

The increasing use of oil as ships' fuel tells to our advantage in that oil requires a considerably less number of men in the fireroom than does coal, and the work is less arduous. During the past two years so many of our merchant ships, or ships which are going into trade upon the close of their service as transports or munitions and supply ships, have been manned by enlisted men in the Navy or Naval Reserves that the limited number of our seafaring men has not yet been brought home to us, as it necessarily will be during the current fiscal year. In this respect our disadvantage increases with the growth of our tonnage, while competing nations, which have lost more heavily in tonnage than in crews to man their ships, have an advantage. The use of oil as fuel, accordingly, is in part an offset, especially as in normal times the fireroom force is more highly paid than the deck force, and the relative difference there in American and foreign wages is greater. The economic rule that, other things being equal, the harder and more disagreeable work will be better paid can not arbitrarily be set aside indefinitely, and as it asserts itself the advantage which oil as a fuel gives to the American ship will show itself. There is a like advantage in this respect in the production as in the consumption as fuel on shipboard of oil compared with coal.

The export of oil as cargo, however, differs from the export of coal, because the tanker carrying out oil in bulk necessarily returns in ballast or with a very small amount of cargo. There seems to be no reason why the United States should not permanently excel in the construction and operation of this type of ship not only in the export trade of the United States, but also in that of Mexico and other portions of this hemisphere, in which oil may be found in abundance. Any handicaps, at least, will be of our own invention, as our natural advantages for the development of this element in a merchant marine are evident, and the present is plainly the opportune time.

ADMINISTRATIVE SITUATION.

The increase in ships and shipbuilding since 1914, and especially during the past fiscal year, had not up to June 30, 1919, created serious administrative difficulties, for two reasons: First, because for the past two years we were at war and in nearly all branches of Government activity, certainly in shipping, the ancient adage "Inter arma silent leges" has prevailed; second, the Government itself has assumed control of and operated the greater part of American seagoing shipping as a military measure, manned with its enlisted men about 600 of our ships, and on June 30 last was the actual owner of about half the 7,300,000 gross tons comprising the seagoing fleet of larger vessels (over 1,000 gross tons) under the flag, and as such the Government was entitled to, and frequently claimed under its prerogative, exemption from laws.

The war, however, is ended, and, if the operation of the mercantile marine on commercial principles in accord with acts of Congress is to be resumed, the men and the money needed to administer those acts should be provided to meet the great increase in American shipping. To illustrate, the American seagoing ships of over 1,000 gross tons on June 30, 1914, numbered 755 of 2,128,731 gross tons, and for that fiscal year the total appropriations for the shipping commissioners' service was $71,350 and the number of men employed was 48. On July 1, 1919, the large seagoing ships numbered 2,058 of 7,300,122 gross tons, and are increasing at the rate of 400,000 gross tons a month, while the total appropriations for the current year for the shipping commissioners' service was $88,465, and the number of men employed was 59. Already it has been necessary to ask for a deficiency appropriation and more men, and until they have been obtained the Bureau has had to ask the Panama Railroad Steamship Co. and the Shipping Board to assign some of their employees to shipping commissioners' offices to help in the despatch of their ships, respectively. This is not economy, nor good administration, nor compliance with the spirit of the laws and ought not to continue, but it is better than adding one more source of delay to the outward movement of ships.

RADIO COMMUNICATION.

The situation as to the administration of the laws regulating radio communication is even more disheartening. On June 30, 1915, there were 585 American ships with licensed wireless stations, and 1,653 commercial radio operators had been examined and licensed to operate them. For that year the appropriations for the wireless service were $45,000, and the inspectors and others employed numbered 26. On July 1, 1919, the number of American ships equipped with wireless numbered 2,312 and is increasing monthly with the increase of tonnage mentioned at the rate of about 100 a month. During July and August alone 714 operators were examined and licensed, but the appropriation remains at $45,000, as in 1915, and the inspectors and others employed number 29. Two branches of the work of the radio service have been mentioned which admit of comparative statement in figures. The exigencies of war developed the wireless art, as it developed flying, with which to an extent it is already related, and the development was in communication by land, as well as by sea. Unless the radio-inspection service is to keep pace with the improvements and inventions of the art, the Government would do better to withdraw altogether from the field of inspection. To keep pace with developments, the Government ought to retain those men who in its armies in France and in other services have themselves contributed to those developments and have applied them. It has been necessary to ask for a deficiency appropriation and more men and the best men shown to be such by demands the war made on their skill and ingenuity.

TONNAGE ADMEASUREMENT.

The only reason why it is not necessary to ask for a deficiency appropriation to carry out the laws for the admeasurement of ships in view of the multiplication of our tonnage is because the Shipping

Board building program, which almost exclusively occupied our yards last year and will continue to do so during the current fiscal year, comprises only a few types of ships of fixed general dimensions, and the blue prints for one ship will serve to give instructions for the admeasurement of scores of ships like it. In time we shall probably return, possibly by next year, to the normal method of building ships, particularly with a view to the needs of our commerce and the varying types and numbers of ships required to meet them. When that time comes, if our shipbuilding industry retains the major part of the advantages it has derived from great expenditures from the Treasury, appropriations for admeasuring ships and the establishment of a body of measurers, more uniformly qualified for the work will be needed. The work is now done by men in the marine divisions in the customhouses, some of whom are experienced men, abundantly qualified, who can give their time to the work, while others are drawn for short periods from desks where they compute tariff figures or compile statistical returns. To secure uniform practice by oral instruction and demonstration, only one adjuster is provided at $3,500 to cover salary, traveling, and all other expenses.

LOADLINES.

The enactment of the bill providing for loadlines for ships now pending in both branches of Congress will require a staff of men competent to give it effect, some at Washington and some at the principal seaports. The questions involved relate both to the safety of the ship and those on board and to commercial competition on just and equal terms with the ships of other nations, and cheap men can not do the work. The details of estimates and force are reserved, of course, until the passage of the bill, but the subject is mentioned because our increase in tonnage and its voyages to all parts of the world call for the creation of administrative agencies similar to those which other nations have found necessary.

BULKHEADS.

Akin to the subject of loadline for cargo ships is the subject of bulkheads and other structural features of passenger ships, which like loadlines, is related both to the safety of the ship and those on board and to equitable conditions of commercial competition.

The possession of 13,000,000 gross tons of shipping under the flag, of which 7,300,000 gross tons are seagoing ships of over 1,000 gross, and a possible increase of almost 4,000,000 gross tons during the current year, is no more in itself a merchant marine approaching that under the British flag, and much greater than that ever under any other flag, than was the mere draft of about 11,000,000 men last year the creation of the largest and best army in history. The assemblage of the material as of the men was only the first part of the undertaking. Some of the administrative details relating to ships are mentioned on the assumption that Congress does not intend as a permanent policy to vote public money to build all the ships and to operate a large percentage of them.

STATISTICS FOR THE YEARS 1918 AND 1919.

The following table shows the geographical distribution, motive power and material of construction, and trade of vessels of the United States and details of construction for the fiscal years 1918 and 1919:

COMPARISON OF AMERICAN MERCHANT MARINE OF 1918 AND 1919.

TOTAL MERCHANT FLEET.

Classification.	1918		1919	
GEOGRAPHICAL DISTRIBUTION.	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
Atlantic and Gulf coasts	16,327	5,356,976	16,596	6,945,260
Pacific coast	5,755	1,646,697	6,198	2,816,481
Northern lakes	2,939	2,797,503	3,043	3,023,762
Western rivers	1,690	123,342	1,676	121,797
Total	26,711	9,924,518	27,513	12,907,300
POWER AND MATERIAL.				
Sail:				
Wood	4,422	900,542	4,102	903,430
Metal	165	308,993	158	296,231
Total	4,587	1,209,535	4,260	1,199,661
Steam:				
Wood	4,233	823,823	4,300	1,320,578
Metal	2,534	6,313,690	3,097	8,736,822
Total	6,767	7,137,513	7,397	10,057,400
Gas:				
Wood	9,775	275,494	10,126	299,726
Metal	116	58,307	128	58,501
Total	9,891	333,801	10,254	358,227
Canal:				
Wood	519	58,588	489	56,137
Metal	.....	.....	1	294
Total	519	58,588	490	56,431
Barges:				
Wood	4,705	1,051,726	4,832	1,091,576
Metal	242	133,355	280	144,005
Total	4,947	1,185,081	5,112	1,235,581
Grand total	26,711	9,924,518	27,513	12,907,300
TRADE.				
Registered:				
Sail—				
Wood	506	337,335	637	413,126
Metal	49	83,110	49	86,419
Total	615	420,445	686	499,545
Steam—				
Wood	269	113,084	432	547,393
Metal	657	2,750,055	1,236	5,268,232
Total	926	2,863,139	1,668	5,815,625
Gas—				
Wood	1,132	112,529	1,295	139,623
Metal	21	40,113	21	38,957
Total	1,153	152,642	1,316	178,580
Barges—				
Wood	1,295	151,116	1,337	157,511
Metal	24	16,364	25	18,465
Total	1,319	167,480	1,362	175,976
Total registered	4,013	3,603,706	5,032	6,669,726

COMPARISON OF AMERICAN MERCHANT MARINE OF 1918 AND 1919—Continued.

Classification.	1918		1919	
TRADE—continued.				
Enrolled and licensed:				
Sail—	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
Wood	3,856	563,207	3,465	490,304
Metal	116	225,883	109	209,812
Total	3,972	789,090	3,574	700,116
Steam—				
Wood	3,964	710,739	3,868	773,185
Metal	1,877	3,563,635	1,861	3,468,590
Total	5,841	4,274,374	5,729	4,241,775
Gas—				
Wood	8,643	162,965	8,831	160,103
Metal	95	18,194	107	19,544
Total	8,738	181,159	8,938	179,647
Canal—				
Wood	519	58,588	489	56,137
Metal	.....	.....	1	294
Total	519	58,588	490	56,431
Barges—				
Wood	3,410	900,610	2,495	934,065
Metal	218	116,991	255	125,540
Total	3,628	1,017,601	2,750	1,059,605
Total enrolled and licensed	22,698	6,320,812	22,481	6,237,574
Grand total	26,711	9,924,518	27,513	12,907,300

VESSELS BUILT DURING FISCAL YEARS 1918 AND 1919.

GEOGRAPHICAL DISTRIBUTION.				
Atlantic and Gulf coasts	708	562,000	861	1,452,230
Pacific coast	517	518,437	668	1,353,503
Northern lakes	168	215,022	317	507,172
Western rivers	135	5,409	107	3,716
Total	1,528	1,300,868	1,953	3,326,621
POWER AND MATERIAL.				
Sail:				
Wood	112	78,894	83	77,687
Metal	3	4,735	1	1,547
Total	115	83,629	84	79,234
Steam:				
Wood	80	37,771	651	2,117,492
Metal	a 229	962,547	240	989,572
Total	309	1,000,318	891	3,107,064
Gas:				
Wood	612	85,932	626	48,965
Metal	8	4,746	7	1,062
Total	620	90,678	633	50,027
Canal:				
Wood	32	4,101	15	2,731
Metal	.....	.....	.....	.....
Total	32	4,101	15	2,731
Barges:				
Wood	437	113,969	307	80,791
Metal	15	8,173	b 23	6,774
Total	452	122,142	330	87,565
Total construction	1,528	1,300,868	1,953	3,326,621

a Including 1 concrete steam vessel of 3,427 gross tons.
b Including 4 concrete barges of 1,231 gross tons.

The following summary of vessels of 1,000 gross tons or over in the preceding table and of such vessels built other fiscal years from the beginning of the war shows changes in the larger forms of construction:

Type.	1915		1916		1917		1918		1919	
Seaboard:	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
Ocean steel steamers	18	111,625	35	187,128	47	300,290	145	813,882	381	2,037,916
Ocean steel gas screws	....	.....	....	.....	4	13,009	....	.....	....	.....
Steel ferryboats, river and bay steamers	1	1,402	2	3,362	3	5,363	....	.....	....	.....
Wooden steamers	1	5,373	1	1,103	13	17,600	17	30,939	208	556,900
Wooden gas screws	....	.....	....	.....	9	15,121	34	68,085	14	28,554
Steel schooners	....	.....	....	.....	1	1,432	2	3,058	1	1,547
Wooden schooners	1	1,318	7	11,286	14	20,212	40	58,099	33	48,299
Wooden barkentines	....	.....	....	.....	1	1,220	....	.....	1	1,393
Wooden unrigged vessels	....	.....	....	.....	1	1,357	1	1,041	....	.....
Total	21	119,718	45	202,879	93	375,604	239	975,104	638	2,674,609
Great Lakes:										
Steel steamers, lake trade	1	6,331	5	26,876	14	94,715	6	43,078	....	.....
Steel steamers, ocean trade	1	1,815	6	10,915	10	21,790	83	180,865	206	492,469
Steel gas screws, ocean trade	....	.....	....	.....	6	11,793	2	4,248	....	.....
Steel schooner-barges, ocean trade	....	.....	....	.....	1	2,320	1	2,383	....	.....
Total	2	8,146	11	37,791	31	130,618	92	230,574	206	492,469
Western Rivers:										
Steel gas screws	....	.....	1	1,473	....	.....	....	.....	....	.....
Steel barge	....	.....	....	.....	....	.....	1	1,392	....	.....
Grand total	23	127,864	57	242,143	124	506,222	332	1,207,070	844	3,167,078

SUMMARY AND TYPES OF SHIPS OF 1,000 GROSS TONS BUILT.

Practically all this tonnage was built for salt water, and nearly all of it for the foreign trade. According to place of build and type of vessel the ships above may be thus summarized:

Type.	Seaboard.		Great Lakes.		Total.	
	No.	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
Steel steamers	381	2,037,916	206	492,469	587	2,530,385
Wooden steamers	208	556,900	.....	.....	208	556,900
Steel schooner	1	1,547	.....	.....	1	1,547
Wooden schooners	33	48,299	.....	.....	33	48,299
Wooden barkentine	1	1,393	.....	.....	1	1,393
Wooden gasoline	14	28,554	.....	.....	14	28,554
Total	638	2,674,609	206	492,469	844	3,167,078

SHIPPING COMMISSIONERS.

Summaries of the routine work of shipping commissioners for the past fiscal year are printed as usual in Appendix A. The great increase in our merchant shipping, especially on trans-Atlantic voyages, is not reflected in these summaries because the increase in ships and the war created wholly abnormal conditions, which did not begin to disappear until near the end of May. About 600 ships, owned or requisitioned by the Shipping Board, according to the estimate of the Navy Department, were supplied with crews of enlisted men of the U. S. Navy, and were under command of officers

of the U. S. Navy, numbering in all 120,000. This number, however, includes gun crews that were put on board ships manned by regular merchant crews. These enlisted men of the U. S. Navy served and were paid under their enlistment papers and, of course, did not appear before the shipping commissioners for shipment and discharge. Part of these 120,000 were employed on the seized German ships and other merchant ships assigned to the Army and Navy for transport service; but, accepting the Navy estimates of 120,000 men supplied to merchant ships, more than half of the additional work imposed by law on the shipping commissioners under normal conditions was performed as a war-emergency measure by the Navy Department. The gradual discharge of naval crews and the shipment of merchant crews began in May, and on August 1 fully 1,500 enlisted naval radio operators were withdrawn from merchant ships. Instead of a gradual increase in the force of the shipping commissioners' offices needed to perform their increase of work in consequence of the steady increase in our merchant shipping, the force should be increased at once to meet the transition from war to peace conditions. Our shipping is increasing at the rate of nearly 400,000 gross tons a month. For these reasons it has been necessary to ask for a deficiency appropriation for the current year and in the estimates for next year to ask provision for an enlarged force.

Besides the volume of work, the nature of the work of these officers has changed considerably. So long as our ships were employed chiefly in the coastwise or near-by foreign trades, members of crews were in fairly close touch with their families and dependents, but since American ships in increasing numbers are visiting the remote ports of the world the shipping commissioners' offices have to answer numerous inquiries from relatives and dependents as to the whereabouts of seamen. There ought to be established in all the commissioners' offices at least a card index of seamen—a plan favored by the Bureau for some time, but impossible of performance during war conditions—and a registry of seamen in the Bureau of Navigation, similar to the British registrar of merchant seamen, would be desirable. The difficulty which both propositions face is the very large alien element in our merchant crews, many of whom have no fixed home here, often deserting from foreign ships in our ports in order to join American ships bound to their own countries or elsewhere about the world as inclination or circumstances may suggest. On the other hand, we have undoubtedly a considerable maritime population which retains its allegiance to other countries, but has its home in the United States serving on American ships on account of the higher pay which always has been paid and the better conditions which always have been afforded. Such considerable and unavoidable increases in appropriations must be requested at a time when rigid economy is incumbent upon all that the subject of registration even of American seamen owing allegiance to the United States and with homes here may perhaps be deferred until next year.

The shipping commissioners are designated by statute to hear and decide any question between the master, consignee, agent, or owner, and any of the crew which may be submitted to them by both parties to a dispute and the decision is deemed conclusive as to the rights of the parties before a court of justice. During the war various agen-

cies outside the statutes were created which dealt with the general relations of employers and employees and were necessary, as the Government itself stood in the relation of employer to those employed in many of the essential industries and occupations of the country. General rulings of these agencies, so far as applicable, were observed by shipping commissioners, so far as I am aware, but the number of individual issues to be determined by the statutory officers in the shipping service was not thereby reduced. The discretionary powers vested by Congress in these officers since 1872, and the extent to which they are invoked, suggest a higher range of salaries than those awarded to them before 1914 and remaining substantially unchanged. This consideration is entirely apart from all questions of the higher cost of living, which, however, with everyone else in the country, they must meet. It is based on the nature of work requiring judgment which Congress has imposed for nearly 50 years on these officers and the vast appropriations by Congress for ships in the past three years have greatly increased.

MEN SHIPPED AND DISCHARGED.

During the year 485,796 officers and men have been shipped, reshipped, or discharged by shipping commissioners, compared with 457,248 during the previous fiscal year. These figures include the repeated shipments in many cases of the same men on different voyages, and often on different ships, and are not to be taken as a statement of the number of different officers and men who manned our ships and were under the commissioner's supervision as to their contracts which was approximately between 85,000 and 90,000.

The following statement shows the aggregate routine work and salaries of commissioners and their force 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.
1910	356,448	$65,539.19	$0.18	1915	414,744	$63,755.47	$0.15
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	.13
1913	379,188	62,374.13	.16	1918	457,248	72,075.48	.16
1914	378,772	63,475.20	.17	1919	485,796	75,288.47	.15

NATIONALITY OF CREWS.

The change in the nationality of officers and men of our merchant ships during the war is the result of several forces operating at different times. Upon our declaration of war in April, 1917, many officers and men of the American merchant marine joined as volunteers the United States Naval Reserves and served with credit and often distinction. But with the increase in merchant tonnage this withdrawal was felt severely, and regulations under the draft, accordingly, allowed men in the merchant service to choose between joining the Army or remaining in the merchant service, which prevented a further drain on our merchant marine personnel and attracted others to ship. Congress also voted to the Shipping Board $6,250,000 for recruiting, instructing, and training officers, engineers, and crews for

American vessels and for all expenditures incidental thereto. The resultant of these forces has been a considerable increase in the proportion of American citizens, native-born and naturalized, who were shipped before shipping commissioners, and for the past year the percentage of such is 47.6, a restoration to the percentage of 47.4 in 1914. The following table shows the nationality of those shipped (counting repeated shipments) of officers and men before shipping commissioners during the past eight years:

Nationality.	1912	1913	1914	1915	1916	1917	a 1918	1919
Americans (born)	58,109	63,040	63,247	65,196	76,956	81,899	72,613	97,160
Americans (naturalized)	35,562	32,780	31,417	29,965	31,877	26,826	24,868	24,676
British	21,033	24,031	24,745	29,395	29,523	28,947	26,967	26,848
Chinese	55	65	64	471	68	42	205	729
Japanese	290	193	98	200	245	368	972	1,198
Filipinos	184	258	472	482	528	650	1,091	1,154
Germans	7,185	9,185	9,497	9,466	12,415	10,254	206	138
Norwegians	9,394	8,679	8,194	9,891	11,383	9,819	9,617	10,237
Swedes	7,565	6,995	6,321	7,878	9,208	9,505	10,095	10,054
Danes	2,744	2,510	2,260	4,084	4,608	4,893	5,467	5,843
Russians	4,403	4,483	4,526	5,930	7,949	8,150	9,127	10,108
Austrians	2,240	2,980	3,363	3,536	3,474	1,894	427	125
French	614	615	617	716	892	783	663	694
Spanish	26,247	20,511	25,022	25,252	33,139	34,006	31,643	24,163
Italians	3,877	4,813	4,368	4,843	4,150	4,079	3,491	2,503
Portuguese	3,924	4,384	3,921	5,034	4,733	5,702	4,869	5,481
Others	11,762	12,434	11,442	16,196	21,533	25,322	30,019	34,811
Unknown	3,037	68	10	6	.....	2	.....	.....
Total	198,225	198,024	199,584	218,541	252,681	253,141	232,340	255,922
Per cent Americans	47.3	48.4	47.4	43.5	43.2	42.9	41.9	47.6

a The summary for the year 1918 as printed in the report for 1918 at p. 27 contained several errors due to mistakes in transferring to the summary the correct details as stated on pp. 39–40. An erratum notice was sent out as soon as the error was seen.

Those classed as "others" in the columns above are mainly from the countries of South and Central America, some citizens of the new states created by the war, and a few Swiss shipping as stewards. The totals above, as stated, do not represent individual men, but frequently the same man has shipped on different voyages and on different ships. In ordinary years a fair average allowance is four such voyages and shipments, the years before the war thus covering about 60,000 men; but during the past year the proportion of long voyages has been greater and the number of new ships making thus only one or two voyages in the year has grown rapidly, so that from 85,000 to 90,000 individuals probably are covered by the statement.

DESERTION OF SEAMEN.

The following return shows the number of men who have signed articles to ship and then failed to join. The percentage is the lowest in 10 years:

Year.	Shipped and re-shipped.	Failed to join.	Per cent.	Year.	Shipped and re-shipped.	Failed to join.	Per cent.
1909	181,032	2,114	1.17	1915	218,541	3,339	1.53
1910	185,721	2,690	1.45	1916	252,681	4,512	1.71
1911	192,191	3,082	1.60	1917	257,327	5,006	1.95
1912	198,225	3,849	1.94	1918	232,340	4,446	1.91
1913	198,024	3,906	1.97	1919	255,922	3,502	1.37
1914	199,584	2,771	1.39				

ALLOTMENT NOTES.

The following table shows the number of allotment notes issued 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.		Relatives.	Total.	Year.	Creditors.		Relatives.	Total.
	Square-rigged.	All other vessels.				Square-rigged.	All other vessels.		
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
1911	505	241	57	803	1918	.....	.....	3,018	3,018
1912	555	296	62	913	1919	.....	.....	5,956	5,956

WAGES OF SEAMEN.

The customary tables showing rates of wages are printed in Appendix B to preserve the continuity of the record. During the war, however, agreements on wages and conditions of work on shipboard were entered into and modified by those concerned and issued by the Shipping Board, which was the largest American owner of ships. These agreements, including the latest issued early in the current fiscal year, are included in the Appendix.

NAVIGATION RECEIPTS.

The three main sources of Federal revenue from navigation have supplied the following receipts during the past five fiscal years, embracing the period of the war:

Source.	1915	1916	1917	1918	1919
Tonnage duties	$1,315,425.30	$1,454,565.83	$1,393,743.16	$1,171,418.36	$1,265,229.23
Navigation fees	142,446.37	158,518.08	159,808.03	146,508.02	143,492.19
Navigation fines	41,518.24	52,381.75	49,962.37	32,097.68	162,146.50
Yacht tax	37,976.30	19,849.71	.....	1,468.60	.....
Total	1,537,366.21	1,685,315.37	1,603,513.56	1,351,492.66	1,570,867.92

The increase in receipts from tonnage duties is due mainly to the gradual resumption of commercial voyages after the armistice. American ships paid $258,105.11 in tonnage duties, but in so far as the payments were made by Shipping Board ships owned by the Government the receipts, of course, are essentially a matter of bookkeeping rather than of revenue. The large increase in fines is due to proceedings for forfeiture of the steamship *Sacramento* for fraudulent registry. This ship, a former German liner, by fraud secured an American register at San Francisco and then proceeded under German direction with supplies for the squadron of Admiral Von Spee off the island of Juan Fernandez. These supplies enabled the German squadron to sail to its destruction a short time later off the Falkland Islands. Proceedings for the forfeiture of the steamer were successful, and the forfeiture compromised for $250,000, of which one-half

was paid and is included in the fines for 1919, and the remaining half will be included in the current year's receipts. All the cases under the repealed yacht-tax section 35 of the tariff act of 1909 are now believed to be closed.

RADIO COMMUNICATION.

During most of the past fiscal year the war conditions described in the report for 1918 have continued with practically no change. Under the Executive order of April 30, 1917, "to insure the proper conduct of the war against the Imperial German Government and the successful termination thereof" coast radio stations were operated by the Navy Department or closed, and the order is in force at this writing, pending ratification of the treaty of peace. The Navy Department continued the supervision of the allotment of radio apparatus to ship and shore stations, and it supplied naval radio operators to many ships.

The chief inspector, inspectors, and assistant inspectors who volunteered in April, 1917, continued with the American Expeditionary Forces in France or with the American Navy in European or home waters, and the worth of their technical services during the war has been recognized by promotions and by the award of decorations by the American and by the allied Governments. The former chief inspector (Lieut. Col. Louis R. Krumm) was in charge of the wireless operations of the American armies in France, an inspector (Maj. John L. Dillon) was in charge of the wireless operations of the artillery of the first Army in France, another inspector (Lieut. H. C. Gawler) was in charge of the wireless operations at the naval base in the Azores, and other members of the inspection force satisfactorily performed the less conspicuous military and naval duties in the line of their experience assigned to them with the armed forces.

The regular work of the inspection service was continued in the meantime by assistant inspectors promoted on the personal understanding voluntarily entered into that on the return of the inspectors serving with our armed forces in France and at sea they would yield their positions and return to their former status. The number of inspections of ship stations before clearance was 4,243, compared with 4,341 during the fiscal year 1918, with 6,103 during 1917 and 6,125 during 1916. Had the radio laws been in full operation, the number of inspections would have been much larger than in these earlier years. Many American ships were supplied with apparatus under distribution by the Navy and manned with naval radio operators, and for the time being the Navy was, in fact, responsible, in so far as any branch of Government is responsible, for the efficiency of such apparatus and operators. Even if the force of inspectors had been large enough and strong enough to carry out the inspection laws in full, of course, under the conditions that work would not have been undertaken. In the same way the wireless apparatus and operators on many foreign ships were temporarily supplied or controlled by their respective admiralty or navy departments, and, as a rule, were not closely inspected here as in ordinary times and under ordinary conditions. In addition to the foregoing, 954 inspections were made of apparatus on ships voluntarily equipped, compared with 1,434 during the year 1918.

The number of applicants examined for commercial operators' licenses was 2,426 during the past year, compared with 2,514 during 1918; but, in addition, 314 applicants were examined briefly for emergency permits permitting them to sail one voyage. The number of commercial operators licensed was 1,658 during the past year and 1,881 during the previous year. The service has been confronted throughout the war by the great need of skilled operators, in view of the heavy demands of the Army and Navy for qualified men. The question of a reduction of the standards of skill was decided adversely because the American radio operator's commercial license now ranks high abroad, as well as at home. To meet the need of operators, emergency permits were issued enabling an applicant who had fair but not standard attainments to take a ship on one voyage and perfect himself and on his return to try the examination again. In addition to their official work, several of the inspectors for much over a year up to the signing of the armistice in November devoted their time after office hours to teaching radiotelegraphy in classes or institutions established by local or private organizations to aid the winning of the war.

The number of ship stations licensed was only 250 during the past year and 196 during the previous year. This work is very much in arrears, as the number of American ship stations increased from 1,478 at the beginning of the fiscal year to 2,312 on June 30, 1919, and is now increasing at the average rate of nearly 100 a month.

CURRENT CONDITIONS.

At the beginning of the current fiscal year nearly all the inspection force who had been serving with the Army in France or with the Navy in foreign or domestic waters were honorably discharged and had returned to their posts in the Service. During the war, radio communication on land and sea developed almost as rapidly as flying in the air, both in the extent of its uses and application and in invention and the mechanical improvement of apparatus and methods. In these developments and in the practical application of them under the trying conditions of warfare, the inspectors who resigned from the Radio Service of the Department of Commerce and volunteered in the Army or Navy within a week after our declaration of war have taken active and creditable parts, recognized by our own and allied Governments. They are specially qualified both by their former experience with the Bureau's Service, and by what they have done and learned during the war, to conduct the radio-inspection service upon which the volume of demands has been increased by great war appropriations for ships and the technical requirements extended by the inventions and improvements of the war. This is not the place and I am not the man to attempt more than the barest enumeration of some of these changes. Before the war transoceanic radio communication was experimental; now it is an everyday commercial affair across the Atlantic and the Pacific. Aviation before the war was virtually limited to inventors and men of considerable wealth and courage; it is now taking its place in commercial life, and wireless furnishes the means of communication between the flyer and those on land or sea. Very much of the communication between the armies on all fronts and their commanders was maintained by radio, and a

great extension in wireless commercial communication on land is inevitable. Radiotelephony is a natural development of radiotelegraphy.

COST OF RADIO SERVICE.

The total annual appropriation for the past five fiscal years and for the current year was $45,000, and the items of actual expenditure for those years are stated in the following table. During the period we were at war the volume of commercial wireless work of the Bureau was about the average of prewar years, while the great expansion was mainly under control of the armed forces and only recently is assuming a commercial status. The last column gives the details of the estimates for next year, submitted early in September in view of the increase and change in the nature of work now actually on hand and confronting the Service in the months just ahead.

The statement following shows details of expenditures for this service during the fiscal years 1915, 1916, 1917, 1918, 1919, the proposed distribution for the current fiscal year, and the estimates for 1921:

	1915	1916	1917	1918	1919	1920	1921
Total salaries:							
Field	$27,844.49	$28,379.51	$27,784.66	$24,068.17	$28,602.88	$31,880	$93,638
Bureau	7,150.00	7,150.00	7,013.34	6,369.90	6,698.62	8,050	13,020
Total	34,994.49	35,529.51	34,798.00	30,438.07	35,301.50	39,930	106,658
General expenses:							
Travel	6,245.52	4,355.12	2,317.42	1,262.32	3,668.72	1,500	6,500
Telephone	399.84	401.81	565.88	617.03	695.89	700	1,200
Laundry	.....	.....	.....	.....	.....	.....	.....
Furniture	370.26	441.77	151.64	428.27	945.01	450	1,000
Supplies	517.49	331.90	558.76	495.19	234.22	485	1,000
Printing	78.10	116.60	68.79	17.46	135.40	15	200
New instruments	312.79	2,786.75	2,741.09	701.28	430.50	565	5,000
Repairs	1,455.65	109.78	83.05	180.22	348.61	200	500
Telegrams	111.51	33.47	24.33	34.91	27.16	25	100
Freight and cartage	124.84	89.34	63.23	60.59	78.81	65	200
Carfare	218.03	339.15	330.16	246.67	219.26	275	700
Technical books and papers, batteries, wire, and other small materials	168.38	57.00	47.30	95.80	74.05	100	404
Berne publications	.....	198.91	13.74	8.73	37.78	15	100
Rent	.....	.....	98.75	149.25	638.00	675	2,100
New construction and other equipment	.....	.....	.....	10,039.21	1,415.73	.....	3,700
Unexpended	3.10	208.89	3,137.86	225.00	749.36	.....	.....
Total	45,000.00	45,000.00	45,000.00	45,000.00	45,000.00	45,000	129,262

INCREASE IN RADIO COMMUNICATION.

In the meantime the number of American ships equipped with wireless has increased from 585 on June 30, 1915, to 2,312 on June 30, 1919, or fourfold, and is increasing at the rate of about 1,000 a year, owing to the appropriations by Congress to build ships. The number of ship stations licensed is very much in arrears and such ships are operating without compliance with law or international obligation, because the examinations necessary for the license could not be made in view of more pressing work in the inspection of ships for safety about to clear and in the examination of operators for commercial license. About August 1 the Navy Department withdrew

about 1,500 naval radio operators from merchant ships, many of which, in consequence, for a brief time could not be adequately and lawfully manned. The inspection force, however, dropped most other work, and up to date 717 operators had been fully licensed and numerous temporary permits issued.

With the ratification of peace and the withdrawal of the Executive war order against radio communication, the commercial land stations will resume business presumably under commercial control, and the amateur transmitting stations and operators will be permitted to enter the restricted fields open to them under the statutes. The number of applications already filed with this Bureau in advance of the restoration of peace conditions points to the prospect of more general radio communication between points on land where wire communication is impracticable than before the war.

The following table shows briefly the growth of radio communication since 1915 and its present status, so far as these admit of concise statistical statement. The number of the inspection force, like the appropriation, was substantially unchanged on June 30. The substance of these statements has already been given to Congress.

June 30—	American ships equipped.	American ships licensed.	Inspections of American and foreign ships.	Commercial operators licensed.	Commercial and experimental land stations.	Amateur stations licensed.	Amateur operators licensed.	Total inspection force.
1915	585	362	6,152	1,653	115	3,547	3,067	26
1916	604	444	7,236	1,278	182	4,942	4,199	28
1917	836	484	7,137	1,682	160	3,741	3,302	28
1918	1,478	392	5,775	1,616	.....	.....	.....	29
1919	2,312	976	5,160	1,645	.....	.....	.....	27

The number and classification of the radio stations of the United States on June 30, 1919 (excluding 3,741 amateur transmitting stations which were closed in April, 1917, and have not yet been permitted to open, the Government stations being mainly those of the Army and Navy), and the grade and number of radio operators under license on June 30, 1919 (excluding amateurs, of whom 4,199 were licensed during the fiscal year 1916, and 3,302 during 1917 up to April, when the issue of such licenses ceased), were as follows:

Radio stations.		Radio operators.	
Classification.	Number.	Grade.	Number.
Commercial land radio stations	47	Commercial extra first	48
Commercial ship radio stations	2,312	Commercial first	2,436
Government land radio stations	269	Commercial second	610
Government ship radio stations	1,580	Emergency first	13
		Emergency second	3
		Cargo	7
Total	4,208		3,117

The officers in charge of the wireless operations of our armies in France commend highly the skill, ingenuity, and versatility of licensed amateur radio operators who volunteered in large numbers for military service and served in dangerous and responsible positions.

SUMMARY OF WORK BY DISTRICTS FOR PAST YEAR.

Following is the usual statement by districts of the work performed during the past fiscal year:

Place of inspection or examination.	Stations inspected.		Operators examined.					Operators licensed.					
			Commercial.			Emergency.	Cargo.	Commercial.			Emergency.		Cargo.
	Ship—Volunteer equipment.	Ship for license.	Extra first.	First.	Second.			Extra first.	First.	Second.	First.	Second.	
First district:													
Boston, Mass.—													
Total 1919	94	12	3	232	18	.....	2	3	147	44	.....	.....	2
Total 1918	127	12	.....	200	25	.....	22	.....	145	12	.....	.....	18
Second district:													
New York, N. Y.—													
Total 1919	141	50	5	619	60	97	11	4	432	54	14	2	10
Total 1918	201	81	9	483	191	.....	43	8	427	124	.....	.....	43
Third district:													
Baltimore, Md	82	35	.....	174	13	52	.....	4	143	19	16	5	.....
Norfolk and Newport News	43	7	.....	49	2	1	.....	.....	39	5	3	.....	.....
Philadelphia	19	7	.....	78	5	37	.....	.....	.....	.....	.....	.....	.....
Total 1919	144	49	.....	301	20	90	.....	4	182	24	19	5	.....
Total 1918	439	10	.....	121	10	.....	8	.....	119	18	.....	.....	7
Fourth district:													
Savannah, Ga.—													
Total 1919	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total 1918	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fifth district:													
New Orleans, La.—													
Total 1919	44	16	2	87	3	4	1	3	86	3	4	1	1
Total 1918	41	10	1	102	6	.....	15	1	62	26	.....	.....	11
Sixth district:													
San Francisco, Calif.—													
Total 1919	91	33	2	259	26	8	7	3	177	33	8	2	15
Total 1918	138	51	3	256	29	.....	20	.....	180	24	.....	.....	14
Seventh district:													
Seattle, Wash.—													
Total 1919	83	26	.....	220	55	15	5	.....	155	29	5	1	5
Total 1918	103	11	.....	161	40	.....	17	.....	104	21	.....	.....	14
Eighth district:													
Detroit, Mich	212	41	.....	179	14	44	.....	.....	59	48	.....	.....	.....
Ashtabula, Ohio	5	3	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Buffalo, N. Y	.....	.....	.....	7	2	12	.....	.....	1	2	.....	.....	.....
Cleveland, Ohio	25	7	.....	10	1	12	.....	.....	6	3	.....	.....	.....
Frankford, Mich	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ludington, Mich	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total 1919	247	54	.....	197	17	68	.....	.....	67	53	.....	.....	.....
Total 1918	169	15	2	275	154	.....	.....	.....	113	107	.....	.....	.....
Ninth district:													
Chicago, Ill	108	10	2	284	14	32	.....	1	87	67	1	1	.....
Manitowoc, Wis	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total 1919	110	10	2	284	14	32	.....	1	87	67	1	1	.....
Total 1918	197	3	1	354	75	.....	.....	1	173	119	.....	.....	.....
SUMMARY.													
First district	94	12	3	232	18	.....	2	3	147	44	.....	.....	2
Second district	141	50	5	619	60	98	11	4	432	54	14	2	10
Third district	144	49	.....	301	20	90	.....	4	182	24	19	5	.....
Fourth district	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fifth district	44	16	2	87	3	4	1	3	86	3	4	1	1
Sixth district	91	33	2	259	26	10	7	3	177	33	8	2	15
Seventh district	83	26	.....	220	55	15	5	.....	155	29	5	1	5
Eighth district	247	54	.....	197	17	68	.....	.....	67	53	.....	.....	.....
Ninth district	110	10	2	284	14	32	.....	1	87	67	1	1	.....
Grand total 1919	954	250	14	2,199	213	317	26	18	1,333	307	51	12	33
Grand total 1918	1,434	196	16	1,967	531	.....	125	10	1,326	454	.....	.....	107

ENFORCEMENT OF THE NAVIGATION LAWS.

The following table shows, by districts and laws violated, the result of the work of the Bureau in the enforcement of the navigation laws, the figures indicating the number of violations reported:

VIOLATIONS OF THE NAVIGATION LAWS REPORTED BY THE VARIOUS COLLECTORS OF CUSTOMS, SHOWING THE LAWS VIOLATED FISCAL YEAR ENDED JUNE 30, 1919, 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).	Seamen's act (Mar. 4, 1915).	Anchorage and St. Marys River Rules.	Passenger act (Aug. 2, 1882).	Enrollment and license (R. S. 4336).	Entry and clearance (R. S. 4197, 2774).	Name on vessel (R. S. 4178).	Change of master (R. S. 4335).	Unlading.	Radio communication laws.	Numbering motor boats, act June 7, 1918.	Miscellaneous.
Baltimore	500	32	134	30	....	....	....	....	....	....	22	....	....	....	282	....
Boston	243	59	31	67	....	....	....	5	1	8	1	....	9	....	50	12
Bridgeport	95	1	62	27	....	....	....	....	1	1	2	....	1	....	....	....
Buffalo	168	63	42	1	....	36	....	....	2	1	6	....	9	....	8	....
Charleston	109	2	38	18	....	1	....	....	1	2	17	1	1	....	27	1
Chicago	88	31	16	2	....	21	....	....	....	....	....	....	....	....	18	....
Cleveland	499	340	111	14	....	8	....	....	....	10	....	3	8	....	3	2
Des Moines	27	.....	24	1	....	....	....	....	....	....	....	....	....	....	2	....
Detroit	142	29	48	40	....	....	....	....	2	4	1	1	5	4	8	....
Duluth	282	103	56	1	....	119	....	....	....	....	....	....	2	....	1	....
Galveston	21	1	1	9	....	....	....	....	....	....	4	....	....	....	6	....
Honolulu	10	4	.....	.....	....	....	....	4	....	....	....	....	....	....	14	2
Indianapolis	32	.....	17	1	....	....	....	....	....	....	....	....	....	....	....	....
Juneau	43	2	4	29	....	....	....	....	....	2	....	1	5	....	....	....
Los Angeles	192	1	85	29	....	....	....	....	1	....	1	....	....	....	75	....
Louisville	49	3	12	12	....	....	....	....	....	....	3	....	....	....	22	....
Memphis	67	1	15	16	....	....	....	....	....	....	....	....	1	....	31	....
Milwaukee	81	6	72	.....	....	....	....	....	....	....	2	....	....	....	1	....
Mobile	98	2	6	34	....	2	....	....	....	2	5	....	....	....	45	2
New Orleans	501	233	18	104	....	....	....	....	1	19	8	6	1	2	101	8
New York	626	163	230	123	....	....	....	3	....	3	1	1	2	50	50	....
Norfolk	814	160	262	38	....	....	....	....	1	1	39	1	1	1	310	....
Ogdensburg	54	1	21	25	....	....	....	....	....	....	....	....	7	....	....	....
Philadelphia	532	17	261	81	....	4	....	....	3	1	7	2	2	....	154	....
Pittsburgh	9	2	.....	4	....	....	....	....	....	1	....	....	2	....	....	....
Port Arthur	203	149	3	21	....	6	....	2	2	1	1	2	5	....	4	7
Portland, Me	53	4	1	37	....	....	....	....	1	....	2	1	5	....	2	....
Portland, Oreg	120	1	45	8	....	....	....	....	1	....	....	2	....	....	63	....
Providence	65	4	24	6	....	....	....	1	....	....	....	....	2	....	28	....
Rochester	14	.....	12	2	....	....	....	....	....	....	....	....	....	....	....	....
St. Albans	1	.....	.....	1	....	....	....	....	....	....	....	....	....	....	....	....
St. Louis	291	3	190	28	....	....	....	....	7	....	2	....	1	....	67	....
San Antonio	4	.....	.....	3	....	....	....	....	....	....	....	....	....	....	....	1
St. Paul	2	.....	2	.....	....	....	....	....	....	....	....	....	....	....	....	....
San Francisco	223	75	40	24	....	5	....	3	....	15	4	2	2	....	10	36
San Juan	8	.....	1	3	....	....	....	1	....	....	....	....	1	....	1	1
Savannah	77	22	25	8	....	....	....	....	....	....	1	....	5	....	19	2
Seattle	266	27	9	125	....	50	....	7	4	10	18	5	6	1	3	2
Tampa	1,303	47	344	86	....	21	....	2	8	2	32	1	....	....	744	10
Wilmington, N. C	261	1	135	8	....	....	....	....	2	....	17	3	....	....	95	....
Total—																
1919 (40 ports)	8,173	1,589	2,397	1,066	....	273	....	28	38	83	196	32	83	58	2,244	86
1918 (49 ports)	4,749	710	2,337	922	....	160	....	32	20	62	127	27	250	20	.....	82
1917 (48 ports)	7,569	1,020	4,660	770	....	286	....	29	42	43	400	41	74	22	.....	182
1916 (48 ports)	7,825	812	5,126	943	....	271	1	19	59	28	331	35	67	43	.....	90
1915 (48 ports)	6,868	671	4,462	982	....	....	11	10	104	41	348	67	93	37	.....	42
1914 (49 ports)	6,720	768	4,838	631	....	....	8	25	41	26	153	59	90	36	.....	45
1913 (107 ports)	3,506	333	2,783	23	....	....	23	8	24	10	83	26	1	40	.....	152
1912 (105 ports)	3,634	165	3,119	96	3	....	12	17	38	39	81	12	....	....	.....	52
1911 (92 ports)	2,268	182	1,811	23	41	....	17	45	10	16	43	30	....	....	.....	50
1910 (74 ports)	1,070	252	488	17	68	....	13	61	13	16	68	12	2	....	.....	76
1909 (64 ports)	1,134	151	710	33	69	....	3	21	14	7	59	....	4	....	.....	63
1908 (73 ports)	852	245	385	12	42	....	6	21	23	18	30	7	2	....	.....	61
1907 (66 ports)	684	209	92	88	36	....	18	62	9	23	52	27	5	....	.....	63
1906 (77 ports)	670	194	110	114	41	....	13	27	10	6	49	5	9	....	.....	72
1905 (63 ports)	524	142	53	99	42	....	13	21	26	7	20	11	28	....	.....	62
1904 (66 ports)	706	134	93	101	48	....	49	16	29	12	24	19	(a)	....	.....	131

a Included under "Miscellaneous" in 1904 report.

It will be noted that the number of violations of law reported is considerably in excess of that of any previous year, due principally to the enforcement of the numbering act of June 7, 1918. The increase in violations of the steamboat-inspection laws is due, to some extent, to the scarcity of licensed officers and able seamen, and the use, particularly between Gulf ports and Mexico, of freight vessels to carry passengers, all of which have been brought about by war conditions and the great increase in the merchant marine.

NUMBER OF VIOLATIONS OF THE NAVIGATION LAWS ON WHICH PENALTIES WERE IMPOSED AND SOURCES OF THE REPORTS FOR FISCAL YEAR 1919.

Headquarters port.	Total.	Coast Guard.	Tarragon.	Kilkenny.	Local inspectors.	Radio.	Customs.	Navigation inspectors.
Baltimore	484	.....	397	7	26	.....	28	26
Boston	238	6	2	2	59	.....	158	11
Bridgeport	95	.....	65	.....	.....	.....	30	.....
Buffalo	156	3	.....	.....	102	.....	22	29
Charleston	102	.....	.....	78	1	.....	23	.....
Chicago	85	2	.....	.....	50	.....	25	8
Cleveland	298	40	.....	.....	187	.....	44	27
Des Moines	4	.....	.....	.....	.....	.....	4	.....
Detroit	122	26	.....	.....	31	.....	65	.....
Duluth	256	.....	.....	.....	.....	.....	218	38
Galveston	21	.....	.....	.....	.....	.....	21	.....
Honolulu	8	.....	.....	.....	2	.....	6	.....
Indianapolis	33	3	.....	.....	.....	.....	22	8
Juneau	41	1	.....	.....	.....	.....	40	.....
Los Angeles	302	.....	.....	.....	.....	.....	302	.....
Louisville	45	3	.....	.....	2	.....	33	7
Memphis	68	.....	.....	.....	4	.....	63	1
Milwaukee	84	81	.....	.....	.....	.....	3	.....
Mobile	99	.....	45	.....	2	.....	52	.....
New Orleans	477	.....	120	.....	1	.....	356	.....
New York	606	2	117	76	64	.....	285	62
Nogales	1	.....	.....	.....	.....	.....	1	.....
Norfolk	621	.....	335	47	85	1	47	106
Ogdensburg	39	.....	.....	.....	.....	.....	39	.....
Pembina	1	.....	.....	.....	.....	.....	1	.....
Philadelphia	422	.....	142	14	10	1	165	90
Pittsburgh	8	2	.....	.....	.....	.....	6	.....
Port Arthur	142	.....	.....	.....	8	.....	134	.....
Portland, Me	41	.....	.....	.....	3	.....	38	.....
Portland, Oreg	119	.....	.....	.....	1	.....	55	63
Providence	59	.....	.....	.....	4	.....	8	47
Rochester	11	.....	.....	.....	.....	.....	4	7
St. Louis	226	.....	.....	.....	2	.....	204	20
St. Paul	1	.....	.....	.....	.....	.....	1	.....
San Antonio	5	.....	.....	.....	.....	.....	5	.....
San Francisco	208	58	.....	.....	76	.....	74	.....
San Juan	8	.....	.....	.....	.....	.....	8	.....
Savannah	60	.....	.....	47	2	.....	11	.....
Seattle	255	8	.....	.....	16	4	223	4
Tampa	1,268	.....	3	946	29	.....	290	.....
Wilmington, N. C	263	.....	.....	263	.....	.....	.....	.....
Total—								
1919 (41 ports)	7,382	235	1,226	1,480	767	6	3,114	554
1918 (49 ports)	4,893	241	809	84	404	5	2,654	696
1917 (48 ports)	7,565	1,255	1,234	864	712	13	2,833	654
1916 (48 ports)	7,895	1,333	987	984	590	36	2,876	1,089
1915 (48 ports)	6,860	1,380	1,425	.....	361	34	2,661	999
1914 (49 ports)	6,720	922	1,762	.....	734	27	3,275	.....

The foregoing statement of the work done by the various inspection services engaged in the enforcement of the navigation laws is based on reports of collectors of customs and is approximately correct.

The material reduction of the work of the Coast Guard is, of course, due to the fact of its temporary transfer to the Navy Department and its employment in that service.

In addition to the facilities mentioned above for the enforcement of the law the Bureau expects this fall to receive from the Navy Department the motor vessel *Dixie*, which was turned over to that Department for patrol duty during the war. There has been transferred to the Bureau also by the Navy Department two motor boats, the *Siwash* and *Psyche II*, which are particularly adapted to this work.

Under sections 500 and 1003 of the revenue act of 1918 taxes are imposed on motor boats not engaged exclusively in trade and also on transportation of freight and passengers for hire by such boats. The vessels employed by the Bureau are assisting the Bureau of Internal Revenue in the collection of these taxes. When Congress provides for the operation of the two new vessels turned over to us by the Navy Department we will be able to have a reasonably complete inspection service for the Atlantic and Gulf coasts, Mississippi River and tributaries, and one vessel on the Great Lakes.

COMPARATIVE STATEMENT OF CASES OF VIOLATIONS OF THE NAVIGATION AND STEAMBOAT-INSPECTION LAWS REPORTED BY OFFICERS OF CUSTOMS, 1904–1919.

Port.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Baltimore	65	30	14	34	21	43	49	114	129	294	219	396	312	461	265	500
Boston	27	33	40	15	8	18	34	132	327	67	949	440	412	427	194	243
Bridgeport	8	7	12	9	9	4	13	206	423	30	134	118	54	89	32	95
Buffalo	1	3	3	5	10	8	32	9	75	64	3	42	144	87	111	168
Charleston	2	.....	5	21	3	2	4	1	4	13	154	91	39	50	28	109
Chicago	8	7	8	7	21	5	70	138	55	35	105	178	389	283	144	88
Cleveland	14	14	20	20	27	10	32	114	66	76	90	104	218	161	177	499
Des Moines	1	.....	2	3	5	4	.....	.....	3	.....	160	85	4	116	56	27
Detroit	33	23	41	48	28	86	161	69	251	221	112	293	441	163	146	142
Duluth	34	16	15	16	15	14	46	9	13	15	17	62	79	138	132	282
Eagle Pass	.....	.....	.....	.....	.....	.....	.....	1	3	28	2	.....	.....	1	1	.....
Galveston	7	5	8	15	5	9	1	6	2	39	49	49	50	105	54	21
Great Falls	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Honolulu	6	2	8	.....	7	17	20	14	14	11	15	14	18	18	11	10
Indianapolis	.....	.....	.....	.....	2	.....	.....	7	23	5	1	5	109	54	85	32
Juneau	18	21	10	22	9	8	17	113	67	27	41	43	33	40	44	43
Laredo	1	.....	.....	.....	.....	.....	.....	1	16	5	14	2	7	10	.....	.....
Los Angeles	.....	8	5	5	52	4	26	65	36	23	79	182	172	137	109	192
Louisville	.....	1	2	5	.....	.....	1	14	24	6	41	58	63	128	50	49
Memphis	3	3	7	4	4	3	8	10	12	9	10	52	94	84	18	67
Milwaukee	2	6	9	4	14	19	13	16	22	16	16	8	133	82	18	81
Mobile	21	35	32	23	6	9	41	36	40	30	157	107	106	109	52	98
New Orleans	11	15	38	21	21	16	24	51	71	73	218	173	177	315	221	501
New York	164	132	160	124	250	638	174	292	352	330	1,013	622	1,256	1,292	583	626
Nogales	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	.....
Norfolk	43	13	21	16	170	66	43	214	121	489	235	335	531	430	181	814
Ogdensburg	5	4	2	4	4	6	6	13	25	20	57	40	92	74	201	54
Pembina	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	3	.....
Philadelphia	25	12	26	16	10	8	17	25	28	164	378	867	483	406	166	532
Pittsburgh	.....	.....	.....	.....	3	5	.....	1	24	6	21	13	27	4	6	9
Port Arthur	.....	.....	.....	6	4	3	5	28	35	10	126	33	68	93	117	203
Portland, Me	7	9	5	7	14	13	26	86	157	51	78	566	241	145	51	53
Portland, Oreg	7	7	11	5	2	3	6	7	125	331	354	273	229	130	239	120
Providence	1	2	14	9	9	13	7	79	70	20	130	21	125	94	68	65
Rochester	.....	.....	4	1	2	1	7	18	23	42	34	28	42	44	102	14
St. Albans	.....	.....	.....	.....	.....	2	.....	.....	4	1	54	3	33	68	29	1
St. Louis	.....	.....	1	.....	3	3	8	30	88	20	109	186	154	348	173	291
St. Paul	1	1	1	.....	.....	2	.....	3	.....	.....	5	1	5	.....	.....	4
San Antonio [a]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2
San Francisco	6	20	11	73	25	20	70	103	64	107	260	446	276	196	151	223
San Juan	11	4	4	3	13	3	9	9	25	18	28	28	11	12	14	8
Savannah	5	1	7	1	6	2	1	2	7	6	98	78	82	48	41	77
Seattle	138	54	72	87	33	29	19	74	108	59	38	306	409	318	338	266
Tampa	27	33	46	54	29	27	80	135	682	364	669	314	570	547	295	1,303
Wilmington, N.C.	4	3	5	1	8	11	5	23	20	373	104	206	137	262	19	261
Total (45 ports)	706	524	670	684	852	1,134	1,070	2,268	3,634	3,506	6,720	6,868	7,825	7,569	4,749	8,173

[a] The districts of Laredo (No. 23) and Eagle Pass (No. 25) were abolished by Executive order Sept. 7, 1917, and the district of San Antonio (No. 23) was created by the same order.

PREVENTION OF OVERCROWDING OF PASSENGER VESSELS.

Owing to the cessation of hostilities and the withdrawal of Government restrictions, there was a material increase in the excursion business on water. From the following table it will be noted that the total number of passengers counted as going on vessels during the year at the principal ports aggregated 7,873,791. This does not include the excursion business out of the port of New York, conditions being such that that office made no report during the year.

NUMBER OF COUNTS AND THE NUMBER OF PASSENGERS INVOLVED IN PREVENTING OVERCROWDING OF PASSENGER VESSELS DURING FISCAL YEAR 1919.

Port.	Navigation.		Customs.		Total.	
	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.
Baltimore	1,333	673,253	1	349	1,334	673,602
Boston			439	402,931	439	402,931
Bridgeport			1	722	1	722
Buffalo			2,051	522,021	2,051	522,021
Charleston,			2	829	2	829
Chicago	1,702	309,770	118	41,922	1,820	358,892
Cleveland	2,494	427,034	125	121,829	2,619	548,863
Detroit	751	4,589,675	194	281,429	945	4,871,104
Duluth	78	18,396	45	16,146	123	34,542
Galveston			29	758	29	758
Indianapolis			17	8,692	17	8,692
Louisville	129	44,607	1	773	130	45,380
Memphis	56	24,741			56	24,741
Mobile			56	17,908	56	17,908
New York			1	31	1	31
Norfolk	104	21,411	151	61,886	255	83,297
Philadelphia			99	120,153	99	120,153
Port Arthur			67	165	67	165
Portland, Me	647	96,371			647	96,371
Portland, Oreg			9	1,249	9	1,249
Providence	86	45,690			86	45,690
Rochester			34	15,132	34	15,132
Savannah			1	270	1	270
St. Albans			250	448	250	448
Total	7,380	6,250,948	3,691	1,622,843	11,071	7,873,791
Total for 1918	8,447	2,931,570	5,129	1,985,202	13,576	4,916,772

The following table shows, by ports, the occasions on which vessels reached their passenger capacity and were prevented by our inspectors from taking on more passengers. On 408 occasions 186,307 passengers were prevented from going on the boats. While it does not follow that on each of these occasions there would have been a dangerous overcrowding of the vessels, it is safe to assume that on a number of such occasions life would have been endangered had it not been for the protection of this service.

SHUT-OFFS, BY MONTHS, DURING THE FISCAL YEAR 1919.

Port.	July.		August.		September.		December.		May.		June.		Total.	
	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.	Counts.	Passengers.
Baltimore	3	3,600	2	1,700	4	5,080	2	600	2	3,100	5	3,550	18	17,630
Boston	1	1,970	3	1,095	3	1,095	....	.....	....	.....	....	.....	7	4,160
Buffalo	4	4,950	3	1,650	2	1,150	....	.....	....	.....	....	.....	9	7,750
Chicago	121	25,112	83	6,328	17	2,984	....	.....	6	1,212	81	15,854	308	51,490
Cleveland	....	.....	2	5,000	....	.....	....	.....	3	7,000	3	220	8	12,220
Detroit	5	9,916	3	4,762	....	.....	....	.....	8	23,557	10	24,743	26	62,978
Duluth	....	.....	3	2,808	....	.....	....	.....	....	.....	....	.....	3	2,808
Memphis	1	750	....	.....	....	.....	....	.....	....	.....	1	750	2	1,500
Mobile	....	.....	1	550	....	.....	....	.....	....	.....	1	568	2	1,118
Norfolk	....	.....	....	.....	....	.....	....	.....	1	1,000	....	.....	1	1,000
Philadelphia	6	9,600	5	8,200	....	.....	....	.....	....	.....	....	.....	11	17,800
Portland, Me	....	.....	....	.....	1	300	....	.....	....	.....	....	.....	1	300
Portland, Oreg	2	200	....	.....	....	.....	....	.....	....	.....	....	.....	2	200
Providence	1	235	2	2,000	....	.....	....	.....	....	.....	....	.....	3	2,235
Rochester	5	2,238	....	.....	2	880	....	.....	....	.....	....	.....	7	3,118
Total	149	58,571	107	34,093	29	11,489	2	600	20	35,869	101	45,685	408	186,307
Total for 1918	188	112,664	83	99,937	14	16,816	....	.....	15	6,390	85	32,213	385	268,020

NUMBERING UNDOCUMENTED VESSELS.

The act of June 7, 1918, regarding the numbering of undocumented vessels, went into effect on December 7, 1918, and since that time up to July 1 of this year 91,916 such vessels have been numbered throughout the country. The numbering of these boats is done without cost, and in the manner in which automobiles are numbered and for similar purposes. The identification of the owners of these small vessels assists materially in the enforcement of the navigation laws and the collection of taxes. In addition to this, the local authorities at the various ports have found it of material assistance in the enforcement of the harbor-police laws and regulations. The law has met with approval among motor-boat owners, and most effective service has been rendered the Government in the enforcement of the law by the motor-boat publications of the country.

INSPECTION VESSELS.

During the past season there has been a general resumption of the use of motor boats for pleasure purposes, increasing the necessity for the use of the inspection boats in safeguarding the lives of those using them.

At the beginning of the war the Bureau turned over to the Navy the motor boat *Dixie* which was adapted to naval patrol work and she was in constant service in Hampton Roads. This vessel is now being overhauled and repaired, and will be turned back in the near future.

The Navy Department, also, has turned over to the Bureau two small motor boats, the *Siwash* and *Psyche II,* which are especially adapted to this work. It is expected that these vessels will be placed in service about January 1.

It is proposed to station the *Siwash* with headquarters at New York to cover the New England coast. The *Kilkenny* will cover Chesapeake and Delaware bays and North Carolina sounds. The *Tarragon,* a small vessel of light draft, will be stationed at Jacksonville to cover

the waters of South Carolina and Florida. The *Dixie* will be stationed with headquarters at St. Louis to cover the Mississippi River and tributaries in the summer and the Gulf coast in the winter. The *Psyche II* will be employed on the Great Lakes.

The inspection vessels are small, ranging from 60 to 93 feet in length and carry crews ranging from 5 to 7. They are economical in operation and with its five vessels, which we now have, the Bureau should be able to make a reasonable inspection of the Atlantic and Gulf coasts, Mississippi River and tributaries, and a portion of the Great Lakes. The revenue derived from their work in the collection of taxes and navigation fines should exceed the cost of their operation. They will be of material assistance in extending to the millions of people using this means of navigation the protection of the navigation laws.

PASSENGER ACT OF 1882.

During the past fiscal year passenger ships on 314 voyages brought 55,603 steerage passengers to the United States, compared with 442 voyages carrying 67,988 passengers in the fiscal year 1918; 630 voyages carrying 147,493 passengers in 1917; 720 voyages carrying 154,057 passengers in 1916; and 956 voyages carrying 211,057 passengers in 1915.

RECOGNITION OF HEROISM.

Even before our declaration of war in April, 1917, American officers and men on our merchant ships were placed in peril by submarine attacks, and in numerous instances those whose ships had been sunk eagerly shipped on other ships. Such conduct is entitled to official recognition, and a committee has been appointed to make recommendations on this subject. Official recognition in all its forms, to have any value, should be proportionate and discriminating, so it is best to wait until the final general form of recognizing the valor of men in the Army and Navy has been decided before reaching a conclusion about men in the merchant marine. In the British merchant marine thus far a "torpedo badge" has been awarded to officers and men who were serving on merchant ships which were torpedoed, and who joined other ships afterwards. Where men have undergone the danger a second time a second badge has been awarded, and in case of death the badge is awarded to the widow or oldest orphan.

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, 1919.

The following statements are based on the annual reports of United States shipping commissioners for the fiscal year ended June 30, 1919. 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 of each office to the Government, and the number of employees authorized:

Port.	Discharged.	Shipped and reshipped.	Total.	Total amount of salaries paid.	Average cost per man.	Employees.
Baltimore	12,579	14,814	27,393	$3,100.00	$0.11	1
Bath	33	1,100	1,133	1,000.00	.88	.....
Boston	17,346	18,969	36,315	7,197.67	.20	3
New Bedford	256	1,199	1,455	1,200.00	.82	.....
Newport News [a]	1,551	2,691	4,242	967.50	.23	1
New Orleans	24,219	24,731	48,950	4,785.00	.10	3
New York	105,763	108,035	213,798	20,882.00	.10	14
Norfolk	6,163	9,135	15,298	2,385.00	.16	1
Philadelphia	11,213	15,808	27,021	6,376.50	.24	3
Portland, Me	2,450	4,972	7,422	2,200.00	.30	1
Providence	973	3,675	4,648	2,400.00	.52	1
Rockland	72	637	709	575.00	.81	.....
San Francisco	17,721	19,619	37,340	11,871.00	.32	7
Seattle	29,515	30,537	60,052	10,348.00	.17	7
Total	229,854	255,922	485,796	75,288.47	.15	42

[a] These figures represent six months' work, the office having been established in January, 1919.

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.	
Baltimore	4,502	90	3,792	93	1,084	7	2,045	92	3,099	10	14,841
Bath	40	.....	839	.....	.....	205	.....	.....	.....	16	1,100
Boston	1,502	155	1,984	77	2,097	18	6,060	640	6,424	12	18,969
New Bedford	.....	123	.....	.....	.....	.....	518	429	107	22	1,199
Newport News	1,649	33	577	39	151	5	184	1	52	.....	2,691
New Orleans	5,611	41	3,914	128	12,638	68	1,268	24	1,038	1	24,731
New York	33,099	2,111	17,467	577	40,650	164	3,543	223	10,182	19	108,035
Norfolk	4,391	233	1,735	86	634	2	1,527	151	374	2	9,135
Philadelphia	5,392	110	2,658	78	3,009	7	2,579	67	1,891	17	15,808
Portland, Me	158	35	243	47	281	10	2,935	167	1,072	24	4,972
Providence	36	13	.....	.....	.....	.....	2,451	305	870	.....	3,675
Rockland	.....	47	9	75	12	9	111	262	49	63	637
San Francisco	9,795	1,358	276	38	4,110	156	913	179	2,784	10	19,619
Seattle	3,591	287	128	13	88	.....	11,886	634	13,910	.....	30,537
Total	69,766	4,636	33,622	1,251	64,754	651	36,020	3,174	41,852	196	255,922

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.	
Baltimore	3,687	16	5,790	20	2,997	69	12,579
Bath	.....	.....	.....	.....	.....	33	33
Boston	1,686	191	2,516	20	12,837	96	17,346
New Bedford	.....	21	.....	.....	220	15	256
Newport News	749	24	48	.....	717	13	1,551
New Orleans	12,785	38	9,411	190	1,795	.....	24,219
New York	45,211	1,403	38,938	374	19,502	335	105,763
Norfolk	4,368	29	279	27	1,276	184	6,163
Philadelphia	4,370	75	4,414	78	2,255	21	11,213
Portland, Me	41	.....	514	9	1,830	56	2,450
Providence	.....	.....	.....	.....	973	.....	973
Rockland	.....	.....	.....	9	.....	63	72
San Francisco	9,461	1,848	483	35	5,690	204	17,721
Seattle	541	119	481	3	28,227	144	29,515
Total	82,899	3,764	62,874	765	78,319	1,233	229,854

4. Nationality of Seamen.

The following table, compiled by shipping commissioners from articles of agreement, shows the nationality of men shipped and reshipped. During recent fiscal years 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	6,236	3	105	6,344	946	....	16	962	1,156	.....	24	1,180
Bath	855	....	152	1,007	.....	....	3	3	4	.....	14	18
Boston	9,072	9	368	9,449	1,232	2	75	1,309	2,019	8	158	2,185
New Bedford	313	....	148	461	11	....	40	51	44	.....	112	156
Newport News	1,319	....	18	1,337	141	....	5	146	196	.....	16	212
New Orleans	9,538	....	59	9,597	1,889	....	19	1,908	3,597	.....	35	3,632
New York	32,533	41	531	33,105	8,985	20	236	9,241	10,658	20	406	11,084
Norfolk	4,494	....	188	4,682	523	....	20	543	596	.....	67	663
Philadelphia	6,180	....	75	6,255	1,164	....	24	1,188	1,149	.....	55	1,204
Portland, Me	2,922	....	109	3,031	549	....	22	571	245	.....	33	278
Providence	1,369	....	101	1,470	165	....	18	183	470	.....	60	530
Rockland	95	....	247	342	5	....	13	18	19	.....	51	70
San Francisco	7,207	342	106	7,655	2,645	86	128	2,859	1,669	65	41	1,775
Seattle	12,210	78	137	12,425	5,510	70	114	5,694	3,822	8	31	3,861
Total	94,343	473	2,344	97,160	23,765	178	733	24,676	25,644	101	1,103	26,848

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.
Baltimore	.....	....	.....	.....	29	....	3	32	589	.....	19	608
Bath	.....	....	1	1	.....	....	2	2	5	.....	8	13
Boston	58	....	2	60	20	....	.....	20	508	3	50	561
New Bedford	.....	....	.....	.....	4	....	15	19	25	.....	5	30
Newport News	.....	....	.....	.....	3	....	1	4	57	.....	7	64
New Orleans	.....	....	.....	.....	104	....	.....	104	814	.....	17	831
New York	.....	....	.....	.....	307	1	12	320	2,918	33	259	3,210
Norfolk	.....	....	.....	.....	15	....	6	21	263	.....	49	312
Philadelphia	.....	....	.....	.....	27	....	1	28	862	.....	26	888
Portland, Me	.....	....	.....	.....	10	....	.....	10	110	.....	15	125
Providence	20	....	.....	20	.....	....	.....	.....	319	.....	43	362
Rockland	.....	....	.....	.....	3	....	5	8	15	.....	44	59
San Francisco	5	....	.....	5	75	9	6	90	758	90	150	998
Seattle	45	5	2	52	31	1	4	36	2,041	21	114	2,176
Total	128	5	5	138	628	11	55	694	9,284	147	806	10,237

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	663	....	18	681	395	....	14	409	1,121	.....	20	1,141
Bath	9	....	10	19	2	....	8	10	.....	.....	.....	.....
Boston	574	4	61	639	245	3	16	264	1,127	1	1	1,129
New Bedford	24	....	16	40	3	....	2	5	37	.....	4	41
Newport News	101	....	4	105	45	....	4	49	155	.....	.....	155
New Orleans	692	....	18	710	521	....	21	542	2,493	.....	28	2,521
New York	3,268	43	282	3,593	2,113	37	206	2,356	15,460	4	48	15,512
Norfolk	330	....	35	365	136	....	22	158	529	.....	3	532
Philadelphia	1,060	....	39	1,099	578	....	23	601	1,511	.....	2	1,513
Portland, Me	130	....	7	137	49	....	6	55	126	.....	5	131
Providence	225	....	31	256	61	....	14	75	181	.....	.....	181
Rockland	6	....	21	27	4	....	9	13	19	.....	.....	19
San Francisco	731	88	119	938	413	75	42	530	322	1	3	326
Seattle	1,340	28	77	1,445	749	10	17	776	960	.....	2	962
Total	9,153	163	738	10,054	5,314	125	404	5,843	24,041	6	116	24,163

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	102	....	19	121	208	....	21	229	576	.....	6	582
Bath	.....	.....	.....	.....	.....	.....	12	12	3	.....	5	8
Boston	67	....	3	70	1,362	5	42	1,409	570	2	52	624
New Bedford	.....	.....	.....	.....	98	....	200	298	12	.....	2	14
Newport News	14	....	1	15	75	....	7	82	120	.....	5	125
New Orleans	600	....	1	601	149	....	1	150	611	.....	8	619
New York	1,298	....	3	1,301	1,854	2	127	1,983	4,158	49	306	4,513
Norfolk	45	....	7	52	162	....	9	171	346	.....	35	381
Philadelphia	144	....	5	149	238	....	8	246	992	.....	18	1,010
Portland, Me	13	....	1	14	186	....	68	254	174	.....	8	182
Providence	.....	.....	.....	.....	326	....	28	354	173	.....	23	196
Rockland	5	.....	.....	5	.....	.....	34	34	.....	.....	.....	.....
San Francisco	66	1	2	69	45	2	1	48	646	69	83	798
Seattle	67	37	2	106	208	....	3	211	942	54	60	1,056
Total	2,421	38	44	2,503	4,911	9	561	5,481	9,323	174	611	10,108

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	.....	....	.....	.....	54	....	4	58	14	.....	.....	14
Boston	.....	.....	.....	.....	14	....	1	15	5	.....	2	7
Newport News	6	....	1	7	16	....	.....	16	8	.....	.....	8
New Orleans	5	....	.....	5	60	....	2	62	23	.....	7	30
New York	631	1	15	647	701	13	7	721	278	.....	6	284
Norfolk	19	.....	.....	19	45	.....	.....	45	5	.....	.....	5
Philadelphia	31	.....	.....	31	166	.....	.....	166	6	.....	.....	6
Portland, Me	.....	.....	.....	.....	2	.....	.....	2	.....	.....	.....	.....
San Francisco	7	4	2	13	25	10	26	61	628	12	4	644
Seattle	1	4	2	7	14	2	36	52	148	2	6	156
Total	700	9	20	729	1,097	25	76	1,198	1,115	14	25	1,154

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	.....	....	.....	.....	2,431	....	22	2,453	14,520	3	291	14,814
Bath	.....	....	4	4	1	....	2	3	879	.....	221	1,100
Boston	17	....	4	21	1,176	5	26	1,207	18,066	42	861	18,969
New Bedford	10	....	4	14	44	....	26	70	625	.....	574	1,199
Newport News	1	....	.....	1	354	....	11	365	2,611	.....	80	2,691
New Orleans	.....	....	.....	.....	3,373	....	46	3,419	24,469	.....	262	24,731
New York	.....	....	.....	.....	19,779	35	351	20,165	104,941	299	795	108,035
Norfolk	.....	....	.....	.....	1,143	....	43	1,186	8,651	.....	484	9,135
Philadelphia	49	....	.....	49	1,336	....	39	1,375	15,493	.....	315	15,808
Portland, Me	10	....	.....	10	163	....	9	172	4,689	.....	283	4,972
Providence	.....	....	.....	.....	48	....	.....	48	3,357	.....	318	3,675
Rockland	.....	....	.....	.....	10	....	32	42	181	.....	456	637
San Francisco	2	....	1	3	2,671	79	57	2,807	17,915	933	771	19,619
Seattle	21	2	.....	23	1,463	18	18	1,499	29,572	340	625	30,537
Total	110	2	13	125	33,992	137	682	34,811	245,969	1,617	8,336	255,922

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.	Failures.	Men.	Failures.	Men.	Failures.	Men.	Failures.	Men.	Failures.	Per cent of failures.
Baltimore	9,378	100	190	.....	5,144	154	102	7	14,814	261	1.08
Bath	879	.....	.....	.....	221	.....	.....	.....	1,100	.....	.....
Boston	5,583	93	250	97	12,484	105	652	8	18,969	303	1.60
New Bedford	.....	.....	123	.....	625	.....	451	3	1,199	3	.25
Newport News	2,377	50	77	.....	236	10	1	1	2,691	61	2.27
New Orleans	22,163	228	237	1	2,306	187	25	1	24,731	417	2.26
New York	91,216	1,147	2,852	310	13,725	101	242	26	108,035	1,584	1.69
Norfolk	6,760	102	321	19	1,901	30	153	21	9,135	172	1.88
Philadelphia	11,059	196	195	18	4,470	65	84	.....	15,808	279	1.76
Portland, Me	682	15	92	.....	4,007	62	191	7	4,972	84	1.69
Providence	36	.....	13	.....	3,321	68	305	12	3,675	80	2.18
Rockland	21	.....	131	6	160	.....	325	9	637	15	2.36
San Francisco	14,181	123	1,552	35	3,697	13	189	.....	19,619	171	.87
Seattle	3,807	22	300	2	25,796	48	634	.....	30,537	72	.23
Total	168,142	2,076	6,333	488	78,093	843	3,354	95	255,922	3,502	1.37

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.	Port.	Steamers.	Square-rigged.	Schooners.	Total.
New Bedford	.....	.....	23	23	San Francisco	32	8	10	50
New Orleans	1	.....	.....	1	Seattle	17	.....	.....	17
New York	34	2	3	39					
Norfolk	125	.....	.....	125	Total	210	10	36	256
Philadelphia	1	.....	.....	1					

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	501	.....	3	504	Philadelphia	436	.....	21	457
Bath	2	.....	3	5	Portland, Me	9	.....	4	13
Boston	158	3	5	166	Rockland	.....	.....	4	4
Newport News	92	.....	3	95	San Francisco	928	60	29	1,017
New Orleans	80	.....	2	82	Seattle	296	.....	.....	296
New York	2,679	8	148	2,835					
Norfolk	470	.....	12	482	Total	5,651	71	234	5,956

8. Seamen Shipped and Discharged by Collectors.

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

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, 1919:

Port.	Shipped.	Discharged.	Port.	Shipped.	Discharged.
Bangor, Me	33	.....	Sabine, Tex	65	58
Bar Harbor, Me	12	.....	Orange, Tex	15	8
Belfast, Me	67	58	Beaumont, Tex	245	94
Cutler, Me	10	.....	Galveston, Tex	247	320
Machias, Me	88	.....	Houston, Tex	5	7
Southwest Harbor, Me	16	.....	Freeport, Tex	50	50
Portsmouth, N. H	7	13	Texas City, Tex	191	169
Gloucester, Mass	4,099	37	Port Aransas, Tex	138	133
Plymouth, Mass	.....	2	San Diego, Calif	1,261	1,343
Fall River, Mass	25	49	San Pedro, Calif	682	331
Vineyard Haven, Mass	7	3	Port San Luis, Calif	73	68
Bridgeport, Conn	.....	30	Eureka, Calif	195	15
Newark, N. J	104	108	Astoria, Oreg	468	77
Perth Amboy, N. J	500	517	Portland, Oreg	2,855	437
Wilmington, Del	88	.....	Marshfield, Oreg	12	1
Newport News, Va.[a]	3,947	3,047	Port Angeles, Wash	183	42
Charleston, S. C	78	198	Aberdeen, Wash	317	100
Brunswick, Ga	33	105	Anacordia, Wash	26	.....
Savannah, Ga	229	168	Bellingham, Wash	163	78
Tampa, Fla	699	65	South Bend, Wash	61	9
Key West, Fla	773	92	Juneau, Alaska	35	20
Jacksonville, Fla	695	357	San Juan, P. R	385	204
St. Andrews, Fla	90	11	Ponce, P. R	37	27
Miami, Fla	150	.....	Mayaguez, P. R	74	23
Fernandina, Fla	47	48	Guanica, P. R	126	123
Apalachicola, Fla	7	.....	Arecibo, P. R	1	1
Pensacola, Fla	878	206	Aguadilla, P. R	1	1
Mobile, Ala	2,182	3,344	Fajardo, P. R	2	1
Gulfport, Miss	380	135	Arroyo, P. R	2	4
Pascagoula, Miss	298	177	Jobos, P. R	2	2
Baton Rouge, La	541	683			
Port Arthur, Tex	454	325	Total	24,454	13,524

[a] Six months from June to December, 1918.

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), 1895–1919.

Third. Average monthly wages paid to first mates on American vessels, 1895–1919.

Fourth. Average monthly wages paid to firemen and first engineers on American steam vessels, 1895–1919.

Fifth. The wage scales established by the U. S. Shipping Board on May 18 and June 14, 1918, January 1 to May 1, 1919, and also the working rules and wages effective July 28 and August 1, 1919, are published herein.

Sixth. The principal rates of wages on British ships at ports of the United Kingdom, extracted from the tables of the National Maritime Board, printed in the Shipping Federation pamphlet.

TABLE 1.—AVERAGE MONTHLY WAGES PAID IN THE AMERICAN MERCHANT MARINE FOR FISCAL YEAR ENDED JUNE 30, 1919.

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.
To Great Britain.														
Under 500 tons:														
Baltimore	$93.75	$106.25	$112.50	$125.00	$106.25	$93.75	$106.25	$112.50	$195.00	$190.00	$93.75	$81.25	$195.00	$190.00
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
From 500 to 1,500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	106.25	112.50	195.00	190.00	93.75	81.25	195.00	190.00
Boston	75.00	.....	.....	125.00 to 150.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	181.25	162.50	75.00	65.00	212.50	181.25
New York	75.00	90.00	90.00	125.00	100.00	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	75.00	.....	.....	140.00	95.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	125.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.00	.....	90.00	155.00	115.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 1,500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	106.25	112.50	195.00	192.50	93.75	81.25	210.00	192.50
Boston	.....	.....	.....	.....	.....	75.00	85.00	90.00	181.25 to 206.25	162.50 to 187.50	75.00	65.00	212.50 to 287.50	162.50 to 187.50
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	190.15	176.35	75.00	65.00	239.00	190.15
New Orleans	.....	.....	.....	.....	.....	93.70	106.25	112.50	211.66	191.83	93.70	81.25	275.16	211.00
New York	75.00	100.00	90.00	150.00	125.00	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia[a]	.....	.....	.....	.....	.....	75.00	85.00	90.00	155.00	140.00	75.00	65.00	190.00	155.00
Portland, Me	75.00	.....	.....	150.00	100.00	75.00	85.00	90.00	187.50	168.00	75.00	65.00	187.50	168.75
Rockland	75.00	.....	.....	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.00	85.00	.....	162.50	127.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seattle	.....	.....	.....	.....	.....	75.00	80.00	90.00	175.00	150.00	75.00	75.00	250.00	175.00
To Continent of Europe.														
Under 500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	106.25	112.50	195.00	190.00	93.75	81.25	195.00	190.00
New Orleans	75.00	85.00	.....	110.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

From 500 to 1,500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	106.25	112.50	195.00	190.00	93.75	81.25	195.00	190.00
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	181.25	162.50	75.00	65.00	212.50	181.25
New York	75.00	100.00	90.00	125.00	100.00	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia [a]	75.00	85.00	.....	135.00	90.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	125.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 1,500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	106.25	112.50	210.00	192.50	93.75	81.25	210.00	192.50
Bath	.....	.....	.....	.....	.....	75.00	85.00	.....	193.75	175.75	.....	.....	250.00	193.75
Boston	.....	.....	.....	.....	.....	75.00	85.00	90.00	181.75 to 206.25	162.50 to 187.50	75.00	65.00	212.50 to 287.50	162.50 to 187.50
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	190.15	171.35	75.00	65.00	239.00	190.00
New Orleans	.....	.....	.....	.....	.....	93.70	106.25	112.50	211.66	191.83	93.70	81.25	275.16	211.00
New York	75.00	125.00	90.00	150.00	125.00	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia [a]	75.00	85.00	.....	135.00	90.00	75.00	85.00	90.00	155.00	140.00	75.00	65.00	190.00	155.00
Portland, Me	.....	.....	.....	.....	.....	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Rockland	75.00	.....	.....	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.00	.....	100.00	150.00	120.00	75.00	80.00	90.00	168.12	144.02	75.00	75.00	237.91	166.67
Seattle	.....	.....	.....	.....	.....	75.00	80.00	90.00	175.00	150.00	75.00	75.00	250.00	175.00
To South America.														
Under 500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	178.00	162.50	75.00	65.00	178.00	162.50
New Orleans	75.00	110.00	.....	.....	85.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York	75.00	85.00	.....	100.00	90.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
From 500 to 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	178.00	162.50	75.00	65.00	178.00	162.50
Boston	75.00	.....	.....	125.00 to 150.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	125.00	90.00	75.00	65.00	.....	.....
New Orleans	.....	.....	.....	.....	.....	75.00	85.00	90.00	181.25	162.50	80.00	.....	212.50	181.25
New York	75.00	100.00	90.00	125.00	100.00	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia [a]	75.00	85.00	.....	135.00	85.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	125.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.00	125.00	.....	155.00	120.00	75.45	.....	.....	146.89	129.03	75.50	.....	192.27	143.85
Seattle	90.00	.....	95.00	135.00	110.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	200.00	175.00	75.00	65.00	200.00	175.00
Bath	75.00	85.00	.....	150.00	125.00	75.00	85.00	.....	193.75	175.00	75.00	.....	250.00	193.75
Boston	75.00	.....	.....	125.00 to 150.00	100.00	75.00	85.00	90.00	181.25 to 206.25	162.50 to 187.50	75.00	65.00	212.50 to 287.50	162.50 to 187.50
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	185.65	166.87	75.00	65.00	225.62	185.65
New Orleans	.....	.....	.....	.....	.....	75.00	85.00	90.00	187.50	168.75	75.00	65.00	231.25	187.50

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 1.—AVERAGE MONTHLY WAGES PAID IN THE AMERICAN MERCHANT MARINE FOR FISCAL YEAR ENDED JUNE 30, 1919—Continued.

Destination, size, and port of departure of vessels.	Sail.					Steam.								
	Able seamen.	Boatswains.	Carpenters.	First mates.	Second mates.	Able seamen.	Boatswains.	Carpenters.	First mates.	Second mates.	Firemen.	Trimmers.	First engineers.	Second engineers.
To South America—Continued.														
Over 1,500 tons.—Continued.														
New York	$75.00	$125.00	$90.00	$150.00	$125.00	$75.00	$85.00	$90.00	$187.50	$168.75	$75.00	$65.00	$187.50	$168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia[a]	75.00	85.00	.....	135.00	85.00	75.00	85.00	90.00	155.00	140.00	75.00	65.00	185.00	155.00
Portland, Me	.....	.....	.....	.....	.....	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Rockland	75.00	.....	.....	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.00	.....	.....	.....	.....	75.00	80.36	90.00	163.62	138.63	75.00	75.00	224.26	164.72
Seattle	.....	.....	.....	.....	.....	75.00	80.00	90.00	175.00	150.00	75.00	75.00	250.00	175.00
To West Indies, Mexico, and Central America.														
Under 500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	178.00	162.50	75.00	65.00	178.00	162.50
Boston	75.00	.....	.....	85.00 to 90.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	75.00	90.00	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....	.....
New Orleans	75.00	90.00	.....	110.00	.....	75.00	85.00	90.00	176.56	155.00	80.00	.....	220.31	178.65
New York	75.00	85.00	.....	.....	90.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	75.00	85.00	.....	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	75.00	.....	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	.....	.....	.....	.....	.....	75.00	.....	.....	145.00	130.00	75.00	.....	225.00	150.00
From 500 to 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	178.00	162.50	75.00	65.00	178.00	162.50
Boston	75.00	.....	.....	125.00 to 150.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newport News	.....	.....	.....	.....	.....	75.00	85.00	90.00	.....	.....	75.00	65.00	.....	.....
New Orleans	75.00	92.50	.....	119.00	.....	75.00	85.00	90.00	175.60	156.84	77.50	65.00	227.50	178.39
New York	75.00	85.00	90.00	100 00	90.00	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	75.00	85.00	.....	125.00	85.00	75.00	85.00	90.00	150.00	125.00	75.00	65.00	180.00	150.00
Rockland	75.00	.....	.....	125.00	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	.....	.....	.....	.....	.....	75.00	.....	.....	153.00	133.87	75.00	.....	195.00	145.50
Seattle	90.00	.....	95.00	135.00	110.00	.....	.....	.....	.....	.....	.....	.....	.....	.....

Over 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	200.00	175.00	75.00	65.00	200.00	175.00
Boston	75.00			125.00 to 150.00	100.00	75.00	85.00	90.00	181.25 to 206.25	162.50 to 187.50	75.00	65.00	212.50 to 281.50	162.50 to 181.50
Newport News						75.00	85.00	90.00	181.25	162.50	75.00	65.00	212.50	181.25
New Orleans						75.00	85.00	90.00	185.52	166.79	75.00	65.00	234.05	184.16
New York	75.00	100.00	90.00	125.00	100.00	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia [a]	75.00	85.00				75.00	85.00	90.00	155.00	140.00	75.00	65.00	185.00	155.00
Portland, Me						75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Providence						75.00	85.00	90.00	193.75	175.00	75.00	65.00	250.00	193.75
Rockland	75.00			150.00	125.00									
San Francisco						75.00	81.00	90.00	165.00	140.00	75.00		229.16	164.17
Seattle						75.00	80.00	90.00	175.00	150.00	75.00	75.00	250.00	175.00
Atlantic and Gulf coasting trade.														
Under 500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	175.00	162.50	75.00	65.00	178.00	162.50
Bath	60.00 to 65.00	85.00		75.00		60.00 to 65.00			75.00					
Boston	75.00			85 to 90										
New Bedford	75.00	90.00		145.00	130.00	75.00			145.00	130.00	75.00	65.00	160.00	135.00
New York	75.00	85.00		85.00	80.00									
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	175.00	140.00	75.00	65.00	170.00	
Philadelphia [a]	75.00			110.00										
Providence	75.00			125.00										
Rockland	65.00			80.00		75.00			165.00	135.00	75.00		200.00	165.00
From 500 to 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00						75.00	65.00	178.00	162.50
Boston	75.00			125.00 to 150.00	100.00									
New Bedford	75.00	90.00		180.00	160.00									
Newport News						75.00	85.00	90.00			75.00	65.00		
New Orleans	75.00			110.00		75.00	85.00	90.00	184.38	161.00	75.00	65.00	207.50	181.25
New York	75.00	80.00	90.00	100.00	90.00	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	175.00	140.00	75.00	65.00	170.00	
Philadelphia [a]	75.00	100.00		110.00		75.00	85.00		150.00	125.00	75.00	65.00	160.00	135.00
Portland, Me	75.00			150.00	100.00									
Providence	75.00			125.00	100.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	250.00	193.75
Rockland	75.00			125.00	90.00									
Over 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00				200.00	175.00			200.00	175.00
Bath	75.00	85.00		125.00	100.00	75.00			150.25	125.00				
Boston	75.00			125.00 to 150.00	100.00	75.00	85.00	90.00	186.25 to 206.25	162.50 to 187.50	75.00	65.00	212.50 to 287.50	162.50 to 187.50
New Bedford						75.00			145.00	130.00	75.00	65.00	190.00	170.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 1.—AVERAGE MONTHLY WAGES PAID IN THE AMERICAN MERCHANT MARINE FOR FISCAL YEAR ENDED JUNE 30, 1919—Continued.

Destination, size, and port of departure of vessels.	Sail.					Steam.								
	Able seamen.	Boatswains.	Carpenters.	First mates.	Second mates.	Able seamen.	Boatswains.	Carpenters.	First mates.	Second mates.	Firemen.	Trimmers.	First engineers.	Second engineers.
Atlantic and Gulf coasting trade—Continued.														
Over 1,500 tons—Continued.														
Newport News	.....	.....	.....	.....	.....	$75.00	$85.00	$90.00	$181.25	$162.50	$75.00	$65.00	$212.50	$181.25
New Orleans	.....	.....	.....	.....	.....	75.00	85.00	90.00	184.38	165.62	75.00	65.00	221.88	184.38
New York	$75.00	$100.00	$90.00	$125.00	$100.00	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia [a]	75.00	.....	.....	135.00	85.00	75.00	85.00	.....	155.00	140.00	75.00	65.00	170.00	155.00
Portland, Me	75.00	.....	.....	150.00	100.00	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Atlantic and Gulf coasting trade.														
Over 1,500 tons:														
Providence	75.00	.....	.....	125.00	100.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	250.00	193.75
Seattle	.....	.....	.....	.....	.....	75.00	80.00	90.00	175.00	150.00	75.00	75.00	250.00	175.00
To Asia and Australia.														
Under 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	178.00	162.50	75.00	65.00	178.00	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.00	101.75	.....	143.34	111.67	57.50	.....	.....	165.00	150.00	57.50	.....	200.00	157.50
From 500 to 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	.....	162.50	75.00	65.00	178.00	162.50
New York	.....	.....	.....	.....	.....	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	75.27	112.14	106.67	152.21	120.96	75.00	77.50	90.00	150.83	133.33	75.00	.....	221.66	157.50
Seattle	90.00	105.00	110.00	150.00	120.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Over 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	200.00	175.00	75.00	65.00	200.00	175.00
New York	.....	.....	.....	.....	.....	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Portland, Me	.....	.....	.....	.....	.....	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
San Francisco	75.00	93.02	96.01	168.28	124.44	75.00	81.81	89.10	171.23	145.03	75.00	75.00	242.41	171.75
Seattle	.....	.....	.....	.....	.....	75.00	80.00	90.00	155.00	130.00	75.00	75.00	225.00	175.00
Pacific coasting trade.														
Under 500 tons: San Francisco	75.00	.....	.....	150.00	120.00	75.00	.....	.....	145.00	130.00	90.00	.....	201.67	150.00
From 500 to 1,500 tons:														
San Francisco	75.00	107.50	.....	140.00	110.00	75.00	79.75	90.00	143.20	128.67	75.00	.....	193.47	144.57
Seattle	90.00	100.00	95.00	150.00	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....

Over 1,500 tons:														
Newport News						75.00	85.00	90.00	187.50	187.50	75.00	65.00	231.25	187.50
San Francisco	75.00	108.75	113.33	158.00	115.00	75.00	80.00	90.00	158.48	133.41	75.00	75.00	222.08	164.50
Seattle						75.00	80.00	90.00	155.00	150.00	75.00	75.00	225.00	165.00
To Africa.														
Under 500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	127.50	135.00	195.00	190.00	93.75	81.25	195.00	190.00
New York	75.00	85.00	90.00	100.00	90.00									
Norfolk	75.00	85.00	90.00	150.00	125.00									
From 500 to 1,500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	127.50	135.00			93.75	81.25		
Boston	75.00			125.00 to 150.00	100.00									
New York	75.00	100.00	100.00	150.00	100.00	75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00									
San Francisco	75.00			175.00	125.00									
Seattle	90.00	100.00	100.00	150.00	120.00									
Over 1,500 tons:														
Baltimore	93.75	106.25	112.50	125.00	106.25	93.75	127.50	135.00	200.00	192.50	93.75	81.25	200.00	192.50
Boston	75.00			125.00 to 150.00	100.00									
Newport News						75.00	85.00	90.00	187.50	168.75	75.00	65.00	231.25	187.50
New York	75.00	125.00	110.00	175.00	125.00	75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	85.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia [a]						75.00	85.00	90.00	193.75	175.00	75.00	65.00	250.00	193.75
Atlantic to Pacific ports and vice versa.														
Under 500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	195.00	162.50	75.00	65.00	178.00	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00									
From 500 to 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	195.00	162.50	75.00	65.00	178.00	162.50
New Orleans						75.00	85.00		181.25	162.50	75.00		212.50	181.25
New York						75.00	85.00	90.00	181.25	162.50	75.00	65.00	181.25	162.50
Norfolk	75.00	85.00	90.00	150.00	125.00									
San Francisco	75.00			150.00	125.00	75.00			150.83	135.00	75.00		193.33	150.00
Over 1,500 tons:														
Baltimore	75.00	85.00	90.00	100.00	90.00	75.00	85.00	90.00	200.00	175.00	75.00	65.00	200.00	175.00
New York						75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
Norfolk	75.00	85.00	90.00	150.00	125.00	75.00	85.00	90.00	193.75	175.00	75.00	65.00	193.75	175.00
Philadelphia [a]						75.00	85.00	90.00	150.00	135.00	75.00	65.00	175.00	150.00
Portland, Me						75.00	85.00	90.00	187.50	168.75	75.00	65.00	187.50	168.75
San Francisco						75.00	80.01	90.00	166.91	141.47	75.00	75.00	229.46	166.97
Seattle						75.00	80.00	90.00	175.00	150.00	75.00	75.00	250.00	175.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895–1919.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To Great Britain.														
Under 500 tons:														
Boston							$93.75							$93.75
New Bedford					$60.00							$60.00		
New Orleans													$90.00	
New York					45.00							45.00		
Norfolk						$62.50	75.00						62.50	
Philadelphia [a]	$20.00	$20.00												
Portland, Me					60.00	60.00						60.00		
Rockland		25.00	$25.00	$30.00	35.00	55.00	75.00					50.00	55.00	
From 500 to 1,500 tons:														
Baltimore					50.00		93.75					90.00		93.75
Boston				25.00			75.00							
New Bedford					60.00							60.00		
Newport News														75.00
New Orleans					80.00									
New York	18.00	20.00		25.00		60.00	75.00				$35.00	45.00		75.00
Norfolk						62.50	75.00						62.50	
Philadelphia [a]							75.00							
Portland, Me					60.00	60.00						60.00		
Rockland		30.00	30.00	30.00	40.00	65.00	75.00						65.00	
San Francisco	15.00	20.00					75.00							
Over 1,500 tons:														
Baltimore						93.75	93.75					90.00	93.75	93.75
Boston														75.00
Newport News														75.00
New Orleans													95.00	93.70
New York	18.00					60.00	75.00	$22.50	$25.00	$25.00	27.50	45.00	60.00	75.00
Norfolk						62.50	75.00				30.00		62.50	75.00
Philadelphia [a]								20.00		30.00		60.00	62.66	75.00
Portland, Me					60.00	60.00	75.00					60.00		75.00
Rockland							75.00							
San Francisco	16.35			25.00			75.00				25.00	55.00		
Seattle	15.00	20.00		25.00							30.00			75.00
To Continent of Europe.														
Under 500 tons:														
Baltimore							93.75							93.75
New Orleans							75.00							
New York	18.50	20.00			45.00							45.00		
Norfolk						62.50	75.00						62.50	

Philadelphia	21.35	20.00												
Portland, Me					60.00	60.00						60.00		
Rockland							75.00							
From 500 to 1,500 tons:														
Baltimore					90.00		93.75				30.00	90.00		93.75
Boston				25.00	40.00 to 60.00	60.00								
New Bedford					60.00									
Newport News														75.00
New Orleans					71.06	116.66							90.00	
New York	16.00	20.00		30.00	45.00	60.00	75.00				30.00	45.00		75.00
Norfolk				30.00		62.50	75.00						62.50	
Philadelphia[a]	19.60	20.00		25.00	60.00	71.25	75.00							
Portland, Me					60.00	60.00						60.00		
Rockland							75.00							
San Francisco		20.00												
Over 1,500 tons:														
Baltimore						93.75	93.75					90.00	93.75	93.75
Bath														75.00
Boston					45.00 to 60.00						33.00	40.00 to 60.00	60.00 to 75.00	75.00
Newport News														75.00
New Orleans					70.00						30.00	54.57	91.64	93.70
New York				30.00	45.00	60.00	75.00				27.50	45.00	60.00	75.00
Norfolk						62.50	75.00				30.00		62.50	75.00
Philadelphia[a]	20.00					60.00	75.00	20.00			31.47	67.56	62.66	75.00
Portland, Me					60.00	60.00	75.00				30.00	60.00		75.00
Rockland							75.00							
San Francisco	18.75			25.00			75.00				32.50		75.00	75.00
Seattle														75.00
To South America.														
Under 500 tons:														
Baltimore	16.00	22.50					75.00							75.00
Boston		20.00												
Mobile	14.80													
New Bedford		18.00												
New Orleans							75.00		30.00				62.50	
New York	16.27	20.00	22.00	25.00	40.00	60.00	75.00							
Norfolk		18.00	25.00			62.50	75.00						62.50	
Philadelphia[a]	16.00	25.00			45.00			25.00				60.00		
Portland, Me					55.00	60.00								
Providence				25.00										
Rockland														75.00
San Francisco	18.75	22.50			40.00							55.00	60.00	75.00
Seattle		25.00												

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To South America—Continued.														
From 500 to 1,500 tons:														
Baltimore	$16.00	$22.50	.....	.....	$50.00	.....	$75.00	.....	.....	.....	.....	$50.00	.....	$75.00
Bath	.....	.....	.....	$25.00	60.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boston	18.00	20.00	$20.00	20.00 to 25.00	40.00 to 60.00	$60.00	$75.00	.....	.....	.....	.....	.....	.....	.....
New Bedford	.....	.....	.....	.....	60.00	.....	.....	.....	.....	.....	.....	60.00	.....	.....
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
New Orleans	25.00	.....	.....	.....	52.50	.....	.....	$30.00	$30.00	.....	.....	.....	$67.50	75.00
New York	15.77	20.00	.....	25.00	45.00	60.00	75.00	.....	.....	.....	$25.00	$45.00	60.00	75.00
Norfolk	18.00	.....	.....	25.00	.....	62.50	75.00	.....	.....	.....	.....	.....	62.50	.....
Philadelphia[a]	19.43	23.25	20.00	24.58	47.50	62.50	75.00	.....	.....	.....	.....	56.25	67.50	.....
Portland, Me	16.27	20.00	20.00	.....	55.00	60.00	.....	.....	.....	.....	.....	60.00	.....	.....
Providence	.....	.....	.....	30.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	.....	.....	.....	.....	.....	65.00	75.00	.....	.....	.....	.....	.....	.....	.....
San Francisco	20.00	22.50	.....	.....	40.00	60.00	75.00	30.00	30.00	.....	.....	55.00	63.05	75.45
Seattle	18.00	20.00	24.67	27.50	50.00	63.33	90.00	.....	.....	.....	45.00	.....	63.33	.....
Over 1,500 tons:														
Baltimore	.....	22.50	.....	25.00	.....	62.50	75.00	.....	.....	.....	30.00	50.00	62.50	75.00
Bath	.....	.....	.....	.....	.....	75.00	75.00	.....	.....	.....	.....	.....	.....	75.00
Boston	.....	.....	.....	20.00 to 25.00	.....	.....	75.00	.....	.....	.....	.....	45.00 to 60.00	60.00 to 75.00	75.00
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
New Orleans	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30.00	46.25	60.00	75.00
New York	15.00	20.00	.....	25.00	45.00	60.00	75.00	25.00	25.00	$25.00	27.50	45.00	60.00	75.00
Norfolk	.....	.....	.....	30.00	.....	62.50	75.00	.....	.....	.....	30.00	.....	62.50	75.00
Pascagoula	.....	.....	.....	20.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	20.00	.....	.....	22.00	46.66	60.00	75.00	.....	.....	.....	.....	49.24	61.50	75.00
Portland, Me	.....	.....	.....	25.00	55.00	60.00	75.00	.....	.....	.....	.....	60.00	.....	.....
Rockland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
San Francisco	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	56.31	64.50	75.00
Seattle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.00	.....	75.00
To West Indies, Mexico, and Central America.														
Under 500 tons:														
Baltimore	16.00	20.00	25.00	.....	.....	.....	75.00	20.00	.....	.....	.....	.....	.....	75.00
Boston	20.00	25.00	25.00	25.00 to 30.00	40.00 to 60.00	.....	75.00	.....	25.00	.....	.....	.....	.....	.....

New Bedford			22.00	25.00	60.00		75.00	30.00		25.00		60.00		75.00
New Orleans		25.00	20.00	25.00	35.00	65.00	75.00		30.00			50.56	60.00	75.00
NewYork	16.76	25.00	23.00	30.00	45.00	60.00	75.00				30.00		60.00	
Norfolk	17.33	21.75				62.50	75.00		25.00		30.00		62.50	
Pascagoula	18.00	24.08	24.87	25.00										
Philadelpnia[a]	19.62	23.95	24.16	27.50	45.50	60.80	75.00		30.00	25.00				
Portland, Me	16.76	25.00			55.00	60.00						60.00		
Providence	18.00				50.00									
Rockland	20.00	25.00	25.00	30.00	35.00	55.00	75.00							
San Francisco	18.89	30.95	40.00								30.00	55.75	64.50	75.00
Seattle		30.00												
From 500 to 1,500 tons:														
Baltimore	16.00	25.00	25.00		50.00		75.00	16.00				50.00		75.00
Boston	20.00	25.00	25.00	25.00 to 30.00	40.00 to 60.00	60.00 to 75.00	75.00	30.00	25.00					
New Bedford				25.00										
Newport News														75.00
New Orleans	25.00				50.00	60.00	75.00	35.00	30.00	30.00		51.84	66.25	75.00
New York	17.77	25.00	25.00	30.00	45.00	60.00	75.00		22.50	30.00	30.00	45.00	60.00	75.00
Norfolk	17.00	25.00	25.00	30.00		62.50	75.00				30.00		62.50	
Pascagoula	18.00	25.00		25.00										
Philadelphia[a]	17.88	24.95	23.21	27.21	45.00	65.45	75.00	25.00			33.33	54.00	60.00	75.00
Portland, Me	16.56	25.00	25.00		55.00	60.00						60.00		
Providence	25.00			30.00	50.00	62.50								
Rockland		30.00	30.00	30.00	40.00	65.00	75.00							
San Francisco	19.67	35.00		40.00						45.79	49.75	55.16	62.81	75.00
Seattle	22.50	30.00	40.00	40.00		63.33	90.00			45.00	50.00			
Over 1,500 tons:														
Baltimore		25.00		25.00		62.50	75.00				30.00	50.00	62.50	75.00
Boston		25.00	30.00	25.00 to 30.00	45.00 to 60.00		75.00		25.00	25.00	30.00	45.00 to 60.00	60.00 to 75.00	75.00
Newport News														75.00
New Orleans					45.00				30.00	35.00	30.00	49.49	66.62	75.00
New York				30.00	45.00	60.00	75.00	25.00	25.00	30.00	30.00	45.00	60.00	75.00
Norfolk				30.00		62.50	75.00				30.00		62.50	75.00
Philadelphia[a]		30.00	25.00	25.00	46.25		75.00	25.00	25.00	25.14	32.55	49.68		75.00
Portland, Me				25.00	55.00	60.00						60.00	60.00	75.00
Providence					50.00								62.50	75.00
Rockland							75.00							
San Francisco	20.00	30.00		50.00	55.00					33.54	31.49	55.59	64.28	75.00
Seattle										35.00				75.00
Atlantic and Gulf coasting trade.														
Under 500 tons:														
Baltimore	18.00	25.00	25.00				75.00			25.00				75.00
Bath		25.00	25.00	25.00	45.00	60.00	60.00 to 65.00		25.00		30.00	40.00		60.00 to 65.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
Atlantic and Gulf coasting trade—Continued.														
Under 500 tons—Continued.														
Boston	$20.00	$25.00	.....	$25.00 to 30.00	$40.00 to 60.00	.....	$75.00	.....	$25.00	.....	.....	$45.00 to 60.00	$60.00 to 75.00	.....
Gloucester	.....	.....	$30.00	30.00	.....	.....	.....	.....	.....	.....	$35.00	.....	.....	.....
New Bedford	20.00	25.00	25.00	25.00	60.00	$60.00	75.00	$30.00	.....	$27.00	.....	60.00	.....	$75.00
New Orleans	.....	25.00	20.00	25.00	.....	70.50	.....	.....	30.00	.....	.....	.....	69.00	.....
New York	17.59	25.00	25.00	30.00	45.00	60.00	75.00	.....	.....	.....	30.00	45.00	60.00	.....
Norfolk	18.00	25.00	25.00	.....	.....	62.50	75.00	.....	25.00	28.75	.....	.....	62.50	75.00
Pascagoula	15.25	18.37	25.00	25.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	20.90	26.41	25.28	28.82	49.29	63.00	75.00	.....	25.00	28.86	30.83	41.25	56.00	.....
Portland, Me	20.97	25.00	25.00	.....	55.00	60.00	.....	.....	25.00	30.00	30.00	60.00	60.00	.....
Providence	20.00	25.00	25.00	30.00	50.00	.....	75.00	.....	.....	.....	.....	.....	.....	.....
Rockland	20.00	25.00	25.00	30.00	35.00	55.00	65.00	25.00	.....	30.00	30.00	50.00	55.00	75.00
From 500 to 1,500 tons:														
Baltimore	18.00	25.00	25.00	.....	50.00	.....	75.00	.....	25.00	.....	.....	50.00	.....	.....
Bath	22.00	30.00	30.00	30.00	.....	.....	.....	.....	25.00	30.00	.....	60.00	.....	.....
Boston	20.00	30.00	.....	25.00 to 30.00	40.00 to 60.00	60.00 to 75.00	75.00	.....	25.00	25.00 to 30.00	.....	45.00 to 60.00	.....	.....
New Bedford	23.00	25.00	.....	30.00	60.00	.....	75.00	.....	.....	30.00	.....	.....	.....	.....
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
New Orleans	25.00	25.00	20.00	.....	45.00	60.00	75.00	39.00	30.00	30.00	30.00	58.13	60.00	75.00
New York	17.59	25.00	27.50	30.00	45.00	60.00	75.00	.....	25.00	.....	30.00	45.00	60.00	75.00
Norfolk	20.00	29.00	30.00	30.00	.....	62.50	75.00	.....	25.00	25.00	30.00	.....	62.50	75.00
Pascagoula	18.00	25.00	25.00	30.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	20.90	27.37	25.60	28.52	49.23	75.00	75.00	22.25	30.00	.....	30.00	49.09	61.67	75.00
Portland, Me	22.29	30.00	28.00	30.00	55.00	60.00	75.00	.....	30.00	.....	30.00	60.00	60.00	.....
Providence	25.00	30.00	30.00	30.00	50.00	62.50	75.00	25.00	25.00	.....	30.00	50.00	.....	75.00
Rockland	20.00	30.00	30.00	30.00	40.00	65.00	75.00	25.00	.....	.....	.....	.....	65.00	.....
Seattle	.....	.....	.....	.....	.....	66.33	.....	.....	.....	.....	.....	.....	63.33	.....
Over 1,500 tons:														
Baltimore	.....	25.00	30.00	25.00	.....	62.50	75.00	.....	25.00	25.00	30.00	.....	62.50	.....
Bath	.....	30.00	.....	.....	60.00	75.00	75.00	.....	.....	.....	35.00	.....	60.00	75.00
Boston	.....	30.00	.....	25.00 to 30.00	45.00 to 60.00	.....	75.00	.....	25.00	25.00 to 30.00	30.00	45.00 to 60.00	60.00 to 75.00	75.00
New Bedford	.....	30.00	.....	.....	.....	.....	.....	.....	.....	25.00	.....	.....	60.00	75.00
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
New Orleans	.....	.....	20.00	.....	.....	.....	.....	.....	30.00	.....	30.00	56.88	67.50	75.00

New York	.....	25.00	.....	30.00	45.00	60.00	75.00	25.00	25.00	35.00	30.00	45.00	60.00	75.00
Norfolk	.....	30.00	30.00	30.00	.....	62.50	75.00	.....	.....	27.50	.....	.....	62.50	75.00
Pascagoula	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	75.00
Philadelphia [a]	21.65	29.20	29.86	32.20	47.15	60.00	75.00	22.00	.....	26.00	31.04	43.64	58.29	75.00
Portland, Me	22.60	30.00	30.00	30.00	55.00	60.00	75.00	.....	.....	27.50	30.00	60.00	60.00	75.00
Providence	.....	.....	30.00	30.00	50.00	.....	.....	.....	.....	30.00	30.00	50.00	62.50	75.00
Seattle	.....	.....	.....	.....	.....	66.33	.....	.....	.....	.....	.....	55.00	63.33	75.00
To Asia and Australia.														
Under 500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	75.00
Norfolk	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....
San Francisco	.....	24.00	30.00	.....	48.58	65.62	75.00	.....	45.00	.....	.....	.....	65.00	57.50
From 500 to 1,500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	60.00	.....	75.00
New York	15.21	18.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
Norfolk	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....
San Francisco	18.32	21.28	33.12	28.75	44.37	65.50	75.27	.....	35.00	.....	20.00	.....	67.50	75.00
Seattle	17.50	20.00	26.74	25.00	50.00	63.33	90.00	.....	.....	.....	.....	55.41	63.33	.....
Over 1,500 tons:														
Baltimore	.....	18.00	.....	.....	.....	62.50	75.00	.....	.....	.....	.....	60.00	62.50	75.00
New York	16.00	18.00	18.00	.....	25.00	.....	.....	.....	.....	.....	.....	45.00	60.00	75.00
Norfolk	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	75.00
Philadelphia [a]	16.25	18.00	.....	20.00	.....	.....	.....	.....	.....	.....	.....	45.00	.....	.....
Portland, Me	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
San Francisco	19.00	22.00	.....	27.50	45.00	63.75	75.00	28.75	32.03	.....	38.43	55.20	65.00	75.00
Seattle	.....	20.00	.....	.....	.....	63.33	.....	.....	.....	.....	35.00	55.41	63.33	75.00
Pacific coasting trade.														
Under 500 tons:														
San Francisco	23.88	39.67	42.60	45.00	50.00	60.00	75.00	30.00	45.00	50.00	50.00	55.00	67.00	75.00
Seattle	30.00	40.00	42.50	.....	.....	.....	.....	.....	40.00	55.96	50.00	55.41	.....	.....
From 500 to 1,500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.00	.....	.....
San Francisco	25.48	38.40	41.55	44.28	51.25	60.00	75.00	35.00	45.00	50.00	50.00	55.00	66.15	75.00
Seattle	30.50	40.00	48.25	45.00	55.41	63.33	90.00	.....	40.00	50.00	50.00	55.41	63.33	.....
Over 1,500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.00	.....	.....
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.00
San Francisco	25.00	35.87	45.00	50.00	54.64	64.92	75.00	35.00	44.00	45.00	47.53	55.53	66.00	75.00
Seattle	.....	40.00	50.00	.....	.....	63.33	.....	.....	40.00	50.00	50.00	55.41	63.33	75.00
To Africa.														
Under 500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	93.75	.....	.....	.....	.....	.....	.....	93.75
Boston	18.00	20.00	.....	.....	40.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	15.00	20.00	15.00	22.00	35.00	40.00	.....	.....	.....	15.00	.....	35.00	.....	.....
New York	.....	20.00	.....	25.00	45.00	.....	75.00	.....	.....	.....	.....	.....	.....	.....
Norfolk	.....	.....	.....	.....	.....	62.50	75.00	.....	.....	.....	.....	.....	62.50	.....
Philadelphia [a]	.....	.....	.....	25.00	.....	75.00	.....	.....	.....	.....	.....	.....	.....	.....

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 2.—AVERAGE MONTHLY WAGES PAID TO ABLE SEAMEN ON AMERICAN VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To Africa—Continued.														
From 500 to 1,500 tons:														
Baltimore							$93.75					$60.00		$93.75
Boston	$18.00	$20.00	$20.00	$20.00	$40.00	$60.00 to 75.00	75.00							
New Bedford			15.00	25.00						$15.00				
New Orleans					60.00									
New York	15.51	20.00	20.00	25.00	45.00	60.00	75.00					55.00		75.00
Norfolk				30.00		62.50	75.00						$62.50	
San Francisco						60.00	75.00							
Seattle						63.33	90.00							
Over 1,500 tons:														
Baltimore						62.50	93.75					60.00	62.50	93.75
Newport News														75.00
New Orleans												45.00		
New York		20.00				60.00	75.00					45.00	60.00	75.00
Norfolk						62.50	85.00				$30.00		62.50	75.00
Philadelphia[a]											30.00	56.25		75.00
San Francisco		20.00	20.00		40.00								75.00	
Seattle		20.00	25.00											
Atlantic to Pacific ports, and vice versa.														
Under 500 tons:														
Baltimore							75.00							75.00
Norfolk						62.50	75.00						62.50	
San Francisco													60.00	
Seattle											30.00			
From 500 to 1,500 tons:														
Baltimore	16.00	18.00			50.00		75.00					60.00		75.00
New Orleans														75.00
New York	16.00	18.00	18.00						$27.50				60.00	75.00
Norfolk						62.50	75.00						62.50	
Philadelphia[a]	15.40													
San Francisco							75.00				46.66	55.00	64.28	75.00
Seattle	15.00	20.00	25.00								45.00			

Over 1,500 tons:														
Baltimore		18.00		25.00		62.50	75.00				30.00	60.00	62.50	75.00
Boston											30.00 to 35.00	60.00		
New York	16.00	18.00	18.00							25.00	30.00	45.00	60.00	75.00
Norfolk						62.50	75.00						62.50	75.00
Philadelphia [a]	16.00	18.00	18.00	20.00					25.00		36.35	45.00		75.00
Portland, Me														75.00
San Francisco	16.24	20.83	20.00	50.00	56.00					20.10	32.38	56.15	65.14	75.00
Seattle		20.00	25.00			63.33				25.00	42.50		63.33	75.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus in addition to the foregoing wages paid licensed officers sailing to South America up to Jan. 1, 1919.

139723—19——5

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895–1919.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To Great Britain.														
Under 500 tons:														
Baltimore							$125.00							$195.00
New Orleans													$175.00	
New York					$80.00							$125.00		
Norfolk						$150.00	150.00						140.00	
Philadelphia [a]	$40.00	$40.00												
Portland, Me					100.00	125.00						115.00		
Rockland		40.00	$35.00	$35.00	45.00	60.00	100.00					100.00	110.00	
From 500 to 1,500 tons:														
Baltimore					125.00		125.00					175.00		195.00
Boston	40.00	45.00		50.00		125.00 to 150.00								
Newport News														181.25
New Orleans					150.00									
New York	37.50	45.00		45.00		150.00	125.00				$120.00	$125.00		181.25
Norfolk						150.00	150.00						140.00	
Philadelphia [a]							140.00							
Portland, Me					125.00	125.00						125.00		
Rockland		50.00	45.00	45.00	50.00	90.00	125.00						150.00	
San Francisco	50.00	57.50					155.00							
Seattle		55.00												
Over 1,500 tons:														
Baltimore						210.00	125.00					175.00	210.00	195.00
Boston														181.25 to 206.25
Newport News														190.15
New Orleans													228.33	211.16
New York	45.00					150.00	150.00	$75.00	$120.00	$115.00	115.00	150.00	130.00	187.50
Norfolk						150.00	150.00				90.00		140.00	193.75
Philadelphia [a]								70.00		90.00		171.81	138.20	155.00
Portland, Me					150.00	125.00	150.00					135.00		187.50
Rockland							150.00							
San Francisco	50.83			70.00			162.50					140.00		
Seattle	50.00	57.50		67.50							90.00			175.00

To Continent of Europe.														
Under 500 tons:														
Baltimore							125.00							195.00
New Orleans		40.00					110.00							
New York	40.00	40.00			80.00							125.00		
Norfolk						150.00	150.00						140.00	
Philadelphia [a]	40.00	40.00												
Portland, Me					100.00	125.00						115.00		
Rockland							100.00							
From 500 to 1,500 tons:														
Baltimore					175.00		125.00				80.00	175.00		195.00
Boston				50.00	60.00 to 75.00	175.00								
Newport News														181.25
New Orleans					94.38	130.00							350.00	
New York	40.00	50.00		125.00	80.00	150.00	125.00				115.00	125.00		181.25
Norfolk				50.00		150.00	150.00						140.00	
Philadelphia [a]	42.50	35.00		50.00	72.14	137.50	135.00							
Portland, Me					125.00	125.00						125.00		
Rockland							125.00							
San Francisco		55.00												
Over 1,500 tons—														
Baltimore						210.00	125.00					175.00	210.00	210.00
Boston					70.00 to 225.00						100.00		125.00 to 140.00	181.25 to 206.25
Newport News														190.15
New Orleans											115.00	167.08	242.14	211.66
New York				125.00	95.00	150.00	150.00				110.00	150.00	130.00	187.50
Norfolk						150.00	150.00				120.00		140.00	193.75
Philadelphia [a]	50.00					100.00	135.00	70.00			103.75	189.97	138.20	155.00
Portland, Me					150.00	125.00					100.00	135.00		187.50
Rockland							150.00							
San Francisco	55.00			70.00			150.00				100.00		175.00	168.12
Seattle	50.00													175.00
To South America.														
Under 500 tons:														
Baltimore	40.00	40.00					100.00							178.00
Boston		35.00												
New Bedford		35.00												
New Orleans									75.00				127.50	
New York	37.50	40.00	40.00	45.00	65.00	125.00	100.00							
Norfolk		40.00	40.00			150.00	150.00						140.00	
Philadelphia [a]	42.50	40.00			70.00			65.00						
Portland, Me					100.00	100.00						115.00		
Providence				50.00										
Rockland							100.00							
San Francisco	45.00	47.50			85.00							120.00	145.00	145.00
Seattle		52.50												

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan 1 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To South America—Continued.														
From 500 to 1,500 tons:														
Baltimore	$45.00	$45.00	.....	$60.00	$125.00	.....	$100.00	.....	.....	.....	.....	$125.00	.....	$178.00
Bath	.....	.....	.....	50.00 to 60.00	85.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boston	40.00	40.00	$50.00	.....	50.00 to 100.00	$100.00 to 150.00	125.00 to 150.00	.....	.....	.....	.....	.....	.....	.....
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	125.00
New Orleans	40.00	.....	.....	.....	95.00	.....	.....	$75.00	$75.00	.....	.....	.....	$150.00	181.25
New York	41.09	45.00	.....	55.00	75.00	125.00	125.00	.....	.....	.....	$95.00	120.00	120.00	181.25
Norfolk	40.00	.....	.....	40.00	.....	150.00	150.00	.....	.....	.....	.....	.....	140.00	.....
Philadelphia[a]	41.66	46.00	50.00	48.00	72.14	99.50	135.00	.....	.....	.....	.....	143.75	150.00	.....
Portland, Me	40.21	45.00	50.00	.....	125.00	100.00	.....	.....	.....	.....	.....	125.00	.....	.....
Providence	.....	.....	.....	40.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	.....	.....	.....	.....	.....	90.00	125.00	.....	.....	.....	.....	.....	.....	.....
San Francisco	45.50	51.25	.....	.....	97.50	130.00	155.00	80.00	100.00	.....	.....	124.37	139.37	146.89
Seattle	47.00	55.00	66.25	70.00	100.00	125.00	135.00	.....	.....	.....	100.00	.....	125.00	.....
Over 1,500 tons:														
Baltimore	.....	45.00	.....	75.00	.....	140.00	100.00	.....	.....	.....	100.00	125.00	140.00	200.00
Bath	.....	.....	.....	.....	.....	125.00	150.00	.....	.....	.....	.....	.....	.....	193.75
Boston	.....	.....	.....	60.00	.....	.....	125.00 to 150.00	.....	.....	.....	115.00 to 125.00	.....	125.00 to 150.00	181.25 to 206.25
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	185.65
New Orleans	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	115.00	131.50	156.25	187.50
New York	45.00	.....	.....	65.00	80.00	125.00	150.00	78.33	80.00	$100.00	100.00	135.00	130.00	187.50
Norfolk	.....	50.00	.....	60.00	.....	150.00	150.00	.....	.....	.....	.....	.....	140.00	193.75
Pascagoula	.....	.....	.....	60.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	.....	.....	.....	60.00	128.33	125.00	135.00	.....	.....	.....	.....	139.30	130.25	155.00
Portland, Me	.....	.....	.....	55.00	150.00	100.00	.....	.....	.....	.....	.....	135.00	.....	187.50
Rockland	.....	.....	.....	.....	.....	.....	150.00	.....	.....	.....	.....	.....	.....	.....
San Francisco	.....	.....	70.00	.....	.....	.....	.....	96.67	100.00	100.00	105.20	129.20	156.58	163.62
Seattle	.....	55.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	175.00

To West Indies, Mexico, and Central America.

Under 500 tons:														
Baltimore	40.00	30.00	50.00				100.00	50.00						178.00
Boston	35.00	35.00	35.00 to 40.00	40.00	50.00		85.00 to 90.00		70.00					
New Bedford			45.00	50.00				50.00		45.00		90.00		
New Orleans		40.00	40.00	50.00	45.00	135.00	110.00		75.00			137.50	156.25	176.50
New York	37.00	40.00	40.00	45.00	65.00	125.00					85.00		105.00	
Norfolk	37.50	36.75				150.00	150.00		53.33		75.00		140.00	
Pascagoula		37.13	38.46	40.00										
Philadelphia[a]	37.65	38.57	40.00	42.22	61.25	80.71	125.00		60.00	60.00				
Portland, Me	39.09	37.50			90.00	100.00						115.00		
Providence	35.00													
Rockland	35.00	40.00	35.00	35.00	45.00	60.00	100.00							
San Francisco	42.78	48.93	70.00								100.00	118.16	141.00	145.00
From 500 to 1,500 tons:														
Baltimore	42.00	45.00	50.00		125.00		100.00	55.00				125.00		178.00
Boston	40.00	40.00	45.00 to 50.00	45.00 to 55.00	50.00 to 75.00	80.00 to 100.00	125.00 to 150.00	75.00	70.00					
New Bedford				60.00										
New Orleans	40.00				60.00		119.00	75.00	75.00	85.00		136.71	150.25	175.60
New York	41.82	50.00	45.00	55.00	75.00	125.00	100.00		60.00	90.00	90.00	120.00	120.00	181.25
Norfolk	40.00	45.00		40.00		150.00	150.00						140.00	
Pascagoula	37.50	40.00		40.00										
Philadelphia[a]	40.15	42.33	48.00	48.75	71.54	102.10	125.00	57.50			83.33	153.75	132.84	150.00
Portland, Me	40.94	46.70	48.00		115.00	100.00						125.00		
Providence	40.00			50.00	80.00	100.00								
Rockland		50.00	45.00	45.00	50.00	90.00	125.00							
San Francisco	46.94	53.33		70.00						100.00	100.00	128.18	141.63	153.00
Seattle	50.00	55.00	65.00	70.00	100.00	125.00	135.00				100.00			175.00
Over 1,500 tons:														
Baltimore		45.00		75.00		140.00	125.00				100.00	125.00	140.00	200.00
Boston		45.00	50.00 to 60.00	60.00	60.00 to 75.00		125.00 to 150.00		70.00	90.00	100.00	115.00 to 125.00	125.00 to 150.00	181.25 to 206.25
Newport News														181.25
New Orleans									75.00	90.00	100.00	132.08	151.85	185.52
New York				55.00	80.00	125.00	125.00	80.00	75.00	100.00	100.00	135.00	130.00	187.50
Norfolk				55.00		150.00	150.00				90.00		140.00	193.75
Philadelphia[a]					77.50			75.00	70.00	89.90	100.34	136.20	131.00	155.00
Portland, Me				55.00	125.00	100.00						135.00	130.00	187.50
Providence					100.00								150.00	193.75
Rockland							150.00							
San Francisco	45.00	57.50		75.00	93.33					100.00	113.11	129.20	162.46	165.00
Seattle		55.00					135.00			100.00				

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
Atlantic and Gulf coasting trade.														
Under 500 tons:														
Baltimore	$35.00	$37.50	$40.00	.....	.....	.....	$100.00	.....	.....	.....	.....	.....	.....	$178.00
Bath	.....	30.00	35.00	$35.00	$60.00	$75.00	75.00	.....	$30.00	$40.00	$75.00	$75.00	$100.00	75.00
Boston	35.00	35.00	.....	40.00	50.00	85.00 to 90.00	.....	.....	70.00	.....	.....	80.00 to 125.00	125.00 to 150.00	.....
Gloucester	.....	.....	45.00	50.00	.....	.....	.....	.....	.....	.....	65.00	.....	.....	.....
New Bedford	30.00	30.00	45.00	50.00	90.00	90.00	145.00	$50.00	.....	45.00	.....	90.00	.....	145.00
New Orleans	.....	40.00	.....	50.00	.....	161.25	.....	.....	75.00	.....	.....	.....	144.25	.....
New York	34.59	35.00	40.00	45.00	65.00	125.00	85.00	.....	.....	.....	75.00	105.00	105.00	.....
Norfolk	30.00	35.00	.....	.....	.....	150.00	150.00	.....	.....	68.50	.....	.....	130.00	175.00
Pascagoula	35.00	35.00	43.33	.....	.....	.....	.....	.....	.....	75.63	.....	.....	.....	.....
Philadelphia [a]	37.40	37.30	40.22	41.25	65.00	81.25	110.00	.....	64.00	.....	77.50	115.62	127.50	.....
Portland, Me	32.80	35.00	40.00	.....	90.00	100.00	.....	.....	70.00	70.00	75.00	115.00	125.00	.....
Providence	30.00	30.00	40.00	40.00	80.00	.....	125.00	.....	.....	.....	.....	.....	.....	.....
Rockland	35.00	35.00	35.00	35.00	45.00	60.00	80.00	75.00	.....	75.00	75.00	100.00	110.00	165.00
From 500 to 1,500 tons:														
Baltimore	40.00	45.00	50.00	.....	125.00	.....	100.00	.....	70.00	.....	.....	125.00	.....	.....
Bath	40.00	40.00	50.00	60.00	.....	.....	.....	.....	60.00	50.00	.....	.....	.....	.....
Boston	40.00	45.00	.....	45.00 to 55.00	50.00 to 75.00	80.00 to 100.00	125.00 to 150.00	.....	70.00	65.00 to 80.00	.....	.....	.....	.....
New Bedford	40.00	35.00	.....	50.00	100.00	.....	180.00	.....	.....	55.00	.....	.....	.....	.....
New Orleans	40.00	40.00	.....	.....	60.00	110.00	110.00	75.00	75.00	85.00	90.00	156.25	150.00	184.34
New York	37.62	45.00	45.00	50.00	75.00	125.00	100.00	.....	65.00	.....	90.00	125.00	120.00	181.25
Norfolk	38.33	40.00	47.50	50.00	.....	150.00	150.00	.....	.....	.....	80.00	.....	130.00	175.00
Pascagoula	40.00	40.00	43.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia [a]	37.40	42.35	46.68	47.82	75.00	.....	110.00	65.00	70.00	.....	85.00	117.50	125.63	150.00
Portland, Me	40.42	50.00	50.00	50.00	100.00	100.00	150.00	.....	.....	.....	90.00	125.00	130.00	.....
Providence	40.00	50.00	50.00	50.00	100.00	100.00	125.00	75.00	70.00	.....	100.00	125.00	.....	193.75
Rockland	35.00	50.00	45.00	45.00	50.00	90.00	125.00	75.00	.....	.....	.....	.....	150.00	.....
Seattle	.....	.....	.....	.....	.....	125.00	.....	.....	.....	.....	.....	.....	125.00	175.00
Over 1,500 tons:														
Baltimore	.....	45.00	60.00	75.00	.....	140.00	100.00	.....	70.00	85.00	100.00	.....	140.00	200.00
Bath	.....	45.00	.....	.....	90.00	100.00	125.00	.....	.....	.....	85.00	90.00	140.00	150.00
Boston	.....	45.00	.....	60.00	60.00 to 75.00	.....	125.00 to 150.00	.....	70.00	75.00 to 100.00	90.00 to 100.00	100.00 to 125.00	110.00 to 150.00	186.25 to 206.25
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181.25

New Bedford		40.00											140.00	145.00
New Orleans									75.00	90.00	90.00	143.13	145.65	184.38
New York		45.00		55.00	75.00	125.00	125.00	80.00	75.00	95.00	100.00	125.00	130.00	187.50
Norfolk		50.00	50.00	60.00		150.00	150.00						130.00	193.75
Philadelphia [a]	40.00	60.00	53.50	68.21	85.71	80.00	135.00	75.00		88.63	89.20	119.21	121.58	155.00
Portland, Me	50.00	57.00	60.00	60.00	100.00	100.00	150.00			90.00	100.00	125.00	140.00	187.50
Providence			60.00	60.00	100.00		125.00			75.00	100.00	125.00	150.00	193.75
Seattle						125.00							125.00	
Under 500 tons: *To Asia and Australia.*														
Baltimore							100.00							178.00
Norfolk							150.00							
San Francisco	44.64	51.25	60.00		91.08	118.69	143.34		90.00				133.75	165.00
From 500 to 1,500 tons:														
Baltimore							100.00					125.00		
New York	45.00	45.00												181.25
Norfolk							150.00							175.00
San Francisco	47.02	50.10	61.00	73.75	97.03	127.50	152.21		75.00		100.00		147.50	150.83
Seattle	50.00	55.00	71.00	75.00	90.00	125.00	150.00					115.00	125.00	
Over 1,500 tons:														
Baltimore						140.00	100.00					125.00	140.00	200.00
New York	51.62	50.00	60.00		75.00							135.00	130.00	187.50
Norfolk							150.00							193.75
Philadelphia [a]	50.00	55.00		75.00								140.00		
Portland, Me														187.50
San Francisco	47.50	53.00		75.00	103.75	141.20	168.28	105.88	103.02	125.00	126.64	137.18	168.81	171.23
Seattle		55.00				125.00				125.00	125.00	115.00	125.00	175.00
Under 500 tons: *Pacific coasting trade.*														
Boston		50.00												
San Francisco			62.02	70.00	79.06	105.00	150.00			100.00	100.00		144.00	145.00
Seattle	43.54	51.29	66.00					62.50	82.92	103.17	100.00	115.00		
From 500 to 1,500 tons:														
Baltimore												125.00		
San Francisco	50.91	53.46	71.03	73.00	97.50	125.62	140.00	75.00	86.25	100.00	129.00	121.92	144.21	143.20
Seattle	50.00	60.00	70.50	80.00	100.00	125.00	150.00		90.00	126.05	100.00	115.00	125.00	
Over 1,500 tons:														
Baltimore												125.00		
Newport News														187.50
San Francisco	51.64	55.40	63.33	92.56	105.62	147.75	158.00	75.00	92.57	102.80	110.61	138.74	160.16	158.40
Seattle		60.00	86.67			125.00			90.00	127.22	118.35	115.00	140.00	155.00
Under 500 tons: *To Africa.*														
Baltimore							125.00							195.00
Boston	35.00	35.00												
New Bedford	35.00	30.00	30.00	50.00	60.00	75.00				30.00		60.00		
New Orleans		40.00												
New York		40.00		50.00	65.00		100.00							
Norfolk						150.00	150.00						140.00	

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 3.—AVERAGE MONTHLY WAGES PAID TO FIRST MATES ON AMERICAN VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Sail.							Steam.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To Africa—Continued.														
From 500 to 1,500 tons:														
Baltimore	.....	.....	.....	.....	$175.00	.....	$125.00	.....	.....	.....	.....	$125.00	.....	.....
Boston	$40.00	$40.00	$45.00 to 50.00	$40.00 to 50.00	75.00	$110.00	125.00 to 150.00	.....	.....	.....	.....	.....	.....	.....
New Bedford	.....	.....	30.00	60.00	.....	.....	.....	.....	.....	$30.00	.....	.....	.....	.....
New Orleans	.....	.....	.....	.....	125.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York	47.50	45.00	50.00	55.00	75.00	125.00	150.00	.....	.....	.....	.....	125.00	.....	$181.25
Norfolk	.....	.....	.....	60.00	.....	150.00	150.00	.....	.....	.....	.....	.....	$140.00	.....
Pascagoula	.....	45.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia[a]	.....	.....	.....	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco	40.00	50.00	.....	70.00	.....	125.00	175.00	.....	.....	.....	.....	.....	.....	.....
Seattle	50.00	55.00	.....	75.00	100.00	125.00	150.00	.....	.....	.....	.....	.....	.....	.....
Over 1,500 tons:														
Baltimore	.....	.....	.....	.....	.....	140.00	125.00	.....	.....	.....	.....	125.00	140.00	200.00
Boston	.....	.....	.....	.....	.....	.....	125.00 to 150.00	.....	.....	.....	.....	.....	.....	.....
Newport News	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	187.50
New Orleans	.....	45.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	130.00	.....	.....
New York	.....	.....	.....	.....	.....	125.00	175.00	.....	.....	.....	.....	135.00	130.00	187.50
Norfolk	.....	.....	.....	.....	.....	150.00	150.00	.....	.....	.....	.....	.....	140.00	193.75
Philadelphia[a]	.....	.....	.....	.....	.....	150.00	.....	.....	.....	.....	$95.00	156.25	.....	193.75
San Francisco	.....	53.33	65.00	.....	102.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seattle	.....	55.00	63.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	150.00	.....
Atlantic to Pacific ports, and vice versa.														
Under 500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	100.00	.....	.....	.....	.....	.....	.....	195.00
Norfolk	.....	.....	.....	.....	.....	150.00	150.00	.....	.....	.....	.....	.....	140.00	.....
San Francisco	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	152.50	.....
Seattle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.00	.....	.....	.....
From 500 to 1,500 tons:														
Baltimore	55.00	50.00	.....	.....	125.00	.....	.....	.....	.....	.....	.....	125.00	.....	.....
New Orleans	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181.25
New York	50.00	45.00	52.50	.....	.....	.....	.....	.....	$75.00	.....	.....	.....	120.00	181.25
Norfolk	.....	.....	.....	.....	.....	150.00	150.00	.....	.....	.....	.....	.....	140.00	.....

Philadelphia	52.50													
San Francisco							150.00				100.00	120.66	139.28	150.83
Seattle	55.00	55.00	65.00								100.00			
Over 1,500 tons:														
Baltimore		50.00		75.00		140.00					100.00	125.00	140.00	200.00
Boston											100.00	125.00		
New York	55.83	50.00	70.00							100.00	100.00	135.00	130.00	187.50
Norfolk						150.00	150.00						140.00	193.75
Philadelphia [a]	50.00	52.00	65.00	75.00					75.00		103.89	110.00		150.00
Portland, Me														187.50
San Francisco	54.03	55.83	68.33	75.00	90.00					100.00	102.40	127.94	164.04	166.91
Seattle		55.00	60.00			125.00				125.00	100.00	150.00	140.00	175.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 4.—AVERAGE MONTHLY WAGES PAID TO FIREMEN AND FIRST ENGINEERS ON AMERICAN STEAM VESSELS, 1895–1919.

Destination, size, and port of departure of vessels.	Firemen.							First engineers.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To Great Britain.														
Under 500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	$93.75	.....	.....	.....	.....	.....	.....	$195.00
New Orleans	.....	.....	.....	.....	.....	$90.00	.....	.....	.....	.....	.....	.....	$285.00	.....
Norfolk	.....	.....	.....	.....	.....	62.50	.....	.....	.....	.....	.....	.....	175.00	.....
Portland, Me	.....	.....	.....	.....	$55.00	.....	.....	.....	.....	.....	.....	.....	$115.00	.....
Rockland	.....	.....	.....	.....	50.00	55.00	.....	.....	.....	.....	.....	.....	125.00	150.00	.....
From 500 to 1,500 tons:														
Baltimore	.....	.....	.....	.....	90.00	.....	93.75	.....	.....	.....	.....	.....	175.00	.....	195.00
Newport News	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....	212.50
New York	.....	.....	.....	$45.00	50.00	.....	75.00	.....	.....	.....	$150.00	150.00	.....	181.25
Norfolk	.....	.....	.....	.....	.....	62.50	.....	.....	.....	.....	.....	.....	175.00	.....
Portland, Me	.....	.....	.....	.....	55.00	.....	.....	.....	.....	.....	.....	.....	125.00	.....	.....
Rockland	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....	190.00	.....
Over 1,500 tons:														
Baltimore	.....	.....	.....	.....	90.00	93.75	93.75	.....	.....	.....	.....	.....	175.00	210.00	210.00
Boston	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....	212.50 to 287.50
New Orleans	.....	.....	.....	.....	.....	100.75	93.70	.....	.....	.....	.....	.....	.....	278.33	275.16
Newport News	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	.....	239.00
New York	$37.00	$40.00	$40.00	40.00	50.00	60.00	75.00	$150.00	$150.00	$200.00	200.00	225.00	185.00	187.50
Norfolk	.....	.....	.....	40.00	.....	62.50	75.00	.....	.....	.....	.....	.....	175.00	193.75
Philadelphia[a]	.....	.....	40.00	.....	67.50	63.14	75.00	112.50	.....	150.00	.....	238.30	197.90	190.00
Portland, Me	.....	.....	.....	.....	55.00	.....	75.00	.....	.....	.....	.....	135.00	.....	187.50
San Francisco	.....	.....	.....	.....	55.00	.....	.....	.....	.....	.....	.....	185.00	.....	.....
Seattle	.....	.....	.....	40.00	.....	.....	75.00	.....	.....	.....	140.00	.....	.....	250.00
To Continent of Europe.														
Under 500 tons:														
Baltimore	.....	.....	.....	.....	.....	.....	93.75	.....	.....	.....	.....	.....	.....	195.00
New York	.....	.....	.....	.....	50.00	.....	.....	.....	.....	.....	.....	120.00	.....	.....
Norfolk	.....	.....	.....	.....	.....	62.50	.....	.....	.....	.....	.....	.....	175.00	.....
Portland, Me	.....	.....	.....	.....	55.00	.....	.....	.....	.....	.....	.....	115.00	.....	.....
From 500 to 1,500 tons:														
Baltimore	.....	.....	.....	35.00	90.00	.....	.....	.....	.....	.....	90.00	175.00	.....	.....
New Orleans	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	350.00	.....
Newport News	.....	.....	.....	.....	.....	.....	75.00	.....	.....	.....	.....	.....	.....	212.50
New York	.....	.....	.....	40.00	50.00	.....	75.00	.....	.....	.....	170.00	120.00	.....	181.25
Norfolk	.....	.....	.....	.....	.....	62.50	.....	.....	.....	.....	.....	.....	175.00	.....
Portland, Me	.....	.....	.....	.....	55.00	.....	.....	.....	.....	.....	.....	125.00	.....	.....

Over 1,500 tons:														
Baltimore					90.00	93.75						175.00	210.00	
Bath							75.00							250.00
Boston				35.00 to 40.00	45.00 to 60.00	60.00 to 75.00	75.00				150.00 to 175.00	225.00	185.00 to 225.00	212.50 to 287.50
New Orleans				40.00	60.80	94.12	93.70				110.00	258.33	327.14	275.16
Newport News							75.00							239.00
New York				40.00	50.00	60.00	75.00				180.00	185.00	185.00	187.50
Norfolk				40.00		62.50	75.00				150.00		175.00	193.75
Philadelphia [a]				41.18	73.37	63.14	75.00	112.50			158.75	270.98	197.90	190.00
Portland, Me				40.00	55.00		75.00				150.00	135.00		187.50
San Francisco				38.50		75.00	75.00				150.00		250.00	237.91
Seattle							75.00							250.00
To South America.														
Under 500 tons:														
Baltimore							75.00							178.00
New Orleans		50.00				73.25			125.00				180.00	
Norfolk						62.50							175.00	
Philadelphia [a]	45.00							125.00						
Portland, Me					55.00							115.00		
San Francisco					55.00	60.00	77.50					160.00	220.00	225.00
From 500 to 1,500 tons:														
Baltimore					55.00		75.00					125.00		
New Orleans	50.00	50.00				71.25	80.00	125.00	125.00				215.06	212.50
Newport News							75.00							
New York				40.00	50.00	60.00	75.00				150.00	160.00	165.00	181.25
Norfolk						62.50							175.00	
Philadelphia [a]					55.33	67.50						167.50	182.50	
Portland, Me					55.00							125.00		
San Francisco	45.00	45.00			55.00	63.77	75.50	150.00	150.00			165.00	190.10	192.27
Seattle				55.00		63.33					150.00		205.00	
Over 1,500 tons:														
Baltimore				35.00	55.00	62.50	75.00				100.00	125.00	140.00	200.00
Bath							75.00							250.00
Boston					45.00 to 65.00	60.00 to 75.00	75.00					165.00 to 175.00	165.00 to 200.00	212.50 to 287.50
New Orleans				40.00	52.00	66.25	75.00				110.00	185.50	187.50	231.25
Newport News							75.00							225.00
New York	40.00	40.00	40.00	40.00		60.00	75.00	120.89	125.00	150.00	157.50	175.00	185.00	187.50
Norfolk				40.00		62.50	75.00						175.00	193.75
Philadelphia [a]					54.58	61.50	75.00					193.69	178.75	185.00
Portland, Me					55.00		75.00					135.00		187.50
San Francisco	45.00	45.00	55.00	47.29	56.40	64.50	75.00	150.00	150.00	165.00	161.66	182.92	213.50	224.26
Seattle					55.00		75.00							250.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 4.—AVERAGE MONTHLY WAGES PAID TO FIREMEN AND FIRST ENGINEERS ON AMERICAN STEAM VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Firemen.							First engineers.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To West Indies, Mexico, and Central America.														
Under 500 tons:														
Baltimore	$35.00						$75.00	$100.00						$178.00
Boston		$35.00							$125.00					
New Bedford	35.00							85.00						
New Orleans		50.00			$49.45	$60.00	80.00		125.00			$157.08	$231.25	220.31
New York				$40.00		60.00					$125.00		135.00	
Norfolk		33.33		40.00		62.50			86.67		125.00		175.00	
Portland, Me					55.00							115.00		
Philadelphia [a]		35.00	$30.00						100.00	$115.00				
San Francisco				55.00	55.75	65.00	75.00				125.00	163.08	178.50	225.00
From 500 to 1,500 tons:														
Baltimore	35.00				55.00		75.00	100.00				125.00		178.00
Boston	35.00	35.00						100.00	125.00					
Newport News							75.00							
New Orleans	50.00	50.00	40.00		60.29	70.40	77.50	125.00	125.00	150.00		177.57	213.54	227.50
New York			40.00	40.00	50.00	60.00	75.00		100.00	150.00	140.00	160.00	165.00	181.25
Norfolk				40.00		62.50							175.00	
Philadelphia [a]	35.00			40.00	56.00	60.00	75.00	100.00			128.33	206.67	174.00	180.00
Portland, Me					55.00							125.00		
San Francisco			52.89	55.00	55.66	64.16	75.00			145.79	148.50	162.50	179.34	195.00
Seattle				55.00							150.00			
Over 1,500 tons:														
Baltimore				35.00	55.00	62.50	75.00				100.00	125.00	140.00	200.00
Boston		35.00	35.00 to 40.00	40.00	45.00 to 60.00	60.00 to 75.00	75.00		125.00	150.00	150.00	165.00 to 175.00	165.00 to 200.00	212.50 to 287.50
Newport News							75.00							212.50
New Orleans		50.00	50.00	50.00	53.04	66.98	75.00		125.00	150.00	100.00	187.63	217.78	234.05
New York	40.00		40.00	40.00	50.00	60.00	75.00	125.00	125.00	175.00	165.00	225.00	185.00	187.50
Norfolk				40.00		62.50	75.00				100.00		175.00	193.75
Philadelphia [a]	40.00	30.20	39.51	42.24	53.20	63.45	75.00	125.00	125.00	150.00	156.20	189.71	180.00	185.00
Portland, Me					55.00	60.00	75.00					135.00	185.00	187.50
Providence						62.50	75.00						200.00	250.00
San Francisco			47.96	45.91	55.59	64.28	75.00			150.00	161.20	173.89	219.85	229.16
Seattle			50.00				75.00			150.00				250.00

Atlantic and Gulf coasting trade.

Under 500 tons:														
Baltimore			35.00				75.00			100.00				178.00
Bath		35.00		50.00	50.00	75.00			75.00		100.00	100.00	125.00	
Boston		35.00			45.00 to 60.00	60.00 to 75.00			110.00			130.00 to 135.00	150.00 to 165.00	
Gloucester				45.00						70.00	95.00			
New Bedford							75.00							160.00
New Orleans		50.00				75.00			125.00				213.25	
New York				40.00	50.00	60.00					130.00	125.00	135.00	
Norfolk			35.00			67.50	75.00			112.00			165.00	170.00
Philadelphia[a]		35.00	39.44	44.17	48.75	62.00			104.00	122.78	122.50	142.50	159.00	
Portland, Me		35.00	40.00	40.00	55.00	60.00			95.00	90.00	115.00	115.00	150.00	
Rockland				45.00	50.00	55.00	75.00			125.00	125.00	125.00	150.00	200.00
From 500 to 1,500 tons:														
Baltimore		35.00			55.00		75.00		110.00			125.00		178.00
Bath		35.00							100.00					
Boston		35.00	40.00						110.00	100.00 to 125.00				
New Bedford										100.00				
Newport News							75.00							
New Orleans	50.00	50.00	40.00	50.00	67.13	66.00		125.00	125.00	150.00	100.00	203.12	215.50	
New York		35.00		40.00	50.00	60.00	75.00		100.00		150.00	165.00	165.00	207.50
Norfolk			30.00	40.00		67.50	75.00				115.00		165.00	181.25
Philadelphia[a]	33.13	40.00		40.00	52.72	62.50	75.00	90.00	125.00		138.00	158.18	175.00	170.00
Portland, Me		35.00		40.00	55.00	60.00	75.00				135.00	120.00	185.00	160.00
Providence	40.00	40.00		45.00	50.00		75.00	125.00	115.00		150.00	160.00		250.00
Rockland						75.00							190.00	
Seattle						63.33	75.00						205.00	250.00
Over 1,500 tons:														
Baltimore		35.00	35.00	35.00		62.50	75.00		110.00	135.00	100.00		140.00	200.00
Bath				40.00		75.00					135.00	130.00	190.00	
Boston		35.00	40.00	40.00 to 45.00	45.00 to 60.00	60.00 to 75.00	75.00		110.00	150.00 to 165.00	150.00 to 165.00	150.00 to 175.00	160.00 to 200.00	212.50 to 287.50
New Bedford						60.00	75.00						190.00	190.00
Newport News							75.00							212.50
New Orleans		50.00	50.00	50.00	67.38	68.75	75.00		125.00	150.00	100.00	217.58	194.39	221.88
New York	40.00	40.00	40.00	40.00	50.00	60.00	75.00	125.00	125.00	165.00	155.00	165.00	185.00	187.50
Norfolk						67.50	75.00						165.00	193.75
Philadelphia[a]	35.00		37.16	39.89	50.78	60.10	75.00	125.00		145.00	144.22	170.30	172.72	170.00
Portland, Me			37.00	40.00	55.00	60.00	75.00			150.00	150.00	125.00	185.00	187.50
Providence			40.00	45.00	50.00	62.50	75.00			140.00	150.00	175.00	200.00	250.00
Seattle					55.00	63.33							205.00	

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

TABLE 4.—AVERAGE MONTHLY WAGES PAID TO FIREMEN AND FIRST ENGINEERS ON AMERICAN STEAM VESSELS, 1895–1919—Continued.

Destination, size, and port of departure of vessels.	Firemen.							First engineers.						
	1895	1900	1910	1915	1917	1918	1919	1895	1900	1910	1915	1917	1918	1919
To Asia and Australia.														
Under 500 tons:														
Baltimore							$75.00							$178.00
San Francisco		$50.00					57.50		$120.00				$133.33	200.00
From 500 to 1,500 tons:														
Baltimore					$55.00		75.00					$125.00		178.00
New York							75.00							181.25
San Francisco		50.00		$30.00			75.00		125.00		$150.00		181.25	221.65
Seattle					55.00	$63.33						165.00	205.00	
Over 1,500 tons:														
Baltimore					55.00	62.50	75.00					125.00	140.00	200.00
New York					50.00	60.00	75.00					175.00	185.00	187.25
Norfolk							75.00							193.75
Philadelphia					50.00							190.00		
Portland, Me							75.00							187.50
San Francisco	$45.00	48.24		53.33	55.30	65.00	75.00	$155.88	156.61	$175.00	186.20	187.75	238.07	242.41
Seattle					55.00	63.33	75.00			200.00	166.67	175.00	205.00	225.00
Pacific coasting trade.														
Under 500 tons:														
San Francisco	47.50	50.00	$55.00	65.00		75.75	90.00	110.00	121.25	150.00	150.00		183.25	201.67
Seattle		50.00	55.28	55.00	55.00				90.00	136.29	150.00			
From 500 to 1,500 tons:														
Baltimore					55.00							125.00		
San Francisco	50.00	50.00	55.00	55.00	55.00	67.81	75.00	125.00	131.15	139.47	108.00	162.94	193.48	193.47
Seattle		50.00	55.00	55.00	55.00	63.33			90.00	150.00	150.00	167.00	205.00	
Over 1,500 tons:														
Baltimore					55.00							125.00		
Newport News							75.00							231.25
San Francisco	50.00	50.00	54.76	54.82	55.61	66.00	75.00	150.00	150.00	152.92	164.29	221.38	227.07	222.08
Seattle		50.00	55.00	55.00	55.00	63.33	75.00		90.00	150.00	167.50	175.00	205.00	225.00
To Africa.														
Under 500 tons:														
Baltimore							93.75							195.00
Norfolk						62.50							175.00	
From 500 to 1,500 tons:														
Baltimore					55.00		93.75					125.00		195.00
New York					65.00		75.00					140.00		181.25
Norfolk						62.50							175.00	

Over 1,500 tons:														
Baltimore					55.00	62.50	93.75					125.00	140.00	200.00
Newport News							75.00							231.25
New Orleans					50.00							185.00		
New York					50.00	62.50	75.00					165.00	185.00	187.50
Norfolk				40.00		62.50	75.00						175.00	193.75
Philadelphia[a]				40.00	62.50		75.00				157.50	231.25		250.00
San Francisco													250.00	
Atlantic to Pacific ports, and vice versa.														
Under 500 tons:							75.00							178.00
Baltimore						62.50							175.00	
Norfolk						60.00							177.50	
San Francisco														
From 500 to 1,500 tons:														
Baltimore					55.00		75.00					125.00		178.00
New Orleans							75.00							212.50
New York	50.00					60.00	75.00		150.00				165.00	181.25
Norfolk						62.50							175.00	
San Francisco				51.66	55.00	64.28	75.00				150.00	164.00	190.71	193.33
Seattle				55.00							150.00			
Over 1,500 tons:														
Baltimore				35.00	55.00	62.50	75.00				100.00	125.00	140.00	200.00
Boston				40.00 to 45.00	60.00						175.00	175.00		
New York			40.00	40.00	50.00	60.00	75.00			165.00	175.00	180.00	185.00	187.50
Norfolk				40.00		62.50	75.00						175.00	193.75
Philadelphia[a]	35.00			41.50			75.00		160.00		164.44			175.00
Portland, Me							75.00							187.50
San Francisco			45.00	43.35	55.67	65.14	75.00			150.00	157.87	188.91	229.00	229.46
Seattle			30.00	55.00		63.33	75.00			150.00	150.00	225.00	250.00	250.00

[a] Fifty per cent in addition to the foregoing wages paid all members of crews sailing through the European war zone up to Jan. 1, 1919; 25 per cent bonus, in addition to the foregoing wages, paid licensed officers sailing to South America up to Jan. 1, 1919.

5. WAGE SCALES ESTABLISHED BY THE U. S. SHIPPING BOARD.

MAY 18, 1918.

Following the recent conference between representatives of shipowners, licensed officers and seamen, and the Shipping Board, the Shipping Board has established the following standard wage scale for the following members of the deck and engine departments:

	Per Month.		Per Month.
Boatswain	$85.00	Boys	$40.00
Boatswain's mate	80.00	Oilers	80.00
Carpenter	90.00	Water tenders	80.00
Carpenter's mate	85.00	Engine-room storekeeper	80.00
Quartermaster	77.50	Firemen	75.00
Able seamen	75.00	Wipers	65.00
Ordinary seamen	55.00	Coal passers	65.00

Straight overtime 60 cents an hour and $1.25 for meal money on shore. On vessels sailing into the war zone the war bonus shall remain fifty per cent (50 per cent).

The foregoing wage scale applies to all vessels sailing from Atlantic and Gulf coast ports of the United States, except harbor craft and vessels owned or operated by the Navy. It shall be considered a standard wage scale for all such vessels and shall be in effect and paid retroactively from and after May 4, 1918, the last day of the above-mentioned conference.

There shall be no bonus on vessels not entering the war zone. Since the board has endeavored to fix an equitable scale, considering the increased cost of living, the wages paid in somewhat corresponding occupations on shore with allowances for food and lodging, and the necessity for attracting more men to the merchant sea service, it believes that no additional or increased bonuses or gifts other than above specified should be paid. Except as herein provided there shall be no change in working rules or regulations.

This wage scale shall remain in force until in the judgment of the U. S. Shipping Board conditions warrant a change.

Owing to their greater complexity, the new classification of vessels and the wage scales of the stewards' departments and of the licensed officers and deck and engine departments are still in preparation, but will be decided upon and announced shortly; and will also become effective from and after May 4. As a fair and satisfactory wage agreement has recently been made on the Pacific coast, the Shipping Board will at this time make no change in Pacific coast conditions.

U. S. SHIPPING BOARD.

JUNE 1, 1918.

STEWARDS' WAGE SCALE AND REGULATIONS.

1. There shall be a $20 flat increase to all chief stewards and chief cooks and a $15 flat increase to all other members of the stewards' department over the wage scales in force on May 4, 1918.

2. On vessels sailing into the war zone, the war bonus shall remain 50 per cent.

3. Work done between 8 p. m. and 6 a. m. in preparation or service of meals served between those hours shall be paid overtime at the rate of 50 cents an hour for chief stewards and chief cooks and 40 cents an hour for all others in this department, except the work of the regular night man in the stewards' department and except regular night baking work.

4. Meal money on shore shall be $1.25 per diem.

5. The foregoing wage scale is not intended to alter the number or kind of crew complement existing in the stewards' department on any vessel on May 4, 1918.

6. There shall be no bonus on vessels not entering the war zone. Since the Shipping Board has endeavored to fix an equitable scale considering the increased cost of living, the wages paid in somewhat corresponding occupations on shore, the allowances for food and lodging and the necessity of attracting men to the merchant sea service, it believes that no additional or increased bonus of gifts other than above specified should be paid. Except as herein provided there shall be no change in working rules or regulations.

7. The foregoing wage scale applies to all United States vessels from Atlantic and Gulf ports of the United States except harbor craft and vessels owned or operated by the Navy. It shall be in effect and paid retroactively from May 4, 1918, the last day of the recent conference held to consider the supply and training of seamen.

8. This wage scale during the war emergency shall remain in force until in the judgment of the U. S. Shipping Board conditions warrant a change.

U. S. SHIPPING BOARD.

JUNE 14, 1918.

Wage scale for licensed officers of the deck and engine departments.

[25 per cent bonus for all coastwise, West Indies, and South and Central American trade; 50 per cent bonus for trans-Atlantic war-zone trade]

	A.	B.	C.	D.	E.	F.
Masters	$300	$270	$260	$250	$240	$230
Chief engineers	230	215	200	185	170	160
First officers and first assistant engineers	165	160	155	150	145	140
Second officers and second assistant engineers	150	145	140	135	130	125
Third officers and third assistant engineers	135	130	125	120	115	110
Fourth officers and fourth assistant engineers	120	115	.....	.....	.....	.....
Junior engineers	100	.....	.....	.....	.....	.....

U. S. SHIPPING BOARD.

JUNE 14, 1918.

Classification (power tons).

[Figures are inclusive.]

Class.	Single screw.	Twin screw.	Class.	Single screw.	Twin screw.
A	Over 20,001	Over 15,001.	D	5,001 to 7,500	3,501 to 5,500.
B	12,001 to 20,000	9,001 to 15,000.	E	3,000 to 5,000	2,001 to 3,500.
C	7,501 to 12,000	5,501 to 9,000.	F	Below 3,000	Below 2,000.

U. S. SHIPPING BOARD.

JANUARY 1 TO MAY 1, 1919.

Classification (power tons).

[Figures are inclusive.]

Class.	Single screw.	Twin screw.	Class.	Single screw.	Twin screw.
A	Over 20,001	Over 15,001.	D	5,001 to 7,500	3,501 to 5,500.
B	12,001 to 20,000	9,901 to 15,000.	E	Below 5,001	Below 3,501.
C	7,501 to 12,000	5,501 to 9,000.			

1. The wages for licensed officers shall be as follows:

Wage scale for licensed officers of the deck and engine departments.

	A.	B.	C.	D.	E.
Masters	$375.00	$337.50	$325.00	$312.50	$300.00
Chief engineer	287.50	268.75	250.00	231.25	212.50
First officers and first assistant engineers	206.25	200.00	193.75	187.50	181.25
Second officers and second assistant engineers	187.50	181.25	175.00	168.75	162.50
Third officers and third assistant engineers	168.75	162.50	156.25	150.00	143.75
Fourth officers and fourth assistant engineers	150.00	143.75	.....	.....	.....
Junior engineers	125.00	.....	.....	.....	.....

2. The above rates are flat and do not contemplate the payment of bonuses in any form whatsoever.

3. The above rates shall constitute a single, universal scale applicable to licensed officers on steamships plying from Atlantic and Gulf ports, and shall include coastwise, West Indies, South American, and trans-Atlantic services.

4. The above rates shall become effective for all licensed officers signing on and after January 1, 1919, and shall remain in full force and effect until May 1, 1919, and shall be subject to revision at any time thereafter upon the termination of 30 days after written notice served by any one of the interested parties to the U. S. Shipping Board at Washington, D. C.

WORKING RULES AND WAGES AGREED ON IN COMMITTEE CONFERENCE BETWEEN REPRESENTATIVES OF U. S. SHIPPING BOARD, THE AMERICAN STEAMSHIP ASSOCIATION, THE MASTERS, MATES, AND PILOTS' ASSOCIATION, AND THE NEPTUNE ASSOCIATION.

Working rules.

1. Watch and watch to be maintained on sailing day and at all outside ports and ports of call. No mate shall be required or permitted to take charge of a watch upon leaving or immediately after leaving port unless he shall have had at least 6 hours off duty within the 12 hours immediately preceding the time of sailing.

2. In the home port a day's work shall be from 8 a. m. until 5 p. m., with one hour allowed at noon for dinner.

3. All mates are to be given shore leave every night in home ports. If, however, a mate is required to stay on board at night in the home port, he shall be given a full day off with pay, or, in lieu thereof, be paid one day's pay additional.

4. If a mate is required to stay on board in any port on Sundays, or on New Year's Day, Fourth of July, Labor Day, Thanksgiving Day, or Christmas Day, he shall have one full day off with pay, or be paid one day's pay additional; but this shall not apply to a vessel sailing or ready to proceed on her voyage.

5. Regular sea watches to be maintained at outside ports or in ports of call, provided, however, that, with the consent of the master, the mates shall make a mutual agreement relative to the night watch.

6. While at sea no mate shall be required or permitted to perform any duty in excess of 8 out of 24 hours, except that actually required for the safety of the vessel. (This rule does not apply on routes of 400 miles or less from port of departure to port of final destination.)

7. Mates, when employed, shall at all times, whether or not the ship is in commission, receive for their services the scale rate for the capacity in which they are employed and subsistence.

8. When subsistence is not provided on board, masters shall receive not less than $3.50 per day, and mates not less than $3 per day, for subsistence, and when no room is provided they shall be paid $1.50 per night for room rent. Employers shall furnish first-class transportation to masters and mates when traveling to join a vessel or returning home in compliance with orders.

9. A ship lying at anchor in a home port awaiting berth before her voyage has ended shall have sufficient mates aboard at all times for the safety of the vessel. If, however, more than one mate is required to remain on board at night, the offwatch mate shall be compensated as per rule 3.

10. If a mate is required to remain on board ship at night while lying at anchor in a home port awaiting berth, after her voyage has ended, he shall be paid in accordance with rule 3. The voyage of a vessel shall be considered to be ended when the vessel is safely berthed.

NOTE.—For the purpose of these rules a "home port" shall be considered the port at which shipping articles are opened or the port at which the crew is paid off upon completion of a voyage.

Wages.

Class.	A.	B.	C.	D.	E.
Captain	$412.50	$371.25	$357.50	$343.75	$330.00
First officer	241.25	255.00	228.75	222.50	216.25
Second officer	212.50	206.25	200.00	193.75	187.50
Third officer	188.75	182.50	176.25	170.00	163.75
Fourth officer	165.00	158.75	.....	.....	.....

The terms of this agreement to become effective as of July 28, 1919, and to continue in effect until August 1, 1920.

(Signed) FRANKLIN D. MOONEY,
For American Steamship Association.
(Signed) JOHN H. PRUETT, *President,*
For Masters', Mates', and Pilots' Assn.
(Signed) A. N. MCGRAY, *Sect.-Treas.,*
For Neptune Association.
(Signed) HENRY M. ROBINSON,
For U. S. Shipping Board.

WORKING RULES AND WAGES AGREED ON IN CONFERENCE BETWEEN REPRESENTATIVES OF THE U. S. SHIPPING BOARD, AMERICAN STEAMSHIP ASSOCIATION, AND THE MARINE FIREMENS, OILERS, AND WATERTENDERS' UNION OF THE ATLANTIC AND GULF.

Working rules.

1. In port the working rules to be from 8 a. m. to 12 a. m. and from 1 p. m. to 5 p. m. Any other work performed in port between the hours of 5 p. m. and 8 a. m. on ordinary week days, Sundays, and holidays to be paid at the overtime rate.

2. Any work performed at sea by any member of the engine-room crew over the regular watches, other than for the immediate safety of the vessel, for passengers, cargo, and crew, shall be paid for at overtime rate.

3. No fireman shall be required to work more than 4 natural-draft fires or 3 forced-draft fires on coal-burning vessels, and not more than 12 fires on oil-burning vessels at sea.

4. When any members of the engine-room crew are standing the regular sea watches, they shall do any work which is part of their regular sea duty, but washing paintwork, polishing brass, cleaning of boilers and bilges, overhauling engines, sponging tubes, etc., shall not be done between the hours of 5 p. m. and 8 a. m. If this rule is violated, overtime to be paid at overtime rate.

5. When any member of the engine-room crew is required to stand watch in port on Sundays and holidays for the purpose of looking after pumps, fires, etc., he shall be paid at the overtime rate.

6. Sea watches shall be set not later than noon on the day of sailing, and no unlicensed employee in the engine department shall be required to go on watch unless he shall have had six hours off duty immediately preceding the setting of sea watches.

7. If the ship is in a safe harbor at anchor on Sundays and holidays, all members of the unlicensed engine-room crew that are standing regular sea watches shall receive overtime pay at the overtime rate.

8. If watches are broken moving vessel in port or harbor between the hours of 5 p. m. and 8 a. m., overtime to be paid to the men actually engaged in moving the vessel.

9. The following shall be observed as holidays: New Year's Day, Lincoln's Birthday, Washington's Birthday, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day.

10. In oil-carrying vessels the same rule shall prevail; pumping cargo between the hours of 5 p. m. and 8 a. m. on week days, Sundays, and holidays shall be paid at the overtime rate.

11. Wipers to work two hours on Sundays and holidays at sea.

12. The firemen on ocean-going oil barges to be divided into three watches.

13. Ocean-going vessels where coal passers are carried shall carry at least three coal passers, whose sea watches shall be divided into three.

14. All claims for overtime shall be approved by the engineer in charge right after the overtime ceases.

15. Members are hereby cautioned that in cases of dispute with reference to overtime they shall perform the work required of them by the engineer and then refer their cases to the union for settlement.

16. It is further agreed that proper bedding, blankets, mattresses, covers, and pillow slips shall be furnished by the vessel to all men herein mentioned; men to be held strictly responsible for the equipment furnished. On vessels covered by the seamen's act suitable mess rooms shall be provided for separate and apart from all living and sleeping quarters and from the effluvium of the cargo and bilge water.

17. When the crew is not boarded aboard the vessel, each member of the crew shall receive $1.50 per day for meals, and when compelled to sleep ashore each man shall receive 50 cents per night for room.

18. Members are cautioned to be aboard at the time requested by the engineer on the day of sailing.

19. In case these rules shall conflict with any law now existing or that may become effective, then these rules shall be amended to conform therewith.

20. Overtime rate, 60 cents per hour.

Wages per month.

Electricians	(a)	Donkeymen	$95
Assistant electricians	(a)	Storekeepers	95
Refrigerating engineers	(a)	Oilers	95
Assistant refrigerating engineers	(a)	Firemen	90
Deck engineers	$100	Coal passers and wipers	75
Pumpmen	100	Water tenders	95

a Increase of $15 over wages paid prior to July 28, 1919.

Authorized representatives of the Marine Firemens, Oilers, and Water Tenders' Union of the Atlantic and Gulf are to be granted permission to visit vessels at time of paying off and at such times as are agreeable to the representatives of the owners, but under no consideration are representatives of the organization to interfere with the men at work.

These working rules and wage scale are to take effect immediately, and are to remain in full force and effect until May 1, 1920.

(Signed) FRANKLIN D. MOONEY,
For the American Steamship Association.

(Signed) GEORGE COOK,
(Signed) OSCAR CARLSON,
Secretary for Marine Firemens, Oilers, and Water Tenders' Union of the Atlantic & Gulf.

(Signed) HENRY M. ROBINSON,
For U. S. Shipping Board.

JULY 30, 1919.

WORKING RULES AND WAGES AGREED ON IN COMMITTEE CONFERENCE BETWEEN REPRESENTATIVES OF THE U. S. SHIPPING BOARD, AMERICAN STEAMSHIP ASSOCIATION, AND MARINE ENGINEERS' BENEFICIAL ASSOCIATION.

Working rules.

1. Watch and watch to be maintained on sailing day or at any outside port or ports of call. No engineer shall be required or permitted to take charge of a watch upon leaving or immediately after leaving port unless he shall have had at least 6 hours off duty within the 12 hours immediately preceding time of sailing.

2. A working day at any port where watches are broken shall be from 8 a. m. to 5 p. m., during which time one hour shall be allowed for dinner.

3. All engineers are to be given shore leave every night in home port by the owner employing a night engineer or watchman, if obtainable. If, however, a night engineer or watchman is not obtainable and a ship's engineer is required to stay on board at night in the home port, he shall be given a full day off, with pay, or, in lieu thereof, be paid one day's pay additional. It is the intention of this rule that no night work shall be performed by the ship's engineer except that which is necessary for the safety of the vessel, boilers, or machinery.

4. If an engineer is required to stay on board in any port on Sundays, or on New Year's Day, Fourth of July, Labor Day, Thanksgiving Day, or Christmas Day, he shall have one full day off, with pay, or be paid one day's pay additional; but this shall not apply to a vessel sailing or ready to proceed on her voyage.

It is the intention of this rule that no work shall be performed by the engineer except that which is necessary for the safety of the vessel, boilers, or machinery.

5. In all ports of call and foreign ports one engineer shall be required to stay aboard at night. Engineers shall alternate and shall receive no extra compensation for this work. It is the intention of this rule that no night work shall be performed by the engineers except for the safety of the vessel, boilers, or machinery.

6. All work done at sea by assistant engineers in excess of eight hours, except that necessary for the safety of the vessel or her equipment, shall be paid for at the rate of 80 cents per hour.

The following work shall be considered necessary for the safety of the vessel: All repairs to main engines and boilers in service, feed pumps, ballast pump, fire pump, general-service pump, circulating pumps (main or auxiliary), air pumps (main or auxiliary), sanitary pumps, fresh-water pumps, ice machines, dynamos, fuel pumps, evaporator feed pumps, ash hoists, telemotor, steering engine and gear, fuel-transfer pumps, feed heaters, fuel heaters, condensers (main or auxiliary), evaporators, steam and exhaust lines, ballast and bilge lines, fresh water, sanitary and fire lines in engine room and fireroom, anchor windlass or capstans, toilets, and sanitary fittings, provided same become disabled after the commencement of voyage.

The following work shall not be considered necessary for the safety of the vessel: All repairs to jacking or turning engine, deck machinery or piping, galley and fittings, ventilators, building racks for grate bars, storerooms, rearranging storerooms, and all boiler work not necessary for the propulsion of the ship, rearrangement of pipes and machinery, etc., provided, however, that on each passage the engineers may be required to take indicator diagrams from main engines.

7. If it is necessary to move a vessel in port between 5 p. m. and 8 a. m., or on Sundays or holidays, when a vessel arrives from a voyage and anchors, or makes fast to a wharf to wait for a suitable tide or berth, discharge passengers or baggage, or receive fuel, the engineers shall continue their regular watches at the option of the chief engineer, who shall be notified at the time of arrival, or as soon as possible thereafter, of any anticipated detention of the vessel.

8. Work in excess of eight hours shall not be performed or paid for, unless the work is done upon written order of the chief engineer, master, owner, or agent of the vessel. An entry shall be made in the engine room log book every time an assistant engineer is required to perform overtime service, covering kind of work, reason for same, and time started and finished.

9. No engineer shall be laid off Sundays or holidays, but at the option of the chief engineer the assistants may be granted shore liberty with pay.

10. When in port and board is not furnished, the chief engineers shall be paid $3.50 per day and assistant engineers $3 per day subsistence allowance, and when no room is provided they shall be paid $1.50 per night for room hire. Such allowances to be in addition to wages.

11. Members shall sign no shipping articles, unless same contain statements calling for correct wage rates, and transportation, first-class, with meals and berth, and full time paid to port where such articles were signed, in event ship is sold, or for any cause put out of commission. When members are sent from one port to another to accept employment, they shall be paid for all time and expenses incurred in traveling to or from such place of employment.

12. If any member be discharged for observance of these rules, no other members will be permitted to work or sail with his substitute (if, after investigation, the above is found to be the reason for his discharge). A violation of these rules shall be considered conduct unbecoming a member, and will subject such members to the penalty prescribed by constitution for subordinate associations.

13. All members of the Marine Engineers' Beneficial Association shall be held responsible by the organization for the observance of these rules.

14. In the employment of marine engineers preference shall at all times be given to American citizens.

15. Authorized representatives of the Marine Engineers' Beneficial Association are to be granted permission to visit vessels at such times as are agreeable to the representatives of the owners, but under no consideration are representatives of the organization to interfere with the men at work.

NOTE.—For the purpose of these rules a "home port" shall be considered the port at which shipping articles are opened or the port at which crew is paid off upon completion of the voyage. An "outside port" shall be considered a port at which a vessel lays in an open roadstead. A "port of call" or a "foreign port" shall be considered any port other than "home port" or "outside port" referred to above.

Monthly wages.

Chief engineer: Class A, $387.50; class B, $346.25; class C, $332.50; class D, $318.75; class E, $305.

First assistant engineer: Class A, $241.25; class B, $235; class C, $228.75; class D, $222.50; class E, $216.25.

Second assistant engineer: Class A, $212.50; class B, $206.25; class C, $200; class D, $193.75; class E, $187.50.

Third assistant engineer: Class A, $188.75; class B, $182.50; class C, $176.25; class D, $170; class E, $163.75.

Fourth assistant engineer: Class A, $165; class B, $158.75.

Junior engineers: $135.

The terms of this agreement to become effective as of July 28, 1919, and to continue in effect until August 1, 1920.

(Signed) FRANKLIN D. MOONEY,
For American Steamship Association.

(Signed) WM. S. BROWN,
For Marine Engineers' Beneficial Association.

(Signed) HENRY M. ROBINSON,
For U. S. Shipping Board.

WORKING RULES AND WAGES AGREED ON IN COMMITTEE CONFERENCE BETWEEN REPRESENTATIVES OF THE U. S. SHIPPING BOARD, THE AMERICAN STEAMSHIP ASSOCIATION, AND THE UNITED RADIO TELEGRAPHERS' ASSOCIATION.

Working rules.

The radio men aboard ship shall receive the same consideration, accommodation, and general treatment as afforded officers of the ship.

Operators when not feeding on board to receive $3 per day subsistence allowance.

Wages per month.

Chief operators	$125
Assistant operators	100

Effective as of August 1, 1919, and to continue for one year to August 1, 1920.

(Signed) FRANKLIN D. MOONEY,
For American Steamship Association.

(Signed) JAMES A. MOORE,
For United Radio Telegraphers' Association.

(Signed) HENRY M. ROBINSON,
For U. S. Shipping Board.

SEAMEN'S WORKING RULES, ATLANTIC AND GULF COASTS.

[Effective July 28, 1919.]

1. Any work for the safety of the vessel, her cargo, passengers, and crew to be done at any time without extra compensation.

2. Working hours on week days in port shall be from 8 a. m. to 12 m. and from 1 p. m. to 5 p. m. All work performed before and after these hours shall be paid at overtime rate of 60 cents per hour.

3. Work on Sundays and the following holidays in all ports shall be paid at the overrate of 60 cents per hour.

4. Sea watches shall be set when vessel leaves for sea, but not later than 12 m. on day of departure; sea watches shall continue until noon on day of arrival. The actual docking or undocking of a vessel upon arrival and departure shall not be considered overtime unless the vessel is docked or undocked more than once. Docking or undocking to be limited to one hour.

5. If vessel's stay in port is too short to break sea watches and sea watches are continued, the watch on deck shall perform their regular duties, but when called upon to perform other work after 5 p. m. or before 8 a. m. on week days and any time on Sundays and holidays and all work performed on watch below, they shall be paid therefor at the overtime rate. (Work in this case is defined to mean loading and discharging of freight, baggage, stores, fuel, and cleaning and moving vessel.)

6. In all open harbors the crew shall work regular sea watches. (Open harbor is defined to mean unsheltered harbor.)

7. Quartermasters, night watchmen, or other members of the crew required to keep gangway or watch vessel on Sundays or holidays shall receive the overtime rate.

8. When working overtime, a member of the crew appointed by the crew shall compare time with the officer in charge after knocking off, or as soon as possible thereafter.

9. The holidays referred to in these rules are: New Year's Day, Washington's Birthday, Lincoln's Birthday, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day.

Meal hours.

10. The crew shall have one unbroken hour for dinner while lying in port or roadstead, and no work shall be performed during such hour. Dinner shall be from 12 m. to 1 p. m., but may be varied not to exceed one hour either way. Breakfast shall be between 7 a. m. and 8 a. m. Suppertime shall be at 5 p. m., but may be postponed not to exceed one hour. One hour to be allowed for supper. (The above rule regarding dinner and supper hours shall also apply when crew work watch and watch in port.)

11. When the crew is not boarded aboard the vessel, each member of the crew shall receive $1.50 per day for meals, and when compelled to sleep ashore each man shall receive 50 cents for room.

Crew's quarters.

12. Mattress and pillow, with covers, colored spread, and sufficient blankets, shall be furnished by the owners for each member of the crew. (Men to be responsible for bedding furnished.)

Caution.

13. Members should use their judgment at all times, and if in doubt what should be charged as overtime should do the work required of them and then refer the case to the union for adjustment.

14. On vessels carrying six or more on deck, the wheelsmen and lookout men shall be divided into three watches; the remainder of the deck crew to do any work necessary around the ship for the period of eight hours.

Wages for month.

Carpenter	$100.00	Quartermasters	87.50
Carpenter's mate	95.00	Able seamen	85.00
Boatswain	95.00	Ordinary seamen	65.00
Boatswain's mate	90.00	Boys	40.00

Authorized representatives of the Eastern and Gulf Sailors' Association are to be granted permission to visit vessels at time of paying off and at such times as are agreeable to the representatives of the owners, but under no consideration are representatives of the organization to interfere with the men at work.

These working rules and wage scale are to take effect immediately, and are to remain in full force and effect until May 1, 1920.

(Signed) FRANKLIN D. MOONEY,
For American Steamship Association.

(Signed) G. H. BROWN,
(Signed) C. THORSEN,
(Signed) A. TAMKE,
For Eastern and Gulf Sailors' Association.

(Signed) HENRY M. ROBINSON,
For U. S. Shipping Board.

WORKING RULES AND WAGES AGREED ON IN COMMITTEE CONFERENCE BETWEEN REPRESENTATIVES OF THE U. S. SHIPPING BOARD, THE AMERICAN STEAMSHIP ASSOCIATION, AND THE MARINE COOKS AND STEWARDS' ASSOCIATION OF THE ATLANTIC AND GULF.

Working rules.

1. At home ports overtime to be paid before 8 a. m. and after 5 p. m. on week days. On Sundays and holidays full overtime for actual time employed. However, vessels laying in port more than seven days, after the seventh day the steward's crew shall prepare and serve meals without overtime; otherwise the steward's crew may be paid off. The purpose of the above rule is to compensate for extra service at sea.

2. When away from home port, chief stewards will see that all employees of the steward's department (except galley crews) shall perform their work in 10 hours actual working time in each 24 hours, galley crew's time to be regulated by the chief cook. All members of the steward's crew compelled to work between the hours of 8 p. m. and 6 a. m. shall be paid overtime. All members of the steward's department (except galley crews) compelled to work in excess of 10 hours between 6 a. m. and 8 p. m. shall be paid overtime. Galley crews to clean up their respective departments before taking time off in home port.

3. There shall be no cooking or service of meals in the home ports, except as provided for in rule 1, except on day of arrival, or sailing days, or while on articles in stream, and when ships are laying where restaurants are not conveniently located in such case galley crews who prepare and men who serve meals for such service shall be paid overtime. Sailing day to mean when sea watches are set and vessel scheduled to sail.

4. For day watch in home ports, on Sundays and holidays, in lieu of time off, overtime shall be paid.

5. No person supplied by the association shall be required to do painting except such touching up as is necessary in their sleeping quarters, which they shall be obliged to keep clean.

6. In case of any trouble regarding working hours or working of ships members of the steward's department not to leave ships or stop work, but must return to home port and settle all grievances there.

7. When vessels arrive in home ports, mess boys and messmen must clean up forecastles, mess rooms, and officers' quarters before taking time off.

8. Meal money in home port to be allowed at the rate of 50 cents per meal.

9. Sea stores and provisions to be carried by longshoremen or others and stowed with the assistance of the steward's department. On passenger steamers waiters to carry all hand baggage.

10. Overtime to be paid at the rate of 60 cents per hour for chief steward and chief cook; all others, 50 cents per hour.

11. Holidays to be observed as follows: New Year's Day, Lincoln's Birthday, Washington's Birthday, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. No other holidays to be observed, and no overtime at sea on account of any holiday.

12. In case these rules conflict with any existing Federal or State law becoming effective during the term of this agreement, then these rules shall be amended to conform therewith.

13. The company to provide, as far as practicable, individual clothing lockers and the proper facilities for cleanliness for every man in the steward's department. Crew's sleeping quarters to be well ventilated and proper facilities for members of steward's department to be seated at meals. This association will insist that all men shall be neat in appearance.

14. Employees in the steward's department engaged in cleaning up ship after vessel has been laid up, to be paid a minimum rate of $4 per day.

15. Subsistence money for men receiving transportation by rail, $4 per day.

16. When ship is in commission and the men are compelled to sleep ashore, they shall receive 50 cents per night for room rent.

17. These working rules and wage scale are to take effect immediately and are to remain in full force and effect until May 1, 1920.

18. These rules do not apply to vessels performing daily schedules.

19. Authorized representatives of the Marine Cooks and Stewards' Association of the Atlantic and Gulf are to be granted permission to visit vessels at time of paying off and at such times as are agreeable to the representatives of the owners, but under no consideration are representatives of the organization to interfere with the men at work.

Increases of wages.

Freight ships:	Per month.
Chief steward	$15
Chief cook	15
Everybody else	10
Passenger ships:	Per cent.
Chief stewards	20
Chief cook	15
Chief baker	15
Mess boys and waiters	$5
Stewardess	$5
Other men	$10

(Signed) FRANKLIN D. MOONEY,
For American Steamship Association.

(Signed) H. D. GRIFFIN, *President.*
(Signed) W. L. CARTLEDGE, *Secretary-Treas.*
(Signed) DAVID E. GRANGE, *Agent,*
For Marine Cooks and Stewards' Association of the Atlantic and Gulf.

(Signed) HENRY M. ROBINSON,
For the U. S. Shipping Board.

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6. BRITISH WAGES.

The following are the principal rates of wages on British ships at ports of the United Kingdom, extracted from the tables of the National Maritime Board, printed in the Shipping Federation pamphlet of 34 printed pages and transmitted by the American consul general at London in July 1919.

The rates of pay shown are national standard rates; they are both maxima and minima, and may neither be increased nor reduced; they are inclusive of all bonuses

and additions to pay with the exception of the special "war-risk bonus" given by the Government as from October 7, 1918, and certain other payments, which are clearly indicated in their proper places in the various sections.

The "war-risk bonus" referred to above came into force on October 7, 1918. On and after that date an amount of £3 per month in the case of vessels whose crews are on monthly articles, and of 10 shillings per week in the case of those on weekly articles, should be added to the pay of all ratings on board for whom national standard rates of pay have been fixed, except ordinary seamen, boys, apprentices, and first-voyage trimmers, who are to be paid only one-half of the bonus. The bonus should also be added to the pay of masters.

It applies throughout the whole of a voyage any part of which is through waters which have been the scene of submarine activity; to coasting vessels equally with oversea vessels trading to and from the United Kingdom, unless such trading be confined to "smooth water limits" as defined by the board of trade.

This "war-risk bonus" is recoverable from the ministry of shipping in the case of requisitioned vessels.

SAILORS AND FIREMEN.

The following rates of pay are standard rates; that is, they are both maxima and minima, and may be neither increased nor reduced; they are inclusive of all bonuses and additions to pay, except the special "war-risk bonus" referred to in the introduction and certain customary extra payments for extra work, the amount of which is to be settled locally; they are retrospective to October 6, 1917, or from the date of signing articles if subsequent thereto, unless otherwise stated herein; they apply to all vessels of over 200 tons gross, and have also, by special determinations, been made to apply to numerous cases of vessels under that tonnage, but exceeding 80 tons, trading within the "danger zone," the crews of which are engaged on ordinary board of trade articles, except those trading either wholly or in part within "partially smooth water limits," those sailing under the "share system," motor vessels, salvage vessels, cable steamers, tugboats, etc., which exceptional cases will, when referred to the board, be separately considered.

Monthly rates of pay (with free food).

	£	s.	d.
A. B. "sailor," "seaman," or "deckhand"	12	10	0
Boatswains	13	0	0
NOTE.—Where in some passenger vessels the boatswain has hitherto received a higher rate of pay than the current rate, the rate to be £15. In such cases as above the boatswain's mate should be paid at the rate of £13. This also applies to new vessels owned by the same companies of corresponding tonnage and type to those upon which it was customary to pay the boatswain at a rate above the current rate.			
Boatswain's mates. (See note under "Boatswains" above.)			
Carpenters (as from and retrospective to May 31, 1918):			
On vessels up to 8,000 tons gross	14	0	0
On vessels of from 8,001 to 10,000 tons gross	15	0	0
On vessels of from 10,001 to 12,000 tons gross	16	0	0
On vessels of from 12,001 to 25,000 tons gross	17	0	0
On vessels over 25,000 tons gross	18	0	0
Carpenters' mates, also joiners (as from and retrospective to May 31, 1918):			
On vessels up to 8,000 tons gross	13	0	0
On vessels of from 8,001 to 10,000 tons gross	13	0	0
On vessels of from 10,001 to 12,000 tons gross	14	0	0
On vessels of from 12,001 to 25,000 tons gross	14	0	0
On vessels over 25,000 tons gross	15	0	0
Deckhands: Any man signed on as such to receive the pay attached to the A. B. rating.			
Deck storekeepers	12	0	0
Diesel-engine greasers	13	0	0
Donkeymen	13	0	0
Electrical greaser. (See "Greasers.")			
Engine room storekeepers. (See "Storekeepers.")			
Firemen	12	0	0
Firemen, leading (where carried)	12	10	0
Firemen, first leading	13	0	0
NOTE.—This rate applies only to firemen carried in some large passenger liners previously receiving a higher rate of pay and described as "first leading firemen."			

	£	s.	d.
First-voyage trimmers. (See under "Trimmers.")			
Greasers	12	10	0
Greasers, refrigerating and electrical (where customary to pay these ratings 10s. per month higher than main-engine greasers, the custom to be continued)	13	0	0
Greasers, tunnel (if so rated on articles), if working 6-hour watches	13	0	0
Joiners. (See under "Carpenter's mates.")			
Lamp trimmers	12	0	0
Launchmen (if so rated on articles)	12	10	0
Lookouts (extra pay for period in the danger zone)		(a)	
O. S. of between 12 and 24 months' sea service	7	0	0
O. S. of over 24 months' sea service	8	10	0
NOTE.—In computing the period of sea service required to qualify for the rate of £7 or £8 10s., only the time on articles is to be counted, except that time spent on training ships, etc., may be reckoned as provided. If the qualifying period is completed during a voyage the man should be paid off at the rate at which engaged (if standard rate), unless promoted A. B. during voyage. If engaged at other than the standard rate, should be paid off at the rate at which signed on with back pay to October 6, 1917 (or date of signing if subsequent thereto), at the rate at which he would be entitled to receive under this determination had it been in force at the date of his engagement. Previous service on fishing craft may count in full. Previous service in catering department.			
Painters (if so rated on articles)	12	0	0
NOTE.—The fixing of a rate for painters does not in any way prejudice the right to employ an A. B. on painter's work.			
Pumpmen on oil-carrying vessels	13	0	0
Quartermasters	12	0	0
NOTE.—Where a quartermaster is carried, and where a vacancy occurs after articles are signed, a seaman may be promoted quartermaster and his rating so altered that he receives quartermaster's pay.			
Refrigerating greasers. (See "Greasers.")			
Sailmakers on sailing ships	13	0	0
"Sailor," "seamen," or "deckhand" (any man signed on as such to receive the rate attached to A. B. rating)	11	10	0
Seamen gunners, extra pay for period during which the gun is on board		(b)	
Storekeepers, deck	12	0	0
Storekeepers, engine room	13	0	0
Storekeepers, engine room assistant (if so rated on articles)	12	10	0
Trimmers of over one month's sea service	11	10	0
Trimmers of less than one month's sea service	7	15	0
NOTE.—In the case of a man who is already serving or has served the higher rate to apply. First voyage trimmers to be paid at the lower rate of pay during the first voyage, but not longer than three months, or where the voyages are of short duration (as in the cross-Channel trade) they shall serve for not less than one month before becoming entitled to the higher rate of pay. This decision also to apply to trimmers on continuous articles. Service in catering department qualifying as Trimmer.			
Water tenders (if so rated on articles)	12	10	0

a 15s. per month. b 6d. per day.

Cargo liners and general traders of 501 tons gross and upward.

Gross tonnage.	First mate.								Second mate.			
	With certificate of superior rating.				With certificate of rating.				With certificate of superior rating.		With certificate of rating or uncertificated.	
	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.	Begin at—	After 1 yr.	Begin at—	After 1 yr.
	£	£	£	£	£	£	£	£	£	£	£	£
501–1,000	21	21½	22	23	20	20½	21	22	19	19½	18½	19
1,001–3,000	22	22½	23	24	21	21½	22	23	19½	20	19	19½
3,001–5,000	23	23½	24	25	22	22½	23	24	20	20½	19½	20
5,001–7,000	24	24½	25	26	23	23½	24	25	20½	21	19½	20
7,001–9,000	25	25½	26	27	24	24½	25	26	21	21½	20	20½
9,001–12,000	26	26½	27	28	25	25½	26	27	21½	22	20½	21
12,001 and over	27	27½	28	29	26	26½	27	28	22	22½	21	21½

Gross tonnage.	Third mate.	Fourth mate.	Chief engineer.						Second engineer, with first-class certificate.			
	With or without certificate.											
	Fixed rate.	Fixed rate.	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.	After 5 yrs.	After 6 yrs.	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.
	£	£	£	£	£	£	£		£	£	£	£
501–1,000	16	16	24	26	28	30	32	(a)	21	21½	22	23
1,001–3,000	17	16	25	27	29	31	33	(a)	22	22½	23	24
3,001–5,000	17	16	26	28	30	32	34	(a)	23	23½	24	25
5,001–7,000	17	16	27	29	31	33	35	(a)	24	24½	25	26
7,001–9,000	17	16	28	30	32	34	36	(a)	25	25½	26	27
9,001–12,000	17½	16	29	31	33	35	37	(a)	26	26½	27	28
12,001 and over	17½	16	30	32	34	36	38	(a)	27	27½	28	29

Gross tonnage.	Second engineer, with second-class certificate only.				Third engineer.				Fourth engineer.	Fifth or junior.
					With certificate of superior rating.		Uncertificated.		With or without certificate.	
	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.	Begin at—	After 1 yr.	Begin at—	After 1 yr.		
	£	£	£	£	£	£	£	£	£	£
501–1,000	20	20½	21	22	19	19½	18½	19	.....	.....
1,001–3,000	21	21½	22	23	19½	20	19	19½	17	16
3,001–5,000	22	22½	23	24	20	20½	19½	20	17	16
5,001–7,000	23	23½	24	25	20½	21	19½	20	17	16
7,001–9,000	24	24½	25	26	21	21½	20	20½	17	16
9,001–12,000	25	25½	26	27	21½	22	20½	21	17½	16
12,001 and over	26	26½	27	28	22	22½	21	21½	17½	16

a Further increase (if any) at owner's discretion.

Foreign-going passenger liners.

Gross tonnage.	Chief engineer.							Second engineer, with certificate of superior rating.			
	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.	After 4 yrs.	After 5 yrs.	After 6 yrs.	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.
	£	£	£	£	£	£		£	£	£	£
1,000- 5,000	31	33	35	37	39	41	(a)	26	27	28	29
5,001- 9,000	33	35	37	39	41	43	(a)	27	28	29	30
9,001-13,000	35	37	39	41	43	45	(a)	28	29	30	31
13,001-18,000	37	39	41	43	45	47	(a)	29	30	31	32

Gross tonnage.	Second engineer, with certificate of rating.				Third engineer.					
					With certificate.			Uncertificated.		
	Begin at—	After 1 yr.	After 2 yrs.	After 3 yrs.	Begin at—	After 1 yr.	After 2 yrs.	Begin at—	After 1 yr.	After 2 yrs.
	£	£	£	£	£	£	£	£	£	£
1,000- 5,000	25	26	27	28	22	23	24	21½	22	22½
5,001- 9,000	26	27	28	29	22½	23½	24½	22	22½	23
9,001-13,000	27	28	29	30	22½	23½	24½	22	22½	23
13,001-18,000	28	29	30	31	23	24	25	22½	23	23½

Gross tonnage.	Fourth engineer.						Fifth engineer.		Sixth and junior.	
	With certificate.			Uncertificated.			With certificate.	Uncertificated.	With certificate.	Uncertificated.
	Begin at—	After 1 yr.	After 2 yrs.	Begin at—	After 1 yr.	After 2 yrs.				
	£	£	£	£	£	£	£	£	£	£
1,000- 5,000	19	20	21	18	18½	19	17	16½	16½	16
5,001- 9,000	19	20	21	18	18½	19	17	16½	16½	16
9,001-13,000	19½	20½	21½	18½	19	19½	17	16½	16½	16
13,001-18,000	19½	20½	21½	18½	19	19½	17	16½	16½	16

(a) Further increments at owners' discretion.

Oil-tank vessels.

The rates for navigating officers on this class of vessels are the same as those for cargo liners and general traders (see above), with the addition of 10 per cent for first mates and 7½ per cent for lower ranks.

NOTE.—In view of the exigencies arising from the war, Appendix C (Consular Reports of Seamen Shipped, Discharged, and Deserted from American Vessels in Foreign Ports) has been omitted from the report since 1916, but will be resumed next year.

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[a] 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, 1884–1919.

Year ended June 30—	American vessels.	Foreign vessels.[b]	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	76,530.07	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	66,868.61	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	813,871.17	885,841.37

[a] The tonnage year begins with the date of the first payment and ends on the day preceding the corresponding day of the following year.

[b] 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, 1884–1919—Continued.

Year ended June 30—	American vessels.	Foreign vessels.[b]	Total.
1904	$70,741.65	$755,281.36	$826,023.01
1905	79,578.54	778,958.05	858,536.59
1906	84,902.67	882,419.81	967,322.48
1907	80,064.19	964,716.94	1,044,781.13
1908	82,680.48	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	1,233,313.97	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
1918	218,885.70	952,532.66	1,171,418.36
1919	258,217.85	1,007,011.38	1,265,229.23

2. Tonnage Tax Collected, Fiscal Year Ended June 30, 1919, by Customs Districts.

District.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
Alaska	520	$2,256.26	15	$81.66	535	$2,337.92
Buffalo	12	139.68	.....	.....	12	139.68
Connecticut	21	124.42	.....	.....	21	124.42
Duluth and Superior	3	68.02	.....	.....	3	68.02
Florida	580	5,558.62	63	9,427.74	643	14,986.36
Galveston	142	3,884.86	135	26,579.94	277	30,464.80
Georgia	45	780.06	88	13,901.44	133	14,681.50
Hawaii	17	1,282.98	122	25,901.28	139	27,184.26
Maine and New Hampshire	546	3,423.96	122	25,218.54	668	28,642.50
Maryland	154	6,081.06	441	68,083.96	595	74,165.02
Massachusetts	455	5,413.46	248	52,905.06	703	58,318.52
Michigan	2	2.04	.....	.....	2	2.04
Mobile	197	2,843.18	56	7,835.22	253	10,678.40
Montana and Idaho	1	.44	.....	.....	1	.44
New Orleans	507	16,137.52	398	72,154.68	905	88,292.20
New York	1,196	40,937.82	2,445	492,208.26	3,641	533,146.08
North Carolina	.....	.....	21	2,530.20	21	2,530.20
Ohio	275	4,272.48	.....	.....	275	4,272.48
Oregon	15	133.98	10	450.48	25	584.46
Philadelphia	279	9,146.45	511	86,458.26	790	95,604.71
Porto Rico	168	2,405.90	32	4,723.86	200	7,129.76
Rhode Island	5	364.14	2	168.78	7	532.92
Rochester	164	2,059.88	.....	.....	164	2,059.88
Sabine	203	5,883.78	165	33,879.42	368	39,763.20
St. Lawrence	764	2,561.78	.....	.....	764	2,561.78
San Antonio	22	235.32	.....	.....	22	235.32
San Francisco	113	4,555.08	384	37,965.84	497	42,520.92
South Carolina	16	170.68	33	4,386.84	49	4,557.52
Southern California	315	750.62	21	2,510.30	336	3,260.92
Vermont	62	121.20	.....	.....	62	121.20
Virginia	81	2,598.82	596	108,153.06	677	110,751.88
Washington	1,922	10,846.12	235	47,593.32	2,157	58,439.44
Total	8,802	135,040.61	6,143	1,123,118.14	14,945	1,258,158.75
Philippine Islands fund.						
New York	.....	.....	4	684.66	4	684.66
San Francisco	.....	.....	5	919.80	5	919.80
Washington	.....	.....	3	437.52	3	437.52
Total	.....	.....	12	2,041.98	12	2,041.98
Alien tonnage tax and light money.						
Florida	.....	.....	.....	.....	2	6.00
Southern California	.....	.....	.....	.....	1,274	5,022.50
Total	.....	.....	.....	.....	1,276	5,028.50
Grand total	.....	.....	.....	.....	16,233	1,265,229.23

3. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1919, BY NATIONALITY OF VESSELS.

Flag.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
American	5,614	$85,891.79	1,244	$172,213.32	6,858	$258,105.11
Argentinian	1	5.02	7	834.66	8	839.68
Austrian	3	.36	.....	.....	3	.36
Belgian	.....	.....	128	18,883.50	128	18,883.50
Brazilian	2	59.36	46	8,313.42	48	8,372.78
British	2,118	21,852.72	2,492	577,810.00	4,610	599,662.72
Chilean	1	4.20	5	825.02	6	829.22
Chinese	.....	.....	6	1,227.90	6	1,227.90
Colombian	2	2.22	.....	.....	2	2.22
Cuban	45	807.48	9	1,254.36	53	2,061.84
Danish	169	3,360.72	244	29,210.58	413	32,571.30
Dominican	28	67.14	.....	.....	28	67.14
Dutch	11	168.72	191	35,851.74	202	36,020.46
Finnish	.....	.....	1	110.22	1	110.22
French	28	595.40	211	41,214.00	239	41,809.40
Greek	1	28.60	27	4,014.36	28	4,042.96
Honduran	46	764.16	.....	.....	46	764.16
Icelandic	.....	.....	4	180.42	4	180.42
Italian	25	113.80	276	51,358.14	301	51,471.94
Japanese	64	1,837.12	326	72,423.36	390	74,260.48
Mexican	53	1,051.10	.....	.....	53	1,051.10
Nicaraguan	5	95.90	.....	.....	5	95.90
Norwegian	429	12,511.00	511	61,236.34	940	73,747.34
Peruvian	.....	.....	4	354.48	4	354.48
Portuguese	7	40.58	47	5,027.70	54	5,068.28
Russian	1	44.92	25	2,525.52	26	2,570.44
Siamese	1	27.46	1	82.38	2	109.84
Spanish	44	2,097.46	125	16,335.90	169	18,433.36
Swedish	101	3,590.22	211	21,399.66	312	24,989.88
Uruguayan	1	18.50	2	431.16	3	449.66
Venezuelan	2	4.66	.....	.....	2	4.66
Total	8,802	135,040.61	6,143	1,123,118.14	14,945	1,258,158.75
Philippine Islands fund.						
American [a]	.....	.....	1	106.74	1	106.74
Belgian	.....	.....	1	129.30	1	129.30
British	.....	.....	1	215.94	1	215.94
Danish	.....	.....	2	350.28	2	350.28
Japanese	.....	.....	3	533.46	3	533.46
Norwegian	.....	.....	4	706.26	4	706.26
Total	.....	.....	12	2,041.98	12	2,041.98
Alien tonnage tax and light money.						
American	.....	.....	.....	.....	2	6.00
Austrian	.....	.....	.....	.....	13	131.50
Italian	.....	.....	.....	.....	90	296.00
Japanese	.....	.....	.....	.....	1,154	4,522.50
Mexican	.....	.....	.....	.....	2	12.50
Portuguese	.....	.....	.....	.....	5	20.00
Russian	.....	.....	.....	.....	5	15.00
Swedish	.....	.....	.....	.....	5	25.00
Total	.....	.....	.....	.....	1,276	5,028.50
Grand total	.....	.....	.....	.....	16,233	1,265,229.23

[a] Erroneous collection.

4. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1919, BY COUNTRIES FROM WHICH THE VESSELS ENTERED.

Country.	Two-cent rate.		Six-cent rate.		Total.	
	Entries.	Amount.	Entries.	Amount.	Entries.	Amount.
Africa:						
Algeria (French)			16	$2,085.66	16	$2,085.66
Canary Islands (Spanish)			6	661.50	6	661.50
Cape of Good Hope (British)			16	1,278.00	16	1,278.00
Cape Verde Islands (Portuguese)			14	947.52	14	947.52
Egypt			9	1,851.54	9	1,851.54
Gold coast (British)			41	3,467.74	41	3,467.74
Ivory coast (French)			7	557.18	7	557.18
Kongo (Belgian)			2	131.10	2	131.10
Lagos (British)			2	133.50	2	133.50
Liberia			1	38.82	1	38.82
Morocco			2	108.24	2	108.24
Mozambique (Portuguese)			4	988.02	4	988.02
Natal (British)			14	1,629.42	14	1,629.42
Nigeria (British)			6	324.12	6	324.12
Senegal (French)			13	1,679.88	13	1,679.88
Sierra Leone (British)			3	438.24	3	438.24
Tripoli (Italian)			2	360.48	2	360.48
Tunis (French)			4	674.28	4	674.28
Walfish Bay (British)			1	83.58	1	83.58
Total			163	17,438.82	163	17,438.82
Asia:						
Aden (British)			1	126.90	1	126.90
China			92	20,912.88	92	20,912.88
Cochin China (French)			4	693.42	4	693.42
Hongkong (British)			14	2,766.54	14	2,766.54
India			83	15,649.56	83	15,649.56
Japan			172	39,478.80	172	39,478.80
Java (Dutch)			37	8,105.28	37	8,105.28
Manchuria (Japanese)			23	4,746.36	23	4,746.36
Persia			2	132.06	2	132.06
Siam			1	82.38	1	82.38
Siberia (Russian)			15	162.00	15	162.00
Straits Settlements (British)			24	4,008.24	24	4,008.24
Sumatra (Dutch)			1	284.16	1	284.16
Turkey			6	1,098.06	6	1,098.06
Total			475	98,246.64	475	98,246.64
Europe:						
Austria			4	504.78	4	504.78
Azores (Portuguese)			9	971.58	9	971.58
Belgium			124	19,351.08	124	19,351.08
Bulgaria			1	223.92	1	223.92
Denmark			51	10,360.68	51	10,360.68
Finland			2	189.36	2	189.36
France			580	107,507.70	580	107,507.70
Germany			25	4,581.84	25	4,581.84
Gibraltar (British)			176	29,343.66	176	29,343.66
Greece			17	2,545.14	17	2,545.14
Iceland (Danish)			19	987.72	19	987.72
Italy			642	115,152.40	642	115,152.40
Madeira Islands (Portuguese)			2	46.14	2	46.14
Malta (British)			12	1,776.36	12	1,776.36
Netherlands			378	58,338.66	378	58,338.66
Norway	157	$6,890.06	2	156.90	159	7,046.96
Portugal			57	6,009.24	57	6,009.24
Roumania			1	284.94	1	284.94
Russia			5	1,259.58	5	1,259.58
Spain			207	29,542.20	207	29,542.20
Sweden	61	2,902.00	3	571.56	64	3,473.56
Turkey			6	1,425.72	6	1,425.72
United Kingdom			1,880	466,564.18	1,880	466,564.18
Total	218	9,792.06	4,203	857,695.34	4,421	867,487.40
North America:						
Bahamas (British)	127	748.64			127	748.64
Barbados (British)	21	250.72			21	250.72
Bermuda (British)	30	909.60			30	909.60
British Columbia	2,507	17,809.12			2,507	17,809.12
British Honduras	33	363.18			33	363.18
Canal Zone			1	137.34	1	137.34
Costa Rica	73	2,574.72	2	202.44	75	2,777.16
Cuba	1,353	30,717.58			1,353	30,717.58

4. TONNAGE TAX COLLECTED, FISCAL YEAR ENDED JUNE 30, 1919, 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.						
Dominican Republic	159	$2,302.44	.....	.....	159	$2,302.44
Dutch West Indies	41	512.12	.....	.....	41	512.12
French West Indies	27	313.60	.....	.....	27	313.60
Greenland	1	16.94	.....	.....	1	16.94
Guatemala	38	1,075.40	.....	.....	38	1,075.40
Haiti	71	1,688.33	.....	.....	71	1,688.33
Honduras	112	1,554.80	.....	.....	112	1,554.80
Jamaica (British)	121	2,135.00	.....	.....	121	2,135.00
Leeward Islands (British)	1	2.46	.....	.....	1	2.46
Mexico	1,061	32,596.38	.....	.....	1,061	32,596.38
New Brunswick (British)	416	2,179.80	.....	.....	416	2,179.80
Newfoundland (British)	120	701.64	.....	.....	120	701.64
Nicaragua	71	1,108.48	.....	.....	71	1,108.48
Nova Scotia (British)	609	8,193.22	1	$211.26	610	8,404.48
Ontario (British)	1	30.38	.....	.....	1	30.38
Panama	44	2,071.24	.....	.....	44	2,071.24
Quebec (British)	1,363	11,500.20	.....	.....	1,363	11,500.20
Salvador	4	88.32	.....	.....	4	88.32
Trinidad (British)	13	347.88	.....	.....	13	347.88
Virgin Islands	1	.58	.....	.....	1	.58
Windward Islands (British)	3	41.56	.....	.....	3	41.56
Yukon (British)	32	243.10	.....	.....	32	243.10
Total	8,453	122,077.43	4	551.04	8,457	122,628.47
South America:						
Argentina	.....	.....	194	24,562.56	194	24,562.56
Brazil	.....	.....	282	27,991.80	282	27,991.80
British Guiana	.....	.....	38	4,873.14	38	4,873.14
Chile	.....	.....	372	53,368.52	372	53,368.52
Colombia	79	1,607.62	.....	.....	79	1,607.62
Dutch Guiana	.....	.....	14	1,240.74	14	1,240.74
Ecuador	.....	.....	2	241.08	2	241.08
French Guiana	1	9.74	.....	.....	1	9.74
Peru	.....	.....	27	2,007.96	27	2,007.96
Uruguay	.....	.....	18	2,576.76	18	2,576.76
Venezuela	51	1,553.76	.....	.....	51	1,553.76
Total	131	3,171.12	947	116,862.56	1,078	120,033.68
Oceania:						
Australia	.....	.....	195	22,903.14	195	22,903.14
Cook Islands (British)	.....	.....	1	5.88	1	5.88
Ellice Islands (British)	.....	.....	1	13.02	1	13.02
Fanning Islands (British)	.....	.....	4	45.12	4	45.12
Fiji Islands (British)	.....	.....	36	921.30	36	921.30
Gilbert Islands (British)	.....	.....	2	27.36	2	27.36
New Caledonia (French)	.....	.....	7	808.80	7	808.80
New Guinea (British)	.....	.....	1	49.38	1	49.38
New Zealand (British)	.....	.....	58	6,374.46	58	6,374.46
Samoa (German)	.....	.....	17	474.66	17	474.66
Society Islands (French)	.....	.....	16	249.30	16	249.30
Solomon Islands (British)	.....	.....	1	29.76	1	29.76
Tonga Islands (British)	.....	.....	12	421.56	12	421.56
Total	.....	.....	351	32,323.74	351	32,323.74
Grand total	8,802	135,040.61	6,143	1,123,118.14	14,945	1,258,158.75

APPENDIX E.

STEEL-SHIP BUILDING IN THE UNITED STATES.

1. CONSTRUCTION OF STEEL STEAM VESSELS IN THE UNITED STATES.

The progress of the building of steel steam vessels in the United States during the last 10 years and the present condition of the industry is set forth in the following statement. The following table shows the gross tonnage of steel steam vessels built in the United States during each fiscal year for the past 10 years, with the places of build classified by coasts. The total construction of these vessels for the 10 years ended June 30, 1919, was 5,302,459 gross tons, of which 1,300,471 gross tons were built on the Great Lakes, 2,418,613 gross tons on the Atlantic seaboard, 1,568,279 gross tons on the Pacific coast, and 15,096 gross tons on western rivers.

Tonnage of steel steam vessels built during the past 10 years.

Port.	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Atlantic.										
Albany, N. Y.	.....	596	1,044	.....	.....	596	.....	.....	.....	.....
Baltimore, Md.	27,770	30,189	11,914	40,000	32,193	21,991	39,192	41,354	83,748	128,717
Bath, Me.	.....	677	.....	652	.....	471	.....	.....	13,534	28,889
Boston, Mass.	4,079	6,109	5,698	7,739	9,637	10,728	24,932	28,833	37,338	39,595
Galveston, Tex.	.....	.....	.....	.....	.....	.....	.....	213	.....	.....
Houston, Tex.	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
Jacksonville, Fla.	.....	27	.....	292	474	.....	.....	812	1,852	10,634
Key West, Fla.	.....	28	.....	.....	.....	.....	.....	.....	.....	.....
Mobile, Ala.	.....	.....	.....	.....	.....	.....	.....	70	1,381	14,896
Morgan City, La.	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,469
Newark, N. J.	.....	.....	.....	.....	.....	.....	.....	1,750	594	278,641
New London, Conn.	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,030
New Orleans, La.	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,740
Newport News, Va.	34,901	41,932	10,169	21,876	33,210	23,613	43,300	49,381	41,152	26,809
New York, N. Y.	4,207	4,835	1,891	8,757	6,387	1,984	2,840	1,145	19,700	115,973
Philadelphia, Pa.	9,192	11,262	4,945	37,244	35,992	40,256	30,991	76,606	146,261	367,484
San Juan, P. R.	92	.....	.....	.....	.....	.....	.....	.....	.....	490
Savannah, Ga.	.....	.....	.....	.....	.....	568	282	604	.....	12,198
Tampa, Fla.	.....	.....	.....	.....	.....	.....	.....	1,566	.....	4,724
Wilmington, Del.	4,780	6,148	5,221	6,954	11,234	4,166	17,816	15,204	25,024	38,033
Wilmington, N. C.	.....	.....	.....	.....	.....	.....	96	.....	.....	.....
Total	85,021	101,803	40,882	123,514	129,107	104,373	159,449	217,538	370,593	1,086,333
Pacific.										
Los Angeles, Calif.	.....	4,938	.....	8,539	1,522	.....	.....	.....	8,226	137,663
Portland, Oreg.	214	.....	.....	.....	.....	.....	.....	.....	84,534	245,659
San Francisco, Calif.	2,951	1,720	1,567	4,797	8,690	13,250	35,577	85,664	[a]127,148	245,818
Seattle, Wash.	.....	3,391	1,126	2,867	1,202	893	.....	21,450	178,481	340,392
Total	3,165	10,049	2,693	16,203	11,414	14,143	35,577	107,114	398,389	969,532
Great Lakes.										
Buffalo, N. Y.	1,941	2,181	371	230	41	146	42	26	163	20,367
Chicago, Ill.	.....	2,861	.....	.....	.....	124	15	2,081	10,354	39,585
Cleveland, Ohio	79,442	31,763	22,096	32,737	29,891	6,964	28,035	50,264	79,772	134,629
Detroit, Mich.	37,275	35,386	48,298	23,947	10,262	1,815	7,959	47,532	60,822	144,860
Duluth, Minn.	.....	.....	.....	.....	.....	.....	.....	9,129	25,082	81,483
Dunkirk, N. Y.	.....	41	.....	.....	.....	.....	.....	.....	.....	.....
Erie, Pa.	.....	.....	37	.....	.....	.....	.....	.....	211	3,506
Grand Haven, Mich.	823	196	98	14	91	200	94	20	.....	.....
Marquette, Mich.	.....	64	.....	187	.....	.....	.....	.....	.....	.....
Milwaukee, Wis.	8,549	1,308	968	320	1,645	.....	2,234	1,210	17,563	31,259
Port Huron, Mich.	9,926	6,077	.....	.....	.....	.....	.....	.....	626	21,354
Toledo, Ohio	8,727	2,905	3,345	6,995	266	.....	.....	20,081	13,970	25,590
Total	146,683	82,782	75,213	64,430	42,196	9,249	38,379	130,343	208,563	502,633
Western rivers.										
Chattanooga, Tenn.	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Dubuque, Iowa	89	1,103	82	.....	.....	.....	58	73	.....	.....
Evansville, Ind.	.....	.....	.....	195	7	14	14	.....	.....	.....
Kansas City, Mo.	.....	.....	.....	.....	.....	.....	.....	.....	10	144
Louisville, Ky.	.....	.....	.....	770	.....	273	1,473	1,095	.....	.....
Memphis, Tenn.	30	.....	276	9	17	35	.....	27	.....	13
New Orleans, La.	.....	140	11	416	3,298	277	.....	.....	56	.....
Pittsburgh, Pa.	.....	.....	.....	.....	.....	646	.....	99	2,570	996
Rock Island, Ill.	.....	.....	.....	9	.....	.....	.....	.....	.....	.....
St. Louis, Mo.	.....	87	16	129	19	14	47	403	13	28
Wheeling, W. Va.	.....	.....	8	.....	.....	.....	.....	.....	.....	.....
Total	119	1,330	393	1,528	3,341	1,259	1,592	1,697	2,656	1,181
Grand total	234,988	195,964	119,181	205,675	186,058	129,024	234,997	456,692	980,201	2,559,679

[a] Includes 1 vessel of 3,427 gross tons of cement.

2. Steel Merchant Vessels Building, or under Contract to be Built, for Private Shipowners, July 1, 1919.

BAYLES SHIPYARD (INC.), PORT JEFFERSON, N. Y.

Name or hull No.	Gross tonnage.	Speed in knots.	Owner.	Type.	Probable date of launch.
Anahauc	700	9½	Nyark Shipbuilding Corp	Bulk oil	August, 1919

BETHLEHEM SHIPBUILDING CORP. (LTD.), FORE RIVER PLANT, QUINCY, MASS.

No. 1384	7,660		Ore Steamship Co	Ore carrier	
No. 1385	8,400		Standard Transportation Co	Bulk oil	
No. 1386	8,400		do	do	

BETHLEHEM SHIPBUILDING CORP. (LTD.), SPARROWS POINT PLANT, SPARROWS POINT, MD.

No. 4201	6,750		Standard Transportation Co	Bulk oil	
No. 4202	6,750		do	do	

BRUNSWICK MARINE CONSTRUCTION CORP., BRUNSWICK, GA.

No. 7	1,000	8	R. Lawrence Smith	Freight	

CLINTON SHIPBUILDING & REPAIR CO., PHILADELPHIA, PA.

Motor barge No. 30	326		Atlantic Refining Co	Bulk oil	Launched.
Motor barge No. 31	326		do	do	June 26, 1919
No. 35	326		Union Petroleum Co	do	Sept. 15, 1919
No. 36	326		A. C. Churchman	Towing	Oct. 15, 1919

CONSOLIDATED SHIPBUILDING CORP., MORRIS HEIGHTS, N. Y.

No. 242			C. H. K. Curtis	Yacht	October.

DOWNEY SHIPBUILDING CORP., ARLINGTON, N. Y.

No. 11	5,313	10½	Coastwise Transportation Co	Cargo	Aug. 29, 1919

FEDERAL SHIPBUILDING CO., NEWARK, N. J.

No. 31	6,868	11	U. S. Steel Products Co		Nov.—, 1919
No. 32	6,868	11	do		Do.
No. 33	6,868	11	do		Do.
No. 34	4,500	10	Freeport S. & N. Co		Feb. —, 1920
No. 35	4,500	10	do		Do.

JAMES REES & SONS CO., PITTSBURGH, PA.

Homestead	185	15	Carnegie Steel Co	Towing	Launched.

McATEER SHIPBUILDING CO., SEATTLE, WASH.

Mount Hamilton	1,529	8	For Norwegian account	Lumber	Launched.

2. STEEL MERCHANT VESSELS BUILDING, OR UNDER CONTRACT TO BE BUILT, FOR PRIVATE SHIPOWNERS, JULY 1, 1919—Continued.

NATIONAL SHIPBUILDING CORP., VIOLET, LA.

Name or hull No.	Gross tonnage.	Speed in knots.	Owner.	Type.	Probable date of launch.
No. 27	1,000	.....	Pan-American Petroleum & Transp. Co.	Bulk oil	July 10, 1919
No. 28	1,000	.....	do	do	Aug. 8, 1919
No. 29	1,000	.....	do	do	Oct. 30, 1919
No. 30	250	7	Cuyamel Fruit Co	Fruit	Aug. 10, 1919
No. 31	250	7	do	do	Sept. 30, 1919
No. 32	250	7	do	do	Oct. 30, 1919
No. 33	250	7	do	do	Dec. 30, 1919

NEWBURGH SHIPYARDS (INC.), NEWBURGH, N. Y.

No. 16	.....	12	Union Sulphur Co	Freight	Mar. —, 1920
No. 17	.....	14	Cuymel Fruit Co	Fruit	Apr. —, 1920
No. 18	.....	14	do	do	Do.

SPEDDEN SHIPBUILDING CO., BALTIMORE, MD.

No. 251	325	12	Builder's account	Towing	Aug. 15, 1919

SUN SHIPBUILDING CO., CHESTER, PA.

No. 19	10,600	10½	Gulf Refining Co	Bulk oil	Dec. 24, 1919

TEXAS STEAMSHIP CO., BATH, ME.

No. 19	450	7	Builder's account	Bulk oil	Launched.
No. 25	430	.....	do	do	Oct. —, 1919
No. 26	430	.....	do	do	Do.
No. 27	430	.....	do	do	Do.
No. 28	430	.....	do	do	Jan. —, 1920
No. 29	430	.....	do	do	Do.
No. 30	430	.....	do	do	Do.

UNION CONSTRUCTION CO., OAKLAND, CALIF.

No. 11	3,500	10½	Standard Oil Co	Bulk oil	Jan. 15, 1920

UNION SHIPBUILDING CO., BALTIMORE, MD.

John R. Gibbins	3,530	10½	Aluminum Co. of America	Ore carrier	Oct. —, 1919
Geo. B. Mackenzie	3,530	10½	do	do	Nov. —, 1919
Winthrop	250	.....	do	Towing	
Total	68	106,360			

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 November, 1918; the current volume of Lloyd's Register, July, 1919.

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. 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.

Table 7 contains the essential parts of Lloyd's annual summary of shipbuilding returns for the calendar year 1918.

Table 8 gives Lloyd's report of the world's construction in progress on June 30, 1919. 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 since 1914.

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):	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
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	742,802

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
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Finland (all tonnages):								
Sail	.....	.....	.....	276,877	.....	287,154	321,200	327,625
Steam	.....	.....	.....	11,431	.....	53,561	71,594	72,013
Total	.....	.....	.....	288,308	.....	340,715	392,794	399,638
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):[a]								
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	613,792	772,679	765,068
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	408,440	546,838	538,863
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	2,903,570	3,023,725
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	838,118
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	43,844
Steam	.....	.....	.....	.....	.....	51,596	70,193	70,193
Total	.....	.....	.....	.....	.....	109,431	114,037	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
Italy (2 tons and upward):								
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[b]	.....	.....	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	.....

[a] Prior to 1895 steam vessels of all tonnages and sailing vessels above 10 tons were included.
[b] Excluding small coasting vessels and fishing boats.

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
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

2. NUMBER AND NET AND GROSS TONNAGE OF STEAM AND SAILING VESSELS AS RECORDED BY THE BUREAU VERITAS FOR 1918–19.

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 1918–19:

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	9,125	20,379,938	12,567,149	4,809	655,211	13,934	21,035,149
American	2,525	6,692,868	4,371,765	1,687	847,227	4,212	7,534,095
German	1,474	2,876,594	1,719,041	1,276	348,700	2,750	3,225,294
Japanese	1,226	2,094,707	1,311,691	1,577	204,698	2,803	2,299,405
French	1,147	1,753,112	987,721	820	276,772	1,967	2,029,884
Norwegian	1,233	1,519,261	921,499	602	287,315	1,835	1,806,576
Russian	809	862,339	501,795	3,699	551,198	4,508	1,413,537
Dutch	716	1,247,086	758,194	386	41,159	1,102	1,288,245
Italian	501	1,126,966	687,116	952	156,824	1,453	1,283,790
Swedish	1,003	930,470	636,962	922	122,877	1,925	1,053,347
Spanish	475	708,400	425,893	201	36,305	676	744,705
Austrian	316	717,170	427,553	97	6,692	413	723,862
Danish	429	620,935	374,026	610	94,467	1,039	715,402
Greek	243	436,756	265,097	590	108,993	833	545,749
Brazilian	312	491,866	301,530	82	17,397	394	509,263
Portuguese	135	269,511	164,770	224	46,332	359	315,843
Turkish	95	83,120	48,582	950	197,921	1,045	281,041
Belgian	113	189,133	120,504	6	4,405	119	193,538
Argentinian	140	139,259	85,560	48	18,228	188	157,487
Chinese	85	126,747	79,639	7	865	92	127,612
Chilean	99	90,225	58,032	25	19,031	124	109,256
Peruvian	17	53,240	30,972	41	21,969	58	75,209
Roumanian	41	73,007	42,883	1	202	42	73,209
Uruguayan	21	37,418	23,091	45	17,876	66	55,294
Cuban	37	30,661	18,850	149	15,638	186	46,299
Mexican	30	29,283	17,228	16	2,833	46	32,116
Siamese	21	28,001	16,902	.....	.....	21	28,001
Bulgarian	8	12,959	8,024	1	393	9	13,352
Honduran	7	11,493	7,140	3	460	10	11,953
Venezuelan	11	5,248	2,689	8	1,054	19	6,302
Egyptian	8	2,217	626	6	1,968	14	4,185
Sarawak	5	3,551	2,160	.....	.....	5	3,551
Nicaraguan	2	2,262	1,081	.....	.....	2	2,262
Haitian	4	1,488	737	1	84	5	1,572
Persian	2	1,337	811	.....	.....	2	1,337
Columbian	2	1,056	516	2	242	4	1,298
Zanzibar	2	1,220	542	.....	.....	2	1,220
Montenegrin	.....	.....	.....	4	873	4	873
Albanese	.....	.....	.....	3	856	3	856
Tunisian	.....	.....	.....	6	522	6	522
Paraguayan	3	509	287	.....	.....	3	509
Dominican	.....	.....	.....	4	487	4	487
Moroccoan	1	363	197	.....	.....	1	363
Serbian	1	264	112	.....	.....	1	264
Panaman	.....	.....	.....	1	195	1	195
Bornean	1	185	121	.....	.....	1	185
Unknown	39	47,195	29,667	76	17,543	115	64,738
Total	22,464	43,699,420	27,018,755	19,937	4,119,812	42,401	47,819,232

3. NUMBER, GROSS TONNAGE, AND DESCRIPTION OF STEAM AND SAILING VESSELS OF OVER 100 TONS OF THE SEVERAL COUNTRIES OF THE WO D AS RECORDED IN LLOYD'S REGISTER FOR 1919–20.

Flag.	Steamers and motor vessels.								Sailing vessels.								Grand total.	
	Steel.		Iron.		Wood and composite.		Total.		Steel.		Iron.		Wood and composite.		Total.			
	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.
British:																		
United Kingdom	6,646	15,964,018	740	302,734	149	78,091	7,535	16,344,843	213	153,040	58	28,242	158	29,346	429	210,628	7,964	16,555,471
Dominions [a]	1,042	1,579,681	192	121,823	376	161,861	1,610	1,863,365	35	27,034	35	23,311	461	138,694	531	189,039	2,141	2,052,404
Total	7,688	17,543,699	932	424,557	525	239,952	9,145	18,208,208	248	180,074	93	51,553	619	168,040	960	399,667	10,105	18,607,875
American (U. S.):																		
Sea	2,089	8,206,692	142	219,950	903	1,346,279	3,134	9,772,921	87	149,707	39	56,070	1,090	803,472	1,216	1,009,249	4,350	10,782,170
Northern Lakes [a]	463	2,139,626	10	12,550	4	7,518	477	2,159,694	29	98,092	....	.....	.....	.....	29	98,092	506	2,257,786
Philippine Islands	28	31,098	18	13,762	21	5,781	67	50,641	....	.....	....	.....	6	1,176	6	1,176	73	51,817
Total	2,580	10,377,416	170	246,262	928	1,359,578	3,678	11,983,256	116	247,799	39	56,070	1,096	804,648	1,251	1,108,517	4,929	13,091,773
Argentinian	137	124,858	22	8,256	1	219	160	133,333	28	10,905	6	4,489	21	5,714	55	21,108	215	154,441
Ex Austro-Hungarian [b]	294	690,323	30	21,561	4	972	328	712,856	2	466	....	.....	.....	1,295	11	1,761	339	714,617
Belgian	131	291,589	9	4,937	6	9,853	146	306,379	3	5,123	1	1,423	2	351	6	6,897	152	313,276
Brazilian	338	458,187	34	33,419	5	982	377	492,588	7	2,334	5	7,092	39	10,661	51	20,087	428	512,675
Chilean	59	61,408	22	19,118	10	2,286	91	82,812	1	1,771	7	11,906	15	5,158	23	18,835	114	101,647
Chinese	64	102,440	15	17,267	19	11,265	98	130,972	3	1,400	....	.....	1	143	4	1,543	102	132,515
Cuban	21	29,909	8	4,639	10	5,088	39	39,636	5	5,512	2	1,280	5	867	12	7,659	51	47,295
Danish	387	601,038	42	25,330	17	4,963	446	631,331	30	23,703	11	14,101	158	33,301	199	71,105	645	702,436
Dutch	811	1,554,961	52	17,684	7	1,075	870	1,573,720	47	12,961	2	2,427	12	2,803	61	18,191	931	1,591,911
Finnish	61	60,273	31	10,139	17	3,181	109	73,593	23	35,059	14	22,192	192	50,118	229	107,369	338	180,962
French	883	1,722,555	123	104,906	93	134,292	1,099	1,961,753	96	191,576	7	11,523	238	68,779	341	271,878	1,440	2,233,631
German [b]	1,427	3,173,376	114	73,474	2	403	1,543	3,247,253	199	243,973	4	4,461	22	7,693	225	256,127	1,768	3,503,380
Greek [c]	104	219,442	91	62,772	10	8,579	205	290,793	....	.....	2	1,323	.....	31,680	107	33,003	312	323,796
Italian	360	1,089,199	131	134,756	32	13,889	523	1,237,844	21	13,332	37	47,257	277	71,664	335	132,253	858	1,370,097
Japanese [d]	942	2,068,874	92	136,056	384	120,336	1,418	2,325,266	....	.....	....	.....	.....	.....	.....	.....	1,418	2,325,266
Mexican	27	29,230	4	1,377	6	1,301	37	31,908	1	279	1	1,342	8	2,069	10	3,690	47	35,598
Norwegian	1,081	1,445,730	154	97,710	198	53,859	1,433	1,597,299	78	132,381	76	107,823	42	20,326	196	260,530	1,629	1,857,829
Peruvian	20	55,337	1	624	1	210	22	56,171	1	2,528	3	4,179	37	16,464	41	23,171	63	79,342
Portuguese	118	220,425	13	9,145	2	656	133	230,226	5	5,327	....	.....	89	25,659	94	30,986	227	261,212
Roumanian	30	61,687	4	1,673	.....	.....	34	63,360	....	.....	....	.....	1	432	1	432	35	63,792
Russian [a c e]	362	432,994	151	79,267	11	2,215	524	514,476	4	5,507	2	2,711	88	18,311	94	26,529	618	541,005
Spanish	309	586,268	158	118,459	19	4,368	486	709,095	5	5,441	11	15,455	74	20,620	90	41,516	576	750,611
Swedish	584	704,922	291	180,285	158	31,420	1,033	916,627	16	12,159	12	13,522	202	50,303	230	75,984	1,263	992,611
Turkish [c]	70	58,467	30	40,139	2	211	102	98,817	....	.....	....	.....	59	17,432	59	17,432	161	116,249

Uruguayan	23	28,916	4	2,131	5	2,012	32	33,059	1	?,592	6	6,036	4	2,812	11	11,440	43	44,499
Other countries	105	81,212	26	15,523	13	2,888	144	99,623	1	174	....	.....	105	28,658	106	28,832	250	128,455
Flag not recorded	92	90,579	27	13,254	12	11,320	131	115,153	5	3,594	1	1,525	61	20,205	67	25,324	198	140,477
Total	19,108	43,965,314	2,781	1,904,720	2,497	2,027,373	24,386	47,897,407	946	1,145,970	342	389,690	3,581	1,486,206	4,869	3,021,866	29,255	50,919,273

[a] Lloyd's Register Book does not include vessels trading on the Caspian Sea, nor wooden vessels trading on the Great Lakes of North America.
[b] The figures include all vessels which at the date of the armistice had not been captured or requisitioned by other countries.
[c] In the absence of satisfactory information, the records of numerous small sailing vessels (belonging chiefly to Greece, Turkey, and Southern Russia) are omitted from the Register Book.
[d] Japanese sailing vessels are not recorded in Lloyd's Register Book.
[e] The figures exclude vessels registered at Finnish and Esthonian ports.

3A. NUMBER AND NET AND GROSS TONNAGE OF STEAM VESSELS OF OVER 100 TONS OF THE SEVERAL COUNTRIES OF THE WORLD, AS RECORDED IN LLOYD'S REGISTER FOR 1914–15.

Flag.	Wood.			Composite.			Iron.			Steel.			Total.		
	No.	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*
British:															
United Kingdom	84	6,581	11,687	10	1,116	3,287	1,119	288,836	528,220	7,374	11,249,213	18,348,895	8,587	11,545,746	18,892,089
Colonies[a]	312	42,790	75,871	23	4,758	8,467	222	86,429	145,182	979	815,409	1,402,097	1,536	949,386	1,631,617
Total	396	49,371	87,558	33	5,874	11,754	1,341	375,265	673,402	8,353	12,064,622	19,750,992	10,123	12,495,132	20,523,706
American (U. S.):															
Sea	386	120,916	189,538	....	.....	.....	152	174,484	254,570	575	1,020,576	1,582,800	1,113	1,315,976	2,026,908
Northern Lakes[a]	.....	.....	.....	8	11,354	15,655	19	18,378	24,612	552	1,674,307	2,220,174	579	1,704,039	2,260,441
Philippine Islands	21	2,740	4,779	1	130	251	17	7,323	11,123	26	15,683	26,576	65	25,876	42,729
Total	407	123,656	194,317	9	11,484	15,906	188	200,185	290,305	1,153	2,710,566	3,829,550	1,757	3,045,891	4,330,078
Argentinian	1	137	219	1	395	537	35	10,064	16,771	207	101,569	171,365	244	112,165	188,892
Austro-Hungarian	3	497	843	....	.....	.....	40	19,221	30,686	390	634,155	1,020,817	433	653,873	1,052,346
Belgian	.....	.....	.....	....	.....	.....	16	7,919	14,352	157	210,881	326,673	173	218,800	341,025
Brazilian	6	949	1,333	....	.....	.....	43	23,452	37,856	346	160,719	268,418	395	185,120	307,607
Chilean	6	391	712	1	64	127	18	10,181	16,254	66	50,229	79,380	91	60,865	96,473
Chinese	9	2,910	4,656	3	2,374	3,523	17	13,523	20,493	44	40,448	64,423	73	59,255	93,095
Cuban	11	3,519	4,995	....	.....	.....	11	4,526	7,496	31	28,289	45,959	53	36,334	58,450
Danish	7	1,293	2,087	....	.....	.....	90	29,809	67,369	479	423,160	700,974	576	454,262	770,430
Dutch	7	546	1,126	....	.....	.....	67	20,636	35,278	635	888,941	1,435,306	709	910,123	1,471,710
French	22	1,909	3,790	....	.....	.....	172	105,837	183,023	831	992,168	1,735,473	1,025	1,099,914	1,922,286
German	7	798	1,382	1	123	209	155	52,732	90,331	1,926	3,043,315	5,007,798	2,090	3,116,968	5,134,720
Greek	6	449	773	....	.....	.....	125	58,958	100,848	276	456,142	719,240	407	515,549	820,861
Italian	17	739	2,154	1	146	276	221	164,534	275,235	398	706,889	1,152,810	637	872,308	1,430,475
Japanese	269	37,730	62,298	7	2,580	3,889	117	120,473	185,136	710	927,550	1,457,053	1,103	1,088,333	1,708,386
Mexican	6	1,048	1,532	....	.....	.....	6	1,926	3,070	36	24,354	40,467	48	27,328	45,069
Norwegian	100	16,834	29,772	18	2,772	4,375	288	122,367	223,324	1,250	1,031,063	1,699,882	1,656	1,173,036	1,957,353
Peruvian	1	10	210	....	.....	.....	.....	.....	.....	18	15,216	28,561	19	15,226	28,771
Portuguese	1	116	178	1	196	478	17	8,556	13,701	86	46,581	78,072	105	55,449	92,429
Roumanian	.....	.....	.....	....	.....	.....	8	3,387	5,581	26	28,685	50,583	34	32,072	56,164
Russian[a]	14	1,113	1,772	7	738	1,425	233	70,623	120,649	493	427,878	728,103	747	500,352	851,949
Siamese	.....	.....	.....	....	.....	.....	.....	.....	.....	11	7,741	12,360	11	7,741	12,360
Spanish	5	256	593	1	144	220	201	89,887	149,787	382	447,288	733,326	589	537,575	883,926
Swedish	25	2,436	4,075	99	10,423	19,009	374	169,268	284,268	590	409,255	708,012	1,088	591,382	1,015,364
Turkish	4	306	443	....	.....	.....	53	31,095	51,819	85	36,695	64,055	142	68,096	116,317
Uruguayan	2	284	570	....	.....	.....	7	1,970	3,775	33	21,218	34,492	42	23,472	38,837

Other countries: Albania, Bulgaria, Colombia, Costa Rica, Ecuador, Egypt, Hayti, Honduras, Liberia, Montenegro, Nicaragua, Oman, Panama, Persia, Salvador, Samos, Sarawak, Tunis, Venezuela, Zanzibar, etc.	5	539	873	....	.....	.....	20	8,074	13,554	49	22,548	40,371	74	31,161	54,798
Total	1,137	247,836	408,261	182	37,313	61,738	3,863	1,724,468	2,914,363	19,061	25,958,165	41,984,515	24,444	27,987,782	45,403,877

[a] Lloyd's Register Book does not include vessels trading on the Caspian Sea, nor wooden vessels trading on the Great Lakes of North America.

3b.—NUMBER, TONNAGE, AND DESCRIPTION OF THE SAILING VESSELS OF 100 TONS NET OF THE SEVERAL COUNTRIES OF THE WORLD, AS RECORDED IN LLOYD'S REGISTER FOR 1914–15.

Flag.	Wood.		Composite.		Iron.		Steel.		Total.		Total number of steam and sailing vessels.	Total tonnage of steam and sailing vessels (net tonnage of sailing vessels and gross tonnage of steamers).
	No.	*Net tons.*	*No.*	*Net tons.*	*No.*	*Net tons.*	*Net tons.*	*Net tons.*	*No.*	*Net tons.*		
British:												
United Kingdom	304	46,626	4	801	91	53,310	254	263,940	653	364,677	9,240	19,256,766
Colonies [a]	468	101,028	8	4,173	42	26,324	34	25,141	552	156,666	2,088	1,788,283
Total	772	147,654	12	4,974	133	79,634	288	289,081	1,205	521,343	11,328	21,045 049
American (U. S.):												
Sea	1,285	800,104	.....	.....	29	37,369	63	105,903	1,377	943,376	2,490	2,970,284
Northern lakes [a]	.....	.....	.....	.....	.....	.....	31	92,323	31	92,323	610	2,352,764
Philippine Islands	9	2,417	.....	.....	.....	.....	.....	.....	9	2,417	74	45,146
Total	1,294	802,521	.....	.....	29	37,369	94	198,226	1,417	1,038,116	3,174	5,368,194
Argentine	22	6,310	.....	.....	10	10,157	37	16,322	69	32,789	313	221,681
Austro-Hungarian	10	1,308	.....	.....	.....	.....	2	2,065	12	3,373	445	1,055,719
Belgian	2	339	.....	.....	2	2,690	5	8,070	9	11,099	182	352,124
Brazilian	44	9,327	.....	.....	2	2,222	7	4,773	53	16,322	448	323,929
Chilean	15	6,753	.....	.....	15	20,119	2	2,572	32	29,444	123	125,917
Chinese	2	323	.....	.....	.....	.....	.....	.....	2	323	75	93,418
Cuban	4	641	.....	.....	.....	.....	.....	.....	4	641	57	59,091
Danish	223	38,130	.....	.....	3	1,773	20	9,848	246	49,751	822	820,181
Dutch [b]	11	1,790	2	2,264	3	2,377	81	18,314	97	24,745	806	1,496,455
French	385	70,994	.....	.....	11	14,085	155	312,073	551	397,152	1,576	2,319,438
German	17	9,296	2	318	16	17,098	263	297,864	298	324,576	2,388	5,459,296
Greek [b]	76	14,776	.....	.....	2	1,231	.....	.....	78	16,007	485	836,868
Italian	384	93,694	.....	.....	93	104,696	46	39,431	523	237,821	1,160	1,668,296
Japanese [c]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,103	1,708,386
Mexican	8	1,895	.....	.....	.....	.....	1	234	9	2,129	57	47,198
Norwegian	184	79,985	.....	.....	195	240,421	156	226,963	535	547,369	2,191	2,504,722
Peruvian	37	13,654	2	1,829	5	5,956	2	2,496	46	23,935	65	52,706
Portuguese	94	20,132	2	2,042	4	4,558	5	1,770	105	28,502	210	120,931
Roumanian	2	678	.....	.....	.....	.....	.....	.....	2	678	36	56,842

Russian [a] [b]	437	103,257	4	2,483	34	51,261	32	44,868	507	201,869	1,254	1,053,818
Siamese											11	12,360
Spanish	54	11,578			2	2,171	2	1,148	58	14,897	647	898 823
Swedish	356	89,684	3	891	9	8,198	10	3,949	378	102,722	1,466	1,118,086
Turkish [b]	60	16,841							60	16,841	202	133,158
Uruguayan	7	5,382	1	248	7	8,251	1	439	16	14,320	58	53,157
Other countries: Albania, Bulgaria, Colombia, Costa Rica, Ecuador, Egypt, Hayti, Honduras, Liberia, Montenegro, Nicaragua, Oman, Panama, Persia, Salvador, Samos, Venezuela, Zanzibar, etc	78	28,255			1	467	1	189	80	28,911	154	83,709
Total	4,578	1,575,197	28	15,049	576	614,734	1,210	1,480,695	6,392	3,685,675	30,836	49,089,552

[a] Lloyd's Register Book does not include vessels trading on the Caspian Sea nor wooden vessels trading on the Great Lakes of North America.

[b] In the absence of satisfactory information, the records of numerous small sailing vessels (belonging chiefly to Greece, Turkey, southern Russia, and the Dutch East Indies) are omitted from the Register Book.

[c] Japanese sailing vessels are not recorded in Lloyd's Register Book.

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	36,000,893	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
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
1919	29,255	50,919,273	24,386	47,897,407	.....	4,869	3,021,866

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
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
1919	Steam	2,497	2,027,373	2,781	1,904,720	19,108	43,965,314
	Sail	3,581	1,486,206	342	389,690	946	1,145,970
	Total	6,078	3,513,579	3,123	2,294,410	20,054	45,111,284

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
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
1919	7,964	16,555,471	7,535	16,344,843	429	210,628

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
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
1919	Steam	149	78,091	740	302,734	6,646	15,964,018
	Sail	158	29,346	58	28,242	213	153,040
	Total	307	107,437	798	330,976	6,859	16,117,058

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
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
1919	2,141	2,052,404	1,610	1,863,365	531	189,039

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	*Tons.*	*Number.*	*Tons.*	*Number.*	*Tons.*
1890	Steam	276	85,914	408	234,009	132	136,672
	Sail	1,995	837,551	65	46,309	2	1,570
	Total	2,271	923,465	473	280,318	134	138,242
1895	Steam	278	88,414	351	216,351	229	231,756
	Sail	1,353	531,545	58	30,808	7	9,910
	Total	1,631	619,959	409	247,159	236	241,666
1900	Steam	251	68,789	320	225,161	315	332,590
	Sail	927	326,915	50	29,989	19	17,722
	Total	1,178	395,704	370	255,150	334	350,312
1905	Steam	314	87,543	300	216,266	497	598,483
	Sail	776	228,151	58	34,721	32	22,603
	Total	1,090	315,694	358	250,987	529	621,086
1910	Steam	357	91,650	267	189,447	728	999,620
	Sail	613	149,481	46	27,356	32	21,878
	Total	970	241,131	313	216,803	760	1,021,498
1912	Steam	361	90,247	250	175,671	853	1,195,186
	Sail	594	136,882	45	28,870	28	18,388
	Total	955	227,129	295	204,541	881	1,213,574
1913	Steam	314	74,668	232	154,999	927	1,337,279
	Sail	499	109,283	42	27,503	28	18,216
	Total	813	183,951	274	182,502	955	1,355,495
1914	Steam	312	75,871	222	145,182	979	1,402,097
	Sail	468	101,028	42	26,324	34	25,141
	Total	780	176,899	264	171,506	1,013	1,427,238
1915	Steam	311	78,490	223	145,269	987	1,363,216
	Sail	446	91,709	39	21,046	32	20,559
	Total	757	170,199	262	166,315	1,019	1,383,775
1916	Steam	313	77,318	222	147,098	1,019	1,405,914
	Sail	419	84,488	38	20,060	31	19,896
	Total	732	161,806	260	167,158	1,050	1,425,810
1919	Steam	376	161,861	192	121,823	1,042	1,579,681
	Sail	461	138,694	35	23,311	35	27,034
	Total	838	300,555	227	145,134	1,077	1,606,715

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
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
1919	1,440	2,233,631	1,099	1,961,753	341	271,878

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
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
1919	Steam	93	134,292	123	104,906	883	1,722,555
	Sail	238	68,779	7	11,523	96	191,576
	Total	331	203,071	130	116,429	979	1,914,131

4. Motive Power and Chief Materials of Construction of the World's Merchant Marine—Continued.

GERMANY.[a]

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	2,650,033	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
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
1919	1,768	3,503,380	1,543	3,247,253	225	256,127

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	.....	.....	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	.....	.....	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
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
1919	Steam	2	403	114	73,474	1,427	3,173,376
	Sail	22	7,693	4	4,461	199	243,973
	Total	24	8,096	118	77,935	1,626	3,417,349

[a] The figures include all vessels which at the date of the armistice had not been captured or requisitioned by other countries.

4. Motive Power and Chief Materials of Construction of the World's Merchant Marine—Continued.

JAPAN.[a]

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	488,187	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
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	.....	.....
1919	1,418	2,325,266	.....	.....	.....	.....

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	*Tons.*	*Number.*	*Tons.*	*Number.*	*Tons.*
1890	Steam	68	25,936	80	82,357	13	27,103
	Sail	122	32,238	2	885	124	33,123
	Total	190	58,174	82	83,242	137	60,226
1895	Steam	173	39,087	122	154,532	38	83,473
	Sail	79	20,934	1	499	.....	.....
	Total	252	60,021	123	155,031	38	83,473
1900	Steam	253	56,057	120	168,159	102	259,799
	Sail	580	84,930	.....	.....	1	945
	Total	833	140,987	120	168,159	103	260,744
1905	Steam	299	75,225	144	238,588	234	550,355
	Sail	6	2,713	.....	.....	.....	.....
	Total	305	77,938	144	238,588	234	550,355
1910	Steam	306	78,053	124	208,692	408	855,477
	Sail	5	2,245	.....	.....	.....	.....
	Total	311	80,298	124	208,692	408	855,477
1912	Steam	293	71,896	124	193,950	536	1,075,364
	Sail	.....	.....	.....	.....	.....	.....
	Total	293	71,896	124	193,950	536	1,075,364
1913	Steam	276	66,355	118	185,125	636	1,244,753
	Sail	.....	.....	.....	.....	.....	.....
	Total	276	66,355	118	185,125	636	1,244,753
1914	Steam	269	62,298	117	185,136	710	1,457,053
	Sail	.....	.....	.....	.....	.....	.....
	Total	269	62,298	117	185,136	710	1,457,053
1915	Steam	279	63,665	110	175,146	760	1,583,466
	Sail	.....	.....	.....	.....	.....	.....
	Total	279	63,665	110	175,146	760	1,583,466
1916	Steam	272	62,200	101	158,514	772	1,622,948
	Sail	.....	.....	.....	.....	.....	.....
	Total	272	62,200	101	158,514	772	1,622,948
1919	Steam	384	120,336	92	136,056	942	2,068,874
	Sail	.....	.....	.....	.....	.....	.....
	Total	384	120,336	92	136,056	942	2,068,874

[a] 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	93,132,579
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
1917	21,798	42,215,249	19,400	4,424,541	105,946,321
1918	22,464	43,699,420	19,937	4,119,812	112,194,832

BRITISH.

1890	5,302	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	14,919,578	6,589	1,912,360	39,006,956
1910	6,503	17,566,724	4,703	1,306,843	44,716,435
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
1917	8,711	18,938,241	4,796	699,177	47,305,265
1918	9,125	20,379,938	4,809	655,211	50,923,807

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
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
1917	1,920	4,416,254	1,763	920,122	12,291,738
1918	2,525	6,692,868	1,687	847,227	18,342,287

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
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
1917	1,379	2,819,969	1,035	336,039	7,055,715
1918	1,474	2,876,594	1,276	348,700	7,224,864

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
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
1917	1,096	1,831,504	673	321,020	4,296,516
1918	1,147	1,753,112	820	276,772	4,227,656

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	3,997,646
1910	1,099	1,396,151	1,116	608,010	4,037,086
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
1917	1,483	1,945,110	640	362,054	5,112,450
1918	1,233	1,519,261	602	287,315	3,973,311

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.*	*Number.*	*Net tons.*
1890	1,362	1,646,809	880	1,328,541	482	318,268
1895	794	1,211,615	629	1,114,019	165	97,596
1900	1,285	2,268,938	966	2,046,339	319	222,599
1905	1,181	2,302,467	1,051	2,253,032	130	49,435
1908	993	1,761,585	872	1,706,396	121	55,189
1909	899	1,551,532	758	1,510,070	141	41,462
1910	899	1,816,189	811	1,795,419	88	20,770
1911	1,189	2,405,681	1,093	2,368,354	96	37,327
1912	1,278	2,688,306	1,172	2,650,124	106	38,182
1913	1,183	2,884,529	1,076	2,844,144	107	40,385

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

6. CONSTRUCTION—Continued.

Year.	Power.	Wood.		Iron.		Steel.	
		Number.	*Tons.*	*Number.*	*Tons.*	*Number.*	*Tons.*
1910	Steam	32	7,389	.....	.....	779	1,788,030
	Sail	64	16,348	.....	.....	24	4,422
	Total	96	23,737	.....	.....	803	1,792,452
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	14,918
	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	189,898
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

The Number of Steamers according to certain divisions of Gross tonnage Owned in the World—distinguishing the principal Maritime countries—as recorded in Lloyd's Register, 1919-20.

Country where owned.	100 and under 200 tons.	200 and under 500 tons.	500 and under 1,000 tons.	1,000 and under 1,500 tons.	1,500 and under 2,000 tons.	2,000 and under 3,000 tons.	3,000 and under 4,000 tons.	4,000 and under 5,000 tons.
United Kingdom	1,475	1,956	600	404	310	443	599	608
British Dominions	411	423	225	139	90	159	62	50
Total	1,886	2,379	825	543	400	602	661	658
United States:								
Sea	157	325	231	96	152	1,029	243	171
Northern Lakes [a]	13	10	12	12	28	40	58	116
Philippine Islands	10	21	19	9	5	2	.....	1
Total	180	356	262	117	185	1,071	301	288
Austria Hungary [b]	62	48	34	12	11	42	65	28
Denmark	53	79	71	80	75	44	19	12
France	212	295	101	91	75	124	56	36
Germany [b]	268	389	201	125	78	110	70	83
Greece	27	40	47	21	9	26	24	7
Holland	205	173	84	82	63	70	69	30
Italy	88	66	55	56	25	57	56	40
Japan	322	267	204	108	84	160	108	48
Norway	425	237	196	237	99	89	78	39
Russia [c]	117	158	80	65	32	33	18	8
Spain	84	88	75	52	50	71	36	17
Sweden	336	234	131	134	87	47	33	19
Other countries	383	460	238	154	101	125	81	41
Grand total	4,648	5,269	2,604	1,877	1,374	2,671	1,675	1,354

Country where owned.	5,000 and under 6,000 tons.	6,000 and under 8,000 tons.	8,000 and under 10,000 tons.	10,000 and under 15,000 tons.	15,000 and under 20,000 tons.	20,000 and under 25,000 tons.	25,000 tons and above.	Total.
United Kingdom	505	372	144	97	14	5	3	7,535
British Dominions	23	22	4	.....	2	.....	.....	1,610
Total	528	394	148	97	16	5	3	9,145
United States:								
Sea	262	378	45	35	6	2	2	3,134
Northern Lakes [a]	40	140	8	.....	.....	.....	.....	477
Philippine Islands	.....	.....	.....	.....	.....	.....	.....	67
Total	302	518	53	35	6	2	2	3,678
Austria Hungary [b]	15	9	1	1	.....	.....	.....	328
Denmark	8	1	1	3	.....	.....	.....	446
France	46	29	17	14	1	1	1	1,099
Germany [b]	77	83	32	15	7	2	3	1,543
Greece	3	1	.....	.....	.....	.....	.....	205
Holland	30	50	8	4	1	1	.....	870
Italy	52	15	7	4	.....	2	.....	523
Japan	64	36	11	6	.....	.....	.....	1,418
Norway	19	12	.....	2	.....	.....	.....	1,433
Russia [c]	11	1	1	.....	.....	.....	.....	524
Spain	8	2	1	2	.....	.....	.....	486
Sweden	10	1	.....	1	.....	.....	.....	1,033
Other countries	40	22	9	1	.....	.....	.....	1,655
Grand total	1,213	1,174	289	185	31	13	9	24,386

[a] Lloyd's Register does not include vessels trading on the Caspian Sea nor wooden vessels trading on the Great Lakes of North America.

[b] The figures include all vessels which at the date of the armistice had not been captured or requisitioned by other countries.

[c] The figures exclude vessels registered at Finnish and Esthonian ports.

7. Mercantile Shipbuilding in 1918 (Excluding Warships).[a]

[Lloyd's Register, London, February, 1919.]

UNITED KINGDOM.

Particulars of total output.—Excluding vessels built to the order of the admiralty for other than mercantile purposes, 301 vessels of 1,348,120 tons (viz., 300 steamers of 1,344,275 tons and 1 oil hulk of 3,845 tons) have been launched in the United Kingdom during 1918.

These figures are 584,033 tons below the record figures of 1913 and represent an output 26 per cent lower than the average of the three prewar years, 1911–1913; they are, however, higher than the totals for the previous three years, the present total being 185,224 tons more than that for 1917 and 739,885 tons more than that for 1916.

Nationality of vessels launched.—The whole of the output will be for registration in the United Kingdom, with the exception of 4 steamers of 12,325 tons built for French owners.

Size of vessels.—The returns for 1918 show that 127 vessels of between 5,000 and 6,000 tons each and 45 vessels of 6,000 tons and upward were launched; the following were of over 10,000 tons each:

	Tons.		Tons.
Narkunda	14,500	Macharda	10,464
San Florentino	13,000	Port Bowen	10,250
Saranac	11,150		

These average tonnage of steamers launched in the United Kingdom during 1918 is 4,481 tons; but, if steamers of less than 500 tons be excluded, the average reaches 4,593 tons, compared to 4,933 in 1917, 4,080 in 1916, 3,791 in 1915, and 4,460 in 1914.

Vessels fitted with turbines.—The launches for the year include 9 steamers with a total tonnage of 59,729 tons, which will be fitted with geared steam turbines.

Special types of vessels.—The "standard" vessels launched during the year under review amounted to 198, with a total tonnage of about 886,000 tons gross.

Of steamers on the Isherwood system of longitudinal framing, 19 were launched during 1918, with a total gross tonnage of 123,773 tons, of which 15 of 98,162 tons are for the carriage of oil in bulk.

The returns also include 29 other oil carriers of 156,414 tons, besides a number of other vessels designed for special services.

Output of leading ports.—The Clyde district occupies the first place among the shipbuilding centers of the country with an output of 348,760 tons (Glasgow 188,736 tons and Greenock 160,024 tons). Then follow the Tyne (266,594 tons), the Wear (260,553 tons), the Tees (209,711 tons), and Belfast (148,259 tons).

Percentage of the world's output.—From Table VIII it can be ascertained that the tonnage launched in the United Kingdom during the five years 1894–1898 amounted to 74.7 per cent of the total output of the world for that period. During the three following quinquennial periods it was 60, 59.8 and 61.1 per cent, respectively, thus showing that for the 15 years 1899–1913 the United Kingdom's share of the world's output was quite 60 per cent.

During the war years 1914–1918 a very serious decrease has taken place, only 38.6 per cent of the world's mercantile output for this period having been launched in the United Kingdom.

OTHER COUNTRIES.

Particulars of total output.—Outside the United Kingdom, but exclusive of Germany and Austria-Hungary, there have been launched during the year 1,565 merchant vessels of 4,099,324 tons (1,397 steamers of 3,996,924 tons and 168 sailing vessels of 102,400 tons). The figures show an increase of 131 per cent, as compared with those for 1917, and are 2,698,595 tons higher than those for 1913, the prewar-record year.

An interesting feature in this year's totals is the amount of wood tonnage included. No less than 1,145,582 tons of wood vessels have been launched, which is nearly 28 per cent of the total tonnage launched abroad during 1918.

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[a] This summary does not include warships and vessels built to Government order for other than mercantile purposes; it takes into account only merchant vessels of 100 tons gross and upward that were launched in 1918, whether they were completed during the year or are still under construction. Vessels having internal-combustion engines and sailing vessels fitted with auxiliary power are included with steamers. On account of the war, it is impossible to give figures for Germany and Austria-Hungary; they are, therefore, excluded from these tables.

The countries where the largest output has taken place during the year under review are the United States, Japan, and Canada. The totals for these countries amount to 3,781,145 tons and account for 92 per cent of the total output abroad.

United States.—General remarks: The output for the year 1918—viz, 3,033,030 tons gross—is a convincing proof of the great development in the shipbuilding industry which is generally known to have taken place in this country. This total for one year is higher than the whole output of the United States during the 10 years 1907–1916; it is more than three times the amount launched during 1917, and it exceeds by over 25 per cent the combined output of the rest of the world for the year 1918.

The most striking increase has taken place in the yards on the Pacific coast. The average yearly output on that coast during the four years 1912–1915 was under 30,000 tons, in 1916 it was 123,882 tons, in 1917 it amounted to 428,622 tons, and during 1918 it has reached 1,514,296 tons. Of the total launched on the Great Lakes (430,877 tons) only one steamer of 5,429 tons is for trade on those lakes, all the other vessels being intended for seagoing purposes.

Size, material, and type of vessels: The total figures for the United States include 11 steel steamers of between 8,000 and 9,000 tons each and 204 of between 5,000 and 8,000 tons; 326 wood steamers of over 2,000 tons, the largest being 8 of about 3,500 tons gross, each launched at Gulf ports; 188 vessels to be fitted with geared turbines, the largest being 3 of 8,775 tons each; 3 vessels of 1,370 tons each, fitted with turbo-electric system of propulsion; 93 steamers built on the Isherwood system of longitudinal framing, 22 of which, together with 5 other vessels, are for the carrying of oil in bulk, and 67 sailing vessels fitted with auxiliary power.

Thirty-one per cent of the total output is composed of wood vessels.

Japan.—The output of this country, 489,924 tons, is the highest on record. It is 140,000 tons more than in 1917 and practically ten times the amount launched in this country during 1915. The totals include 36 steel steamers of over 5,000 tons each.

Canada.—The total tonnage launched during 1918 reaches 258,191 tons, 49,390 tons of which were launched on the Great Lakes. The figures include 42 wooden steamers, practically all of about 2,325 tons each.

Italy.—The total for Italy is 60,791 tons, about 22,000 tons more than the previous year, and is the highest total reached since 1905; it includes the largest vessel launched abroad during 1918, viz: the turbine steamer *Esperia* of 11,393 tons gross.

Holland, Sweden, and France.—The tonnage of seagoing vessels launched in Holland amounts to 74,026 tons, which is only half the output for 1917. The figures for Sweden are the highest up to date; they show an increase of 50 per cent on the 1917 totals. In France the diminution of output which has been going on since 1913 continued during 1918 when less than 14,000 tons were launched.

GENERAL.

The total mercantile output of allied and neutral countries for the year under review has been 5,447,444 tons. This figure has never been approached before in the society's annual summaries; it is over 63 per cent higher than the output of 1913, the record year prior to the war, which, of course, included the output of Germany, Austria-Hungary, etc.

The number of steel ocean-going steamers of between 5,000 and 10,000 tons launched during 1918 amounted to 439, which represents 28 per cent of the total number of such vessels in existence at the beginning of the war.

VESSELS CLASSED BY LLOYD'S REGISTER.

Of the merchant vessels launched during 1918, 900 of 3,501,344 tons (248 vessels of 1,085,159 tons in the United Kingdom and 652 of 2,416,185 tons abroad) are intended for classification in Lloyd's Register Book. These figures include over four-fifths of the United Kingdom's output, and if the tonnage of all the steel steamers launched in the world is taken into account, nearly 75 per cent of such tonnage has been built under the society's inspection. The total figures are the highest ever reached in the history of the society; they exceed by 1,431,000 tons the previous record total attained in 1913.

TABLE I.—*Vessels launched in the United Kingdom, 1892–1918.*

Year.	Steam.		Sail.		Total.	
	Number.	*Gross tons.*	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
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	545	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
1916	304	607,907	2	328	306	608,235
1917	285	1,162,496	1	400	286	1,162,896
1918	300	1,344,275	1	3,845	301	1,348,120

TABLE II.—*Number and gross tonnage of merchant vessels launched in the world (outside the United Kingdom) from 1892–1918.*

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	121,606	175	68,752	310	190,358
1894	148	203,279	170	73,751	318	277,030
1895	190	209,300	111	57,893	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	791,609	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	1,169,200
1915[a]	313	518,948	103	31,771	416	550,719
1916[a]	506	1,032,074	152	47,771	658	1,079,845
1917[a]	698	1,669,608	128	105,282	826	1,774,890
1918[a]	1,397	3,996,924	168	102,400	1,565	4,099,324

[a] Returns not complete.

TABLE III.—*Merchant vessels launched in the principal ship-building districts of the United Kingdom during the three years 1916–1918.*

District.	1918						Total, 1917.		Total, 1916.	
	Steam.		Sail.		Total.					
	No.	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*
Aberdeen	.....	.....	.....	.....	.....	.....	16	5,266	32	7,091
Barrow, Maryport, and Workington	3	11,004	.....	.....	3	11,004	1	587	2	1,248
Belfast and Londonderry	23	148,259	.....	.....	23	148,259	19	148,057	4	16,386
Dundee	8	23,860	.....	.....	8	23,860	7	6,911	5	12,008
Clyde:										
Glasgow	41	188,736	.....	.....	41	188,736	41	185,551	26	79,208
Greenock	31	160,024	.....	.....	31	160,024	24	134,308	22	92,949
Hartlepools	25	100,413	.....	.....	25	100,413	13	65,622	11	54,295
Hull	5	25,480	.....	.....	5	25,480	18	20,037	68	26,846
Leith	10	16,576	1	3,845	11	20,421	9	14,309	16	10,854
Liverpool	4	12,486	.....	.....	4	12,486	5	26,528	5	1,140
Middlesbrough, Stockton, and Whitby	24	109,298	.....	.....	24	109,298	23	109,306	27	31,342
Newcastle	55	266,594	.....	.....	55	266,594	52	231,907	35	133,336
Sunderland	58	260,553	.....	.....	58	260,553	48	204,398	35	134,472

TABLE IV.—*Size of merchant vessels launched in the United Kingdom during 1918.*

Tonnage.	Steam.	Sail.	Tonnage.	Steam.	Sail.
100 and under 500 tons [a]	8	.....	6,000 and under 8,000 tons	31	.....
500 and under 1,000 tons	11	.....	8,000 and under 10,000 tons	9	.....
1,000 and under 2,000 tons	13	.....	10,000 and under 12,000 tons	3	.....
2,000 and under 3,000 tons	40	.....	12,000 and under 15,000 tons	2	.....
3,000 and under 4,000 tons	42	1	15,000 tons and above	.....	.....
4,000 and under 5,000 tons	14	.....			
5,000 and under 6,000 tons	127	.....	Total	300	1

[a] Vessels of less than 100 tons are not included in Lloyd's Register shipbuilding returns.

TABLE V.—*Total output of merchant vessels in the world during 1918.* [a]

Where built.	Steam.		Sail.		Total.	
	Number.	*Gross tons.*	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
United Kingdom	300	1,344,275	1	3,845	301	1,348,120
Other countries	1,397	3,996,924	168	102,400	1,565	4,099,324
Total for the world	1,697	5,341,199	169	106,245	1,866	5,447,444

[a] Excluding Germany and Austria-Hungary.

TABLE VI.—*Merchant vessels (over 100 tons) launched in the world (outside the United Kingdom) during 1918.*[a]

Countries.	Steamers and motor v essels.				Sailing vessels.				Total.	
	Steel.		Wood.		Steel.		Wood.			
British Dominions:										
Canada—	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Gr. tons.*	*No.*	*Tons.*
Great Lakes	18	40,216	4	9,174	.....	.....	.....	.....	206	279,904
Coast	19	72,398	52	100,178	.....	.....	84	36,225		
Other dominions	6	10,882	7	6,395	.....	.....	16	4,436	9	11,778
China	8	10,988	1	790	.....	.....	.....	.....	13	26,150
Denmark	8	24,341	3	1,255	.....	.....	2	554	3	13,715
France	3	13,715	.....	.....	.....	.....	.....	.....	74	74,026
Holland	74	74,026	.....	.....	.....	.....	.....	.....	15	60,791
Italy	11	59,391	3	950	.....	.....	1	450	198	489,924
Japan	157	458,731	41	31,193	.....	.....	.....	.....	51	47,723
Norway	44	45,832	7	1,891	.....	.....	.....	.....	13	5,311
Portugal	.....	.....	.....	.....	.....	.....	13	5,311	18	17,389
Spain	12	16,074	4	815	.....	.....	2	500	36	39,583
Sweden	22	35,331	11	3,617	.....	.....	3	635		
United States:										
Atlantic coast	152	734,587	86	185,769	1	1,677	31	31,787	929	3,033,030
Gulf ports	3	4,110	56	124,702	.....	.....	7	5,225		
Pacific coast	160	922,949	237	575,747	.....	.....	8	15,600		
Great Lakes	187	428,494	1	2,383	.....	.....	.....	.....		
Total	884	2,952,065	513	1,044,859	1	1,677	167	100,723	1,565	4,099,324

[a] Excluding Germany and Austria-Hungary.

TABLE VII.—*Size and material of vessels included in Table VI.*

Tonnage.	Steam and motors.		Sail.		Tonnage.	Steam and motors.		Sail.	
	Steel.	Wood.	Steel.	Wood.		Steel.	Wood.	Steel.	Wood.
100 and under 500 tons[a]	59	60	.....	103	5,000 and under 6,000 tons	155	.....	.....	.....
500 and under 1,000 tons	50	43	.....	42	6,000 and under 8,000 tons	99	.....	.....	.....
1,000 and under 2,000 tons	147	41	1	16	8,000 and under 10,000 tons	19	.....	.....	.....
2,000 and under 3,000 tons	249	335	.....	6	10,000 tons and above	1	.....	.....	.....
3,000 and under 4,000 tons	50	34	.....	.....					
4,000 and under 5,000 tons	55	.....	.....	.....	Total	884	513	1	167

[a] Vessels of less than 100 tons are not included in Lloyd's Register shipbuilding returns.

TABLE VIII.—*Number and tonnage of merchant vessels of 100 tons gross and upwards launched, 1892–1918.*

Year.	United Kingdom.		Dominions.				Austria-Hungary.		Denmark.		France.	
			All Coast.		Canadian Lake Ports.							
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1892	681	1,109,950	58	19,792	(a)	(a)	7	2,302	22	12,707	19	17,228
1893	536	836,383	41	17,089	(a)	(a)	6	7,435	18	10,719	22	20,337
1894	614	1,046,508	26	6,055	1	748	5	1,703	16	7,300	28	19,636
1895	579	950,967	23	6,105	7	4,276	10	7,371	14	10,982	27	28,851
1896	696	1,159,751	36	8,394	5	2,730	9	6,246	14	11,814	41	44,565
1897	591	952,486	36	10,489	4	1,942	6	6,601	13	13,539	39	49,341
1898	761	1,367,570	65	22,664	5	2,357	9	5,432	17	12,703	48	67,160
1899	726	1,416,791	31	6,475	3	1,989	8	9,248	30	26,613	51	89,794
1900	692	1,442,471	38	6,967	2	2,596	12	14,889	17	11,060	66	116,858
1901	639	1,524,739	68	16,610	6	11,524	7	20,013	41	22,856	92	177,543
1902	694	1,427,558	65	18,235	4	10,584	16	15,192	44	27,148	99	192,196
1903	697	1,190,618	64	20,866	9	13,824	6	11,328	39	28,609	75	92,768
1904	712	1,205,162	55	27,253	6	3,712	40	16,645	30	15,859	69	81,245
1905	795	1,623,168		45—10,798			27	16,402	19	17,557	43	73,124
1906	886	1,828,343	50	16,026	7	10,016	25	18,590	18	24,712	48	35,214
1907	841	1,607,890	83	21,479	14	24,964	7	8,717	29	28,819	50	61,635
1908	523	929,669	111	25,512	8	8,669	24	23,502	24	19,172	50	83,429
1909	526	991,066	35	6,592	3	869	15	25,006	11	7,508	51	42,197
1910	500	1,143,169	53	14,601	7	11,742	8	14,304	18	12,154	55	80,751
1911	772	1,803,844	59	16,006	3	3,656	16	37,836	18	18,689	79	125,472
1912	712	1,738,514	76	25,090	8	9,700	12	38,821	22	26,103	80	110,734
1913	688	1,932,153	77	26,744	14	21,595	17	61,757	31	40,932	89	176,095
1914	656	1,683,553	58	22,288	22	25,246	11	b34,335	25	32,815	33	114,052
1915	327	650,919	27	13,289	4	8,725	(a)	(a)	23	45,198	6	25,402
1916	306	608,235	36	22,577	4	8,994	(a)	(a)	28	35,277	9	42,752
1917	286	1,162,896	80	66,475	25	27,996	(a)	(a)	23	20,445	6	18,828
1918	301	1,348,120	184	230,514	22	49,390	(a)	(a)	13	26,150	3	13,715

Year.	Germany.		Holland.		Italy.		Japan.		Norway.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
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	16,552
1894	77	119,702	41	15,360	10	5,396	14	3,173	25	17,169
1895	75	87,786	25	8,292	10	5,603	3	2,296	21	12,873
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	59,725	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	35,435
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
1916	(a)	(a)	201	180,197	10	56,654	55	145,624	52	42,458
1917	(a)	(a)	146	148,779	11	38,906	104	350,141	44	46,103
1918	(a)	(a)	74	74,026	15	60,791	198	489,924	51	47,723

a No returns. b Returns not complete.

TABLE VIII.—*Number and tonnage of merchant vessels of 100 tons gross and upwards launched 1892–1918—Continued.*

Year.	Sweden.		United States.				Other Countries.		Totals.	
			Coast.		Great Lakes.					
	No.	*Tons.*	*No.*	*Tons.*	*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	145,898	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	b2,852,753
1915	27	20,319	76	157,167	8	20,293	10	b 13,641	743	b1,201,638
1916	34	26,769	167	384,899	44	119,348	18	b 14,296	964	b1,688,080
1917	34	26,760	266	821,115	60	176,804	27	b 32,538	1,112	b2,937,786
1918	36	39,583	741	2,602,153	188	430,877	40	b 34,478	1,866	b5,447,444

a No returns. b Returns not complete.

8. MERCHANT VESSELS UNDER CONSTRUCTION.

The returns compiled by Lloyd's Register of Shipping, which take into account only vessels of 100 tons gross and upward the construction of which has actually been commenced, show that there were 783 merchant vessels of 2,535,050 tons gross under construction in the United Kingdom at the close of the quarter ended June 30, 1919. Warships are not included in these returns. Complete totals for Germany are not yet available; therefore no figures are shown for that country. The particulars of the vessels in question are as follows, similar details being given for the preceding quarter and for June 30, 1918, for the purpose of comparison.

Description.	June 30, 1919.		Mar. 31, 1919.		June 30, 1918.	
	No.	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
Steam:						
Steel	711	2,492,276	603	2,220,816	382	1,807,518
Wood and composite	8	2,293	5	1,633	1	120
Total	719	2,494,569	608	2,222,449	383	1,807,638
Sail: Steel	63	29,481	49	32,396	9	7,375
Total steam and sail	782	a 2,524,050	657	2,254,845	392	1,815,013

a The figures for steel include 28 ferroconcrete barges of 19,608 tons and 10 ferroconcrete motor vessels of 2,546 tons.

The tonnage now under construction in the United Kingdom is about 269,000 tons more than that which was in hand at the end of last quarter, and about 709,000 tons more than the tonnage building 12 months ago.

Of the merchant vessels being built in the United Kingdom at the end of June, 609 of 2,033,319 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 preceding 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, 1919.		Mar. 31, 1919.		June 30, 1918.	
	No.	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
Barrow, Maryport, and Workington:						
Steam	6	28,865	7	27,095	4	11,380
Sail	.....	.....	6	4,200	.....	.....
Total	6	28,865	13	31,295	4	11,380
Belfast and Londonderry:						
Steam	40	318,100	39	312,675	29	230,350
Sail	4	2,700	7	4,750	.....	.....
Total	44	320,800	46	317,425	29	230,350
Glasgow:						
Steam	153	541,797	110	444,588	74	329,668
Sail	19	5,565	6	2,430	4	1,800
Total	172	547,362	116	447,018	78	331,468
Greenock:						
Steam	77	343,305	63	304,105	51	283,010
Sail	4	2,800	5	3,500	.....	.....
Total	81	346,105	68	307,605	51	283,010
Hartlepool: Steam	19	76,450	19	75,600	22	93,450
Hull:						
Steam	78	51,685	70	44,825	8	33,991
Sail	9	1,574	.....	.....	1	160
Total	87	53,259	70	44,825	9	34,151
Liverpool:						
Steam	31	58,395	20	35,585	10	34,070
Sail	.....	.....	.....	.....	1	1,250
Total	31	58,395	20	35,585	11	35,320
Middlesbrough, Stockton, and Whitby:						
Steam	45	161,920	40	147,020	29	137,330
Sail	2	1,360	2	1,400	.....	.....
Total	47	163,280	42	148,420	29	137,330
Newcastle: Steam	100	498,294	91	433,932	62	333,275
Sunderland: Steam	63	269,018	59	259,467	54	242,050

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 and under 500 tons[a]	199	32	10,000 and under 12,000 tons	3	.....
500 and under 1,000 tons	65	31	12,000 and under 15,000 tons	11	.....
1,000 and under 2,000 tons	57	.....	15,000 and under 20,000 tons	10	.....
2,000 and under 3,000 tons	55	.....	20,000 and under 25,000 tons	4	.....
3,000 and under 4,000 tons	59	.....	25,000 and under 30,000 tons	.....	.....
4,000 and under 5,000 tons	19	.....	30,000 and under 40,000 tons	.....	.....
5,000 and under 6,000 tons	136	.....	40,000 tons and above	.....	.....
6,000 and under 8,000 tons	67	.....			
8,000 and under 10,000 tons	34	.....	Total	719	63

[a] 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:

	Steam.		Sail.	
During quarter ended June 30, 1919:	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
Vessels commenced	165	654,923	18	5,057
Vessels launched	181	514,240	25	13,651

Merchant vessels under construction in the world.

	Steam.		Sail.		Total.	
	Number.	*Gross tons.*	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
United Kingdom	719	2,494,569	63	29,481	782	2,524,050
Other countries[a]	1,511	5,165,649	233	328,068	1,744	5,493,717
Total	2,230	7,660,218	296	357,549	2,526	8,017,767

[a] Excluding Germany, figures for which country are not yet available.

MERCHANT VESSELS UNDER CONSTRUCTION ABROAD.

The tonnage being built in the world at the end of June under the inspection of the surveyors of Lloyd's Register, excluding vessels the construction of which has not actually been commenced and excluding all vessels of less than 100 tons, amounts to 4,766,623 tons:

Country.	Steamers and motor vessels.				Sailing vessels.				Total.	
	Steel.		Wood.		Steel.		Wood.			
	No.	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*	*No.*	*Gross tons.*
America (U. S.):										
Atlantic coast	357	1,763,551	36	56,240	2	4,600	34	60,728	994	3,874,143
Gulf ports	34	141,340	53	126,300	1	4,500	31	68,983		
Pacific coast	156	933,805	98	238,400	....	.....	59	148,950		
Great Lakes	133	326,746	....	.....	....	.....	....	.....		
British Dominions:										
Canada—										
Great Lakes	27	63,493	....	.....	....	.....	....	.....	209	346,453
Coast	28	100,600	70	81,050	2	975	31	15,525		
Other dominions	26	70,256	13	11,647	....	.....	12	2,907		
Belgium	4	7,063	....	.....	....	.....	....	.....	4	7,063
China	7	33,300	....	.....	....	.....	....	.....	7	33,300
Denmark	36	56,001	5	1,770	....	.....	....	.....	41	57,771
France	34	107,215	2	1,920	....	.....	2	480	38	109,615
Greece	1	900	1	600	....	.....	....	.....	2	1,500
Holland	88	219,332	....	.....	....	.....	....	.....	88	219,332
Italy (including Trieste)	42	243,940	35	21,605	....	.....	19	6,075	96	271,620
Japan	63	282,060	....	.....	....	.....	....	.....	63	282,060
Norway	40	55,586	24	6,855	....	.....	....	.....	64	62,441
Portugal	.....	.....	....	.....	....	.....	29	12,320	29	12,320
Spain	37	118,269	....	.....	....	.....	3	585	40	118,854
Sweden	42	88,650	19	7,155	....	.....	8	1,440	69	97,245
Total	1,155	[a]4,612,107	356	553,542	5	10,075	228	317,993	1,744	5,493,717

[a] Including 14 ferroconcrete vessels of 40,259 tons.

NOTE.—The figures for Germany are not yet available.

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.[a]					
				Abandoned at sea.			Foundered.		
British:	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*
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.[c]			Burned.			Collision.			Wrecked.[d]		
British:	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*	*No.*	*Net tons.*	*Gross tons.*
United Kingdom	19	5,958	11,068	7	16,195	25,680	17	16,658	28,488	43	63,392	108,387
Colonies	....	.....	.....	1	92	185	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	5,585
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	124
Total	34	24,572	42,853	16	23,813	38,558	41	32,743	55,156	154	140,558	233,459

[a] 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.

[b] Excluding vessels trading on the Great Lakes of North America.

[c] Under the heading "Missing" are included only vessels so posted or reported during the period covered by the return.

[d] 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.[a]			Sunk by warships or by mines.			Total.[b]			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.									
			Abandoned at sea.		Foundered.		Missing.[c]		Broken up, condemned, etc.[d]		Burned.	
	No.	Net tons.	No.	Net tons.	No.	Net tons.	No.	Net tons.	No.	Net tons.	No.	Net tons.
British:												
United Kingdom	653	364,677	....	.....	3	707	4	3,536	....	.....	2	269
Colonies	552	156,666	6	1,373	1	128	1	113	....	.....	....	.....
United States	[e] 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

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

[b] 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.

[c] Under the heading "Missing" are included only vessels so posted or reported during the period covered by the return.

[d] 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.

[e] 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—Continued.										Percentage lost.	
	Collision.		Wrecked.[a]		Lost, etc.[b]		Sunk by warships or by mines.		Total.[c]		Vessels owned.	Tonnage owned.
British:	*No.*	*Net tons.*	*No.*	*Net tons.*	*No.*	*Net tons.*	*No.*	*Net tons.*	*No.*	*Net tons.*		
United Kingdom	6	2,434	14	4,722	1	166	1	1,591	31	13,425	4.75	3.68
Colonies	.....	.....	15	4,578	.....	.....	1	1,798	24	7,990	4.35	5.10
United States	4	3,455	26	16,545	.....	.....	.....	.....	60	46,374	4.36	4.92
Austro-Hungarian	.....	.....	.....	.....	.....	.....	.....	.....	1	1,858	8.33	55.08
Danish	1	178	6	917	.....	.....	1	199	9	1,396	3.66	2.81
Dutch	.....	.....	.....	.....	.....	.....	.....	.....	1	101	1.03	.41
French	4	813	4	2,602	.....	.....	4	8,294	25	17,995	4.54	4.53
German	.....	.....	1	1,994	.....	.....	.....	.....	5	6,360	1.68	1.96
Italian	.....	.....	10	8,604	.....	.....	.....	.....	12	11,049	2.30	4.65
Norwegian	1	819	9	5,548	.....	.....	.....	.....	33	31,218	6.17	5.70
Russian	.....	.....	3	2,688	.....	.....	.....	.....	7	5,558	1.38	2.75
Spanish	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Swedish	.....	.....	9	2,915	.....	.....	.....	.....	12	3,946	3.18	3.84
Other European countries	.....	.....	4	642	.....	.....	1	285	6	1,235	.....	.....
Central and South America	.....	.....	3	3,256	.....	.....	.....	.....	4	3,695	.....	.....
Total	16	7,699	104	55,011	1	166	8	12,167	230	152,200	.....	.....

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.[d]		Broken up, condemned, etc.[e]		Burned.	
British:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
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	[f]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	.....	.....	1	2,110	1	102	.....	.....	.....	.....
Dutch	806	1,496,455	.....	.....	2	4,728	1	101	.....	.....	.....	.....
French	1,576	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[g]	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	3,447	1	2,385	.....	.....	1	584
Swedish	1,466	1,118,086	.....	.....	3	2,118	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

[a] Under the heading "Wrecked" are included vessels lost through stranding, or through striking rocks, sunken wrecks, etc.

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

[c] 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.

[d] Under the heading "Missing" are included only vessels so posted or reported during the period covered by the return.

[e] 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.

[f] Excluding vessels trading on the Great Lakes of North America.

[g] Japanese sailing vessels are not inserted in Lloyd's Register Book, and are therefore not included in these tables.

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—Continued.

Flag.	How lost—Continued.										Percentage lost.	
	Collision.		Wrecked.[a]		Lost, etc.[b]		Sunk by warships or by mines.		Total.[c]		Vessels owned.	Tonnage owned.
British:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*		
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	1.53
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	.83
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[d]	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	....	.....	....	.....	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	....	.....	....	.....	11	12,334	.....	.....
Other countries	....	.....	1	124	....	.....	1	758	2	882	.....	.....
Total	57	62,855	258	288,470	4	6,382	162	372,277	667	926,134	.....	.....

[a] Under the heading "Wrecked" are included vessels lost through stranding, or through striking rocks, sunken wrecks, etc.

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

[c] 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.

[d] Japanese sailing vessels are not inserted in Lloyd's Register Book, and are therefore not included in these tables.

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 up to 1914 (later returns, except for Japan, not available) 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	2,426,044	164,195
1820	21,969	2,439,029	3,405	209,564	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	1,596,822	37,317	12,332,404	.....
1906	20,764	11,167,332	17,108	1,624,049	37,872	12,791,381	.....
1907	21,042	11,485,099	17,300	1,698,256	38,342	13,183,355	.....
1908	21,168	11,541,394	17,440	1,721,960	38,608	13,263,354	.....
1909	21,189	11,585,878	17,609	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	4,753	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	16,735,722	1914	19,145,140

TABLE 3.—*Number and net tonnage of vessels built and registered in British Empire, 1800–1914.*[a]

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

[a] 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.

[b] Records destroyed by fire at customhouse.

TABLE 4.—*Number and net tonnage of steam vessels built and registered in British Empire, 1814–1914.*[a]

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

[a] 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.

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.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1858	154,930	53,150	208,080	1,518	26,956	28,474	156,448	80,106	236,554
1860	158,172	53,796	211,968	.....	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	24,574	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	19,768	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.*[a]

Year.	Sailing vessels.		Steam vessels.		Total.	
	Number.	*Tons.*	*Number.*	*Tons.*	*Number.*	*Tons.*
1856	(b)	(b)	(b)	(b)	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	62,089	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	364,735	520	418,179
1913	56	35,812	374	450,371	430	486,183
1914	47	44,282	277	354,348	324	398,630

[a] There are no returns of vessels belonging to the British possessions that were sold to foreigners.
[b] 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	116,276	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 emp oyed 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.		
	Number.	Tons.	Men employed, exclusive of masters.	Number.	Tons.	Men employed, exclusive of masters.	Number.	Tons.	Men employed, exclusive 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	[a] 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	[b] 37,618	2,004	325,082	[b] 22,850	10,898	900,229	[b] 60,468
1895	7,495	479,764	[b] 31,757	2,633	406,477	[b] 30,424	10,128	886,241	[b] 62,181
1900	6,203	378,957	[b] 23,734	3,545	508,359	[b] 40,288	9,718	887,316	[b] 64,022
1905	5,280	314,112	[b] 19,346	4,135	541,958	[b] 46,366	9,415	856,070	[b] 65,712
1906	5,217	305,976	[b] 19,127	4,358	583,836	[b] 48,986	9,575	889,812	[b] 68,113
1907	5,044	294,587	[b] 18,389	4,661	645,551	[b] 52,858	9,705	940,138	[b] 71,247
1908	4,903	283,867	[b] 17,795	4,890	626,103	[b] 55,014	9,793	909,970	[b] 72,809
1909	4,777	273,858	[b] 17,279	4,954	645,763	[b] 55,395	9,731	919,621	[b] 72,674
1910	4,559	259,130	[b] 16,344	5,088	658,044	[b] 56,721	9,647	917,174	[b] 73,065
1911	3,504	211,345	[b] 13,419	5,107	637,374	[b] 56,855	8,611	848,719	[b] 70,274
1912	3,105	190,283	[b] 12,045	5,249	658,616	[b] 58,577	8,354	848,899	[b] 70,622
1913	2,957	183,726	[b] 11,326	5,392	685,364	[b] 59,754	8,349	869,090	[b] 71,080
1914	2,671	167,772	[b] 10,084	5,268	742,391	[b] 58,588	7,939	910,163	[b] 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	[b] 2,219	250	133,563	[b] 4,386	631	184,554	[b] 6,605
1895	222	26,721	[b] 1,210	329	238,633	[b] 6,444	551	265,354	[b] 7,654
1900	134	15,936	[b] 719	267	201,542	[b] 4,930	401	217,478	[b] 5,649
1905	95	28,856	[b] 739	293	351,077	[b] 7,701	388	379,933	[b] 8,440
1906	77	10,384	[b] 439	308	390,875	[b] 8,586	385	401,259	[b] 9,025
1907	59	7,136	[b] 320	239	240,938	[b] 5,362	298	248,074	[b] 5,682
1908	53	10,284	[b] 332	248	270,524	[b] 6,022	301	280,808	[b] 6,354
1909	51	6,594	[b] 283	306	410,740	[b] 8,957	357	417,334	[b] 9,240
1910	48	6,151	[b] 282	321	518,251	[b] 11,250	369	524,402	[b] 11,532
1911	47	6,856	[b] 282	339	524,482	[b] 11,487	386	531,338	[b] 11,769
1912	39	5,043	[b] 233	295	445,030	[b] 9,991	334	450,073	[b] 10,224
1913	38	4,829	[b] 222	337	611,325	[b] 13,081	375	616,154	[b] 13,303
1914	31	6,957	[b] 224	360	605,631	[b] 12,298	391	612,588	[b] 12,522

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

[b] 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	2,230,285	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	8,236,285	a 172,052	4,718	9,361,758	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	5,021,764	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	431,194	a 14,094	9,609	11,783,346	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.*		*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	6,490,485	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	98,523,693
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	235,833	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	1,256,887	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	711	2,145,286	1,322,806	28,403	1,332	2,450,105	1,604,415	33,022
1912....	618	298,526	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	191,585	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	.....	466,554	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	681,396	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	18,909	1,808	2,178,689	1,341,917	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	3,961,189	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	4,897,089	3,145,578	86,667
1911....	4,311	641,869	568,045	19,517	2,610	4,360,134	2,633,523	67,782	6,921	5,002,003	3,202,568	87,299
1912....	4,343	650,029	574,430	19,682	2,649	4,575,255	2,762,008	68,869	6,992	5,225,284	3,336,438	88,551
1913....	4,385	636,637	561,180	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, 1900–1918.

[Bureau Veritas.]

Year.	Steam vessels.			Sailing vessels.		Total.	
	Number.	*Gr. tons.*	*Net tons.*	*Number.*	*Net tons.*	*Number.*	*Tons.a*
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
1917	1,123	1,858,999	1,155,864	1,549	200,002	2,672	2,059,001
1918	1,226	2,094,707	1,311,691	1,577	204,698	2,803	2,299,405

a Steam vessels, gross tons, sail vessels, net tons.

Table 2.—Number and Gross Tonnage of Japanese Merchant Vessels Registered, 1895–1918.

[Official Japanese list.]

Tonnage.	Steam vessels.		Sailing vessels.		Total.	
1895.	*Number.*	*Gr. tons.*	*Number.*	*Gr. tons.*	*Number.*	*Gr. tons.*
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	a351	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

a 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, 1895–1918—Continued.

Tonnage.	Steam vessels.		Sailing vessels.		Total.	
1906.	*Number.*	*Gr. tons.*	*Number.*	*Gr. tons.*	*Number.*	*Gr. tons.*
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
1918.						
4,000 tons or over	139	856,000	.....	.....	139	856,000
1,000 to 4,000 tons	477	1,003,349	2	3,428	479	1,006,777
Under 1,000 tons	905	403,827	2,631	385,674	3,536	789,501
Total	1,521	2,263,176	2,633	389,102	4,154	2,652,278

Appendix H.

SQUARE-RIGGED AMERICAN VESSELS.

The steady decline in the square-rigged ships of the world 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, 1919. 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, 1919.

Rig.	American built.		Foreign built.		Total.	
	Number.	*Gross tons.*	*Number.*	*Gross tons.*	*Number.*	*Gross tons.*
Ships:						
Steel	4	13,167	12	26,721	16	39,888
Iron	----	----	9	16,582	9	16,582
Wood	10	15,966	----	----	10	15,966
Total	14	29,133	21	43,303	35	72,436
Barks:						
Steel	2	2,622	8	15,835	10	18,457
Iron	----	----	9	11,838	9	11,838
Wood	23	29,358	3	3,723	26	33,081
Total	25	31,980	20	31,396	45	63,376
Barkentines:						
Steel	----	----	3	3,804	3	3,804
Iron	1	2,903	3	4,397	4	7,300
Wood	30	28,401	1	685	31	29,086
Total	31	31,304	7	8,886	38	40,190
Brigs and brigantines: Wood	2	785	----	----	2	785
Total, according to material:						
Steel	6	15,789	23	46,360	29	62,149
Iron	1	2,903	21	32,817	22	35,720
Wood	65	74,510	4	4,408	69	78,918
Total	72	93,202	48	83,585	120	176,787
Total, according to rigs:						
Ships	14	29,133	21	43,303	35	72,436
Barks	25	31,980	20	31,396	45	63,376
Barkentines	31	31,304	7	8,886	38	40,190
Brigs and brigantines	2	785	----	----	2	785
Total	72	93,202	48	83,585	120	176,787
Total—1918	76	99,426	49	84,057	125	183,483
1917	82	98,143	52	87,640	134	185,783
1916	87	103,126	42	66,418	129	169,544
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

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, 1840–1919,[a] AND DOCUMENTED ON JUNE 30, 1919.

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
1850–1867			1	177	1	345			2	522
1869	1	1,798							1	1,798
1871			1	953					1	953
1873			1	1,436					1	1,436
1874	1	1,893	2	3,010	1	885			4	5,788
1875	2	3,094			2	4,189			4	7,283
1876	2	3,022							2	3,022
1877	1	1,392	2	3,145					3	4,537
1878			2	1,232					2	1,232
1879			2	2,946					2	2,946
1880			1	1,317	1	470			2	1,787
1881	1	1,924	1	1,819	2	1,069			4	4,812
1882	2	3,975	2	3,789					4	7,764
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			1	1,201	1	1,308			2	2,509
1891			1	1,673					1	1,673
1892			1	1,469	2	1,746	1	495	4	3,710
1893							1	290	1	290
1896					1	707			1	707
1899	1	3,206	2	2,622	1	674			4	6,502
1901	1	3,292			6	6,590			7	9,882
1902	1	3,381			5	5,122			6	8,503
1917					1	1,220			1	1,220
1918					2	2,780			2	2,780
1919					2	2,609			2	2,609
Total	14	29,133	25	31,980	30	30,833	2	785	71	92,731

[a] None built in 1895, 1897, 1903–1909, 1911–1916.

Following is a list of vessels included in the tabulation, the total crews being 1,964, 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, 1919.

SHIPS.

Name.	Crew.	Tonnage.	Year built.	Name.	Crew.	Tonnage.	Year built.
STAR OF LAPLAND	30	3,381	1902	CHILLICOTHE*	30	1,862	1892
STAR OF ZEALAND	30	3,292	1901	*Falls of Clyde**	16	1,809	1878
EDWARD SEWALL	29	3,206	1899	St. Nicholas	10	1,798	1869
JOHN ENA*	29	2,842	1892	*Star of Italy**	16	1,784	1877
MUSCOOTA*	36	2,660	1888	*Star of France**	17	1,766	1877
STAR OF SCOTLAND*	29	2,598	1887	TONAWANDA*	23	1,745	1892
GOLDEN GATE*	25	2,340	1888	*Marion Chilcott**	16	1,737	1882
*Katherine**	20	2,205	1887	*Rhine**	18	1,690	1886
STAR OF GREENLAND*	21	2,179	1892	Bohemia	18	1,633	1875
ANNIE M. REID*	26	2,165	1892	Santa Clara	18	1,535	1876
ARAPAHOE*	14	2,163	1892	*Brynhilda**	21	1,502	1885
WILLIAM T. LEWIS*	25	2,156	1891	Indiana	14	1,487	1876
Benj. F. Packard	15	2,156	1883	Elwell	15	1,461	1875
DUNSYRE*	23	2,149	1891	Llewellyn J. Morse	18	1,392	1877
*James Rolph**	28	2,108	1884				
Charles E. Moody	20	2,003	1882	American built (14 vessels)	277	29,133	
*Star of Russia**	19	1,981	1874	Foreign built (21 vessels)	460	43,303	
Abner Coburn	19	1,972	1882				
Reuce	17	1,924	1881	Total (35 vessels)	737	72,436	
St. Paul	14	1,893	1874				
STAR OF ALASKA*	18	1,862	1886				

SQUARE-RIGGED VESSELS OF THE UNITED STATES, DOCUMENTED ON JUNE 30, 1919—Continued.

BARKS.

Name.	Crew.	Tonnage.	Year built.	Name.	Crew.	Tonnage.	Year built.
MOSHULU*	37	3,116	1904	Emily F. Whitney	13	1,317	1880
MONONGAHELA*	19	2,782	1892	Launberga*	16	1,302	1893
*Phyllis**	23	2,246	1886	St. Katherine	13	1,201	1890
STAR OF ICELAND*	21	2,161	1896	*Oriole**	14	1,152	1881
I. F. Chapman	25	2,155	1882	*Snowdon**	15	1,111	1877
*Star of England**	17	2,123	1893	*Star of Peru**	16	1,027	1863
STAR OF HOLLAND*	19	2,121	1885	CALLAO*	14	1,014	1885
George Curtis	18	1,837	1884	*Diamond Head**	5	1,012	1866
E. B. Sutton	20	1,819	1881	*Star of Chile**	12	1,001	1868
STAR OF FINLAND	17	1,699	1899	Anna Maria d'Abundo*	12	954	1903
Oriental	17	1,688	1874	Independence	4	953	1871
Pactolus	18	1,673	1891	W. B. Flint	13	952	1885
Berlin	17	1,634	1882	C. D. Bryant	12	929	1878
Levi G. Burgess	16	1,616	1877	SEVERN	8	923	1899
GRATIA*	33	1,582	1891	*Doon**	13	848	1877
Guy C. Goss	20	1,572	1879	Narwhal	9	523	1883
Harvard	16	1,566	1884	Charles W. Morgan (W)	27	313	1841
WINDRUSH*	17	1,531	1891	Wanderer (W)	27	303	1878
Hecla	28	1,529	1877	Grey Hound (W)	22	177	1851
BELMONT*	19	1,528	1891				
Olympic	13	1,469	1892	American built (25 vessels)	423	31,980	
Montauk*	21	1,467	1884	Foreign built (20 vessels)	359	31,396	
Louisiana	14	1,436	1873				
McLaurin	17	1,374	1879	Total (45 vessels)	782	63,376	
B. P. Cheney	19	1,322	1874				
*Star of India**	16	1,318	1863				

BARKENTINES.

City of Sydney	17	2,903	1875	Makaweli	12	899	1902
*E. R. Sterling**	18	2,577	1883	Kohala	11	891	1901
Conqueror	13	1,395	1918	Edward May	5	885	1874
Annie M. Rolph	13	1,393	1919	Charles F. Crocker	11	860	1890
Hesperian	13	1,385	1918	Mannie Swan	10	776	1892
ALTA*	13	1,381	1900	*Carioca**	11	762	1866
PRINS VALDEMAR*	13	1,338	1892	Echo	9	707	1896
Centennial	8	1,286	1875	Amos Pegs*	7	685	1877
James Tuft	12	1,274	1901	Benicia	9	674	1899
Herdis	13	1,220	1917	S. G. Wilder	9	604	1887
Cecil P. Stewart	11	1,216	1919	Retriever	11	547	1881
Aurora	13	1,211	1901	Mary Winkelman	9	522	1881
Amazon	14	1,167	1902	Thrasher	10	515	1883
James Johnson	13	1,149	1901	Wrestler	10	470	1880
HAWAII*	13	1,085	1900	Fremont	3	345	1850
Puako	13	1,084	1902				
Lahaina	13	1,067	1901	American built (31 vessels)	340	31,304	
*Coronado**	13	1,058	1874	Foreign built (7 vessels)	88	8,886	
Thos. P. Emigh	12	1,040	1902				
Georgina	10	998	1901	Total (38 vessels)	428	40,190	
Jane L. Stanford	12	970	1892				
John C. Meyer	11	932	1902				
John S. Emory	10	919	1890				

BRIGS AND BRIGANTINES.

Name.	Crew.	Tonnage.	Year built.
Geneva	8	495	1892
Jeanette	9	290	1893
Total (2 vessels)	17	785	

(W)=whaling vessel.

APPENDIX I.

FOREIGN-BUILT VESSELS ADMITTED TO AMERICAN REGISTRY DURING THE YEAR ENDED JUNE 30, 1919, CLASSIFIED IN CHRONOLOGICAL ORDER OF ISSUE OF REGISTRY.

Vessel and crew.	Permanent register.[a]	Rig.	Service.	Gross tons.	Net tons.	When built.	Home port.	Present owner.	Former flag.	Former name.
Act of Aug. 18, 1914.	1918.									
241.[b] Argonne (45)	Aug. 6	St.s...	Frt....	5,754	4,305	1916	New York, N. Y..	Argonne Steamship Co	Japanese	Taifuku Maru.
242. John L. Cann (14)	Aug. 13	St.s...	Tow..	165	77	1891	....do....	American Star Line (Inc.)	British	John L. Cann.
243. J. A. Bisso (2)	Aug. 19	St.s...	Tow..	246	144	1906	New Orleans, La..	Bisso Towboat Co	....do	Alaska.
244. Buda II (35)	Sept. 7	St.s...	Frt....	2,486	1,556	1905	New York, N. Y..	U. S. Shipping Board	Austrian	Buda II.
245. Hugh D. (9)	Sept. 30	St.s...	Frt....	70	31	1908	....do....	American Star Line (Inc.)	British	Hugh D.
246. Lydia (67)	Oct. 8	St.s...	Frt....	3,900	2,432	1902	Baltimore, Md....	U. S. Shipping Board	Austrian	Szell Kalman.
	1919.									
247. Cartagena (20)	May 19	St.s...	Frt....	728	395	1894	New York, N. Y..	North Atlantic Shipping Corp	Colombian	Cartagena.
Act of Feb. 24, 1915.	1918.									
248. Stillwater (3)	July 11	St.s...	Tow..	30	20	1906	Albany, N. Y....	Lake Champlain Transport Co	British	Portneuf.
249. Chagres (8)	July 17	*Sch...	Tnk...	1,161	1,132	.....	Port Arthur, Tex.	Magnolia Petroleum Co	....do	Chagres.
250. Catarina (4)	Aug. 13	Ga.s..	Pas...	67	43	1888	San Diego, Calif..	National City Commercial Co. (Inc.)	Mexican	Catarina.
	1919.									
251. Evolution (22)	Feb. 20	Sch...	Frt....	202	182	1889	Providence, R. I..	Manuel P. Arango	British	Evolution.
252. Gratia (34)	May 13	Bk....	Frt....	1,582	1,462	1891	New York, N. Y..	Gratia Navigation Co. (Inc.)	....do	Gratia.
Act of Sept. 7, 1916.	1918.									
253. Eastern Chief (48)	July 3	St.s...	Frt....	4,660	3,578	1917	Seattle, Wash....	U. S. Shipping Board	Japanese	Yoshida Maru.
254. Eastern Star (48)	July 9	St.s...	Frt....	4,330	3,282	1917	....do....	....do	....do	Meigen Maru.
255. Eastern Sea (48)	July 13	St.s...	Frt....	5,838	4,493	1918	....do....	....do	....do	Taifuku Maru No. 21.
256. Eastern Queen (55)	July 31	St.s...	Frt....	5,797	4,474	1918	....do....	....do	....do	Tofuku Maru.
257. Eastern King (46)	Aug. 12	St.s...	Frt....	3,164	2,313	1918	....do....	....do	....do	Yone Maru No. 7.
258. Easterner (51)	Sept. 4	St.s...	Frt....	5,806	4,558	1918	San Francisco, Calif.	....do	....do	Sedfuku Maru.
259. East Indian (73)	Sept. 10	St.s...	Frt....	8,183	5,966	1918	....do....	....do	....do	Beikoku Maru.
260. Eastport (40)	Oct. 25	St.s...	Frt....	4,385	2,705	1918	Seattle, Wash....	....do	....do	Eastport.
261. Eastern Cross (50)	Nov. 8	St.s...	Frt....	4,576	3,439	1917	....do....	....do	....do	Kirishima Maru No.6.
262. Eastern Shore (70)	Dec. 6	St.s...	Frt....	6,731	5,124	1918	....do....	....do	....do	Eastern Shore.
263. Eastern Light (70)	Dec. 18	St.s...	Frt....	7,192	5,477	1918	....do....	....do	....do	Eastern Light.
264. East Wind (70)	Dec. 18	St.s...	Frt....	5,846	4,484	1918	....do....	....do	....do	East Wind.
	1919.									
265. East Cape (53)	Jan. 28	St.s...	Frt....	5,812	4,484	1918	San Francisco, Calif.	....do	....do	East Cape.
266. Easterling (49)	Feb. 18	St.s...	Frt....	5,847	4,489	1918	Seattle, Wash....	....do	....do	Easterling.

[a] Provisional registers were granted as follows: 1916 (Dec. 30), Argonne; 1918 (May 7), Buda II.
[b] The serial number represents the order in which the vessel was admitted to registry under the acts of Aug. 18, 1914, Feb. 24, 1915, and Sept. 7, 1916.

APPENDIX J.

WAR LOSSES.

1. AMERICAN DOCUMENTED VESSELS DESTROYED BY MINES, SUBMARINES, ETC., DURING THE WAR.

[Chronologically arranged according to date of loss.]

Name of vessel.	Gross tons.	Lives lost.		Date of loss.	Approximate place of loss.	Owner.	Home port.
		American.	Alien.				
William P. Frye (ship) [a]	3,374	0	0	Jan. 28, 1915	29° 45′ N., 24° 50′ W	Samuel S. Sewall et al	Bath, Me.
Evelyn [b]	1,963	0	1	Feb. 19, 1915	53° 52′ N., 6° 7′ E	Harriss, Irby & Vose	New York, N. Y.
Carib [b]	2,087	1	2	Feb. 23, 1915	53° 56′ N., 7° 56′ E	Clyde Steamship Co	Do.
Greenbrier [b]	3,331	0	0	Apr. 2, 1915	North Frisian Islands, North Sea	Coast Steamship Co	Wilmington, N. C.
Seaconnet [b]	2,294	0	0	June 18, 1915	Yarmouth, England	Philadelphia Trust, Safe Deposit & Insurance Co.	Philadelphia, Pa.
Total, 1915 (5 vessels)	13,049	1	3				
Leelanaw	1,923	0	0	July 25, 1915	60° 00′ N., 4° 50′ W	Harby Steamship Co	New York, N. Y.
Vincent (ship) [b]	1,904	0	0	Sept. 27, 1915	Cape Orloff, Russia	do	Do.
Total, 1916 (2 vessels)	3,827	0	0				
Columbian	8,673	0	0	Nov. 8, 1916	44° 18′ N., 9° 20′ W	American-Hawaiian Steamship Co	Do.
Chemung	3,061	0	0	Nov. 26, 1916	36° 37′ N., 1° 35′ W	Harby Steamship Co	Do.
Housatonic	3,143	0	0	Feb. 3, 1917	20 miles south of Bishops Rock Light	Housatonic Steamship Co	Do.
Lyman M. Law (sch.)	1,300	0	0	Feb. 12, 1917	38° 32′ N., 7° 58′ E	W. F. Hull et al	Do.
Algonquin	1,805	0	0	Mar. 12, 1917	40° 52′ N., 7° 32′ W	National Surety Co	Do.
Vigilancia	4,115	6	9	Mar. 16, 1917	48° 57′ N., 9° 34′ W	Gaston, Williams & Wigmore Steamship Corp.	Do.
City of Memphis	5,252	0	0	Mar. 17, 1917	50° 44′ N., 10° 7′ W	Ocean Steamship Co	Savannah, Ga.
Illinois (tank)	5,225	0	0	Mar. 18, 1917	20 miles north of Alderney Island	Texas Steamship Co	New York, N. Y.
Healdton (tank)	4,489	7	12	Mar. 21, 1917	53° 53′ N., 4° 28′ E	Standard Oil Co. (N. J.)	Do.
Aztec	3,727	13	16	Apr. 1, 1917	25 miles northeast of Ouessant Island, France.	Oriental Navigation Corp	Do.
Marguerite (sch.)	1,553	0	0	Apr. 4, 1917	35 miles southwest of Sardinia	Universal Transportation Co	Do.
Missourian	7,924	0	0	do	43° 31′ N., 8° 14′ E	American-Hawaiian Steamship Co	Do.
Seward	3,390	0	0	Apr. 7, 1917	33 miles off Port Vendres, France	Seward Navigation Corp	Do.
Edwin R. Hunt (sch.)	1,132	0	0	do	40 miles off Cape Gata, Spain	Archibald M. Ostrom	Do.
Woodward Abrahams (sch.)	744	0	0	Apr. 22, 1917	52° 00′ N., 24° 00′ W	Winfield S. Pendleton	Do.
Percy Birdsall (sch.)	1,127	0	0	Apr. 26, 1917	Bay of Biscay	Philip Scheuerman	Do.
Vacuum (tank)	2,551	12	11	Apr. 28, 1917	57° 00′ N., 10° 45′ W	Vacuum Oil Co	Do.

Rockingham	4,455	2	0	May 1,1917	55° 12′ N., 12° 30′ W	Garland Steamship Corp	Do.
Hilonian	2,959	2	2	May 16,1917	3 miles off Albenga, Italy	Universal Transportation Co. (Inc.)	Do.
Frances M. (sch.)	1,228	0	0	May 18,1917	35° 55′ N., 11° 25′ W	Francis J. McDonald	Philadelphia, Pa.
Harwood Palmer (sch.)	2,885	0	0	May 23,1917	5 miles southwest of La Blancha Island, France.	France & Canada Steamship Corp	New York, N. Y.
Barbara (sch.)	838	0	0	May 24,1917	36° 11′ N., 7° 58′ W	Archibald M. Ostrom	Do.
Magnus Manson (sch.)	1,751	0	0	May 25,1917	50 miles west by south of Cape St. Vincent	McIntyre Lumber & Export Co	Mobile, Ala.
Margaret B. Rouss (sch.)	701	0	0	May 27,1917	42 miles south of Monaco, France	John Swan	New York, N. Y.
Dirigo (ship)	3,004	1	0	May 31,1917	6 miles southwest of Eddystone Light	Axim Transportation Co	Pensacola, Fla.
Winslow (sch.) [c]	566	0	0	June 6,1917	Off Sunday Island, South Pacific	George E. Billings	San Francisco, Calif.
Petrolite (tank)	3,710	0	0	June 10,1917	35° 17′ N., 8° 29′ W	Standard Oil Co. (N. J.)	New York, N. Y.
Moreni (tank)	4,045	2	2	June 12,1917	17 miles southwest of Tabarca Island, Spain.	do	Do.
A. B. Johnson (sch.) [c]	529	0	0	June 14,1917	2° 00′ S., 150° 00′ W	James Rolph, jr	San Francisco, Calif.
John D. Archbold (tank)	8,374	1	2	June 16,1917	47° 47′ N., 6° 1′ W	Standard Oil Co. (N. J.)	New York, N. Y.
R. C. Slade (sch.) [c]	673	0	0	June 17,1917	2° 00′ N., 150° 00′ W	Pacific Freighters Co	San Francisco, Calif.
Childe Harold (sch.)	781	0	0	June 21,1917	47° 50′ N., 7° 30′ W	William M. Mills et al	New York, N. Y.
Galena (bark)	1,073	0	0	June 25,1917	70 miles southwest of Ouessant Island, France.	Galena Signal Oil Co	Do.
A. B. Sherman (sch.) [d]	611	0	0	June 26,1917	48° 3′ N., 7° 25′ W	Jonathan May & Sons	Philadelphia, Pa.
Total, 1917 (34 vessels)	97,394	46	54				
Orleans	2,993	1	3	July 3,1917	47° 12′ N., 7° 40′ W	Oriental Navigation Corp	New York, N. Y.
Massapequa	3,193	0	0	July 7,1917	46° 40′ N., 9° 00′ W	New York & Porto Rico Steamship Co.	Do.
Mary W. Bowen (sch.)	2,153	0	0	do	47° 20′ N., 8° 10′ W	Robert Kerr	Do.
Manila (sch.) [c]	731	0	0	July 8,1917	10° 00′ N., 144° 00′ W	Pacific Freighters Co	San Francisco, Calif.
Beluga (bkn.) [c]	507	0	0	July 9,1917	26° 00′ S., 169° 00′ E	W. O. Stevenson	New York, N. Y.
Hildegard (bkn)	622	0	0	July 10,1917	Off Start Point, England	Hildegard Shipping Co. (Inc.)	New Orleans, La.
Kansan	7,708	2	2	do	Off Belle Ile, France	American-Hawaiian Steamship Co	New York, N. Y.
Grace	1,861	1	2	July 12,1917	5 miles north of Andros Island, Greece	Standard Commercial Steamship Corp.	Do.
Florence Creadick (sch.) [d]	732	0	0	July 15,1917	20 miles north of Ile de Bas, France	Jonas Steelman et al	Philadelphia, Pa.
Encore (sch.) [c]	651	0	0	July 19,1917	21° 00′ S., 169° E	Rolph Navigation Co	San Francisco, Calif.
Augustus Welt (sch.)	1,221	0	0	July 21,1917	40° 30′ N., 7° 20′ W	Augustus Welt Corp	New York, N. Y.
John Twohy (sch.)	1,019	0	0	do	35° 55′ N., 23° 20′ W	A. D. Cummins	Philadelphia, Pa.
Carmela (ga. s.)	1,379	0	0	July 27,1917	25 miles southwest of Lizards, England	Arthur A. Miller	New York N. Y.
John Hays Hammond (sch.)	132	0	0	do	350 miles northwest of Ireland	David W. Simpson	Boston, Mass.
Motano (tank)	2,730	14	11	July 31,1917	20 miles southeast of Start Point, England	Standard Oil Co. (N. J.)	New York, N. Y.
Campana	3,675	0	0	Aug. 6,1917	143 miles west of Ile de Re, France	do	Do.
Christiane (bark)	964	0	0	Aug. 7,1917	37° 40′ N., 20° 40′ W	Bennett Trading Co	Portland, Me.
Carl F. Cressy (sch.)	898	0	0	Aug. 23,1917	45° 52′ N., 11° 30′ W	France & Canada Steamship Corp	New York, N. Y.
Laura C. Anderson (sch.)	960	0	0	Aug. 29,1917	49° 43′ N., 0° 55′ W	William J. Quillin et al	Philadelphia, Pa.
William H. Clifford (sch.)	1,593	0	0	Sept. 8,1917	48° 30′ N., 12° 20′ W	Atlantic Shipping Co	New York, N. Y.
Wilmore	5,398	0	0	Sept. 12,1917	7 miles northeast of Hormigas Island, Spain	Wilmore Steamship Co. (Inc.)	Do.
Platuria (tank)	3,445	4	5	Sept. 15,1917	35° 8′ N., 9° 15′ W	Standard Oil Co. (N. J.)	Do.
Ann J. Trainer (sch.)	426	0	0	Sept. 16,1917	Off Brest, France	Maritime Carriers Co	Do.
Henry Lippitt (sch.)	895	0	0	Sept. 23,1917	48° 17′ N., 10° 5′ W	Henry Talmadge & Co	Do.
Paolina (bark)	1,337	0	0	Sept. 25,1917	48° 37′ N., 8° 45′ W	Robert Badcock	Do.
Annie F. Conlon (sch.)	591	0	0	Oct. 3,1917	15 miles southeast of Scilly Islands	Freeman R. Garrett	Portsmouth, N. H.

[a] Sunk by German cruiser Prinz Eitel Friedrich. [b] Sunk by mine. [c] Sunk by German raider Wolf. [d] Wreck sold to aliens.

1. American Documented Vessels Destroyed by Mines, Submarines, etc., During the War—Continued.

Name of vessel.	Gross tons.	Lives lost.		Date of loss.	Approximate place of loss.	Owner.	Home port.
		American.	Alien.				
Lewis Luckenbach	4,415	6	4	Oct. 11, 1917	Off Brest, France	Luckenbach Co	New York, N. Y.
St. Helens	1,497	3	21	Oct. 15, 1917	45° 57′ N., 11° 19′ W	Tiltro Limited	Do.
Jennie E. Righter (sch.)	647	0	0	Oct. 16, 1917	43° 54′ N., 10° 2′ W	Shepherd & Morse Lumber Co	Boston, Mass.
Antilles	6,878	37	30	Oct. 17, 1917	48° 10′ N., 11° 20′ W	Southern Pacific Co	New York, N. Y.
Fannie Prescott (sch.)	404	0	0	Oct. 25, 1917	32° 47′ N., 9° 41′ W	Mandingo Development Corp	Do.
D. N. Luckenbach	2,933	2	3	Oct. 27, 1917	46° 35′ N., 7° 40′ W	Luckenbach Co	Do.
Rochester	2,551	12	11	Nov. 2, 1917	55° 28′ N., 18° 00′ W	Rochester Navigation Corp	New York, N. Y
John H. Kirby (bark) [a]	1,395	0	0	Nov. 15, 1917	320 miles southeast of Port Elizabeth, Africa	Gaston, Williams & Wigmore Steamship Corp.	Do.
Margaret L. Roberts (sch.)	535	0	0	Nov. 16, 1917	33° 20′ N., 19° 30′ W	W. S. Roberts	Crisfield, Md.
Schuylkill	2,720	0	0	Nov. 21, 1917	36° 37′ N., 1° 30′ E	Schuylkill Steamship Corp	New York, N. Y.
Actaeon	4,999	4	0	Nov. 25, 1917	45° 20′ N., 10° 29′ W	U. S. Shipping Board	Do.
Albert Watts (tank) [b]	3,302	0	1	Nov. 28, 1917	Near Genoa, Italy	American-Italian Commercial Corp	Do.
Owasco	4,630	0	2	Dec. 10, 1917	37° 28′ N., 0° 13′ W	U. S. Shipping Board	Do.
Harry Luckenbach	2,798	2	6	Jan. 6, 1918	Off Penmarch Point, France	Luckenbach Co	Do.
Julia Frances (sch.)	183	0	0	Jan. 27, 1918	38° 00′ N., 11° 00′ W	Victor R. Moderno	Do.
Alamance	4,455	0	6	Feb. 5, 1918	4 miles east The Maidens, Ireland	Garland Steamship Corp	Do.
Atlantic Sun (tank)	2,333	1	1	Feb. 24, 1918	55° 55′ N., 7° 9′ W	Sun Co	Philadelphia, Pa.
Santa Maria (tank)	5,383	0	0	Feb. 25, 1918	55° 14′ N., 6° 9′ W	....do	Do.
A. E. Whyland (sch.)	130	0	0	Mar. 13, 1918	Off Teneriffe, Canary Islands	A. Frank Clark	New Bedford, Mass.
A. A. Raven	3,405	0	7	Mar. 14, 1918	Off Wolf Rock Light, England	Girard Trust Co., Trustee	New York, N. Y.
Chattahoochee	8,232	0	0	Mar. 23, 1918	Off Penzance, England	U. S. Shipping Board	Do.
Lakemoor	1,985	46	0	Apr. 11, 1918	2¾ miles off Crossley Light, Scotland	....do	Do.
City of Pensacola (gas.)	705	0	0	Apr. 29, 1918	Near Garrucha, Spain	City of Pensacola Ship Co	Port Arthur, Tex.
Tyler	3,928	7	4	May 2, 1918	40° 24′ N., 5° 41′ E	Old Dominion Steamship Co	New York, N. Y.
Wm. Rockefeller (tank)	7,157	3	0	May 18, 1918	57° 44′ N., 10° 23′ W	Standard Oil Co. (N. J.)	Do.
John G. McCullough	1,985	0	1	....do	8 miles south of Ile d'Yeu, France	J. G. McCullough Steamship Co	Do.
Hattie Dunn (sch.)	435	0	0	May 25, 1918	37° 00′ N., 75° 5′ W	George Elliot et al	Thomaston, Me.
Hauppauge (sch.)	1,446	0	0	....do	38 miles southeast Blackfish Bank, Md	East Coast Transportation Co	New York, N. Y.
Isabel B. Wiley (sch.)	776	0	0	June 2, 1918	39° 10′ N., 73° 7′ W	Atlas Shipping Corp	Philadelphia, Pa.
Sam C. Mengel (sch.)	915	0	0	....do	38° 7′ N., 73° 46′ W	Axim Transportation Co	Pensacola, Fla.
Jacob M. Haskell (sch.)	1,778	0	0	....do	50 miles southeast of Barnegat, N. J	Lewis K. Thurlow	Boston, Mass.
Edward H. Cole (sch.)	1,791	0	0	....do	....do	....do	Do.
Carolina	5,093	10	3	....do	38° 56′ N., 73° 5′ W	New York & Porto Rico Steamship Co	New York, N. Y.
Winneconne	1,869	0	0	....do	39° 26′ N., 72° 5′ W	Winneconne Steamship Corp	Do.
Argonaut	4,826	0	0	June 5, 1918	49° 12′ N., 6° 45′ W	Jason Navigation Corp	Do.
Pinar del Rio	2,504	0	0	June 8, 1918	36° 15′ N., 73° 55′ W	American & Cuban Steamship Line	Do.
Californian [c]	5,658	0	0	June 22, 1918	46° 17′ N., 2° 10′ W	American-Hawaiian Steamship Co	Do.
Total, 1918 (63 vessels)	154,490	155	123				

Westover	5,769	8	0	July 11, 1918		U. S. Shipping Board	Seattle, Wash.
Lansford (*sch.)	830	0	0	July 21, 1918	4 miles off Cape Cod, Mass	Lehigh Coal & Navigation Co	New York, N. Y.
740 (*sch.)	680	0	0	do	do	Lehigh Valley Transportation Co	Perth Amboy, N.J.
766 (bge.)	527	0	0	do	do	do	Do.
703 (*sch.)	934	0	0	do	do	do	Do.
Robert and Richard (sch.)	140	0	0	July 22, 1918	25 miles southeast of Cape Porpoise, Me	Chisholm Corp. et al	Gloucester, Mass.
Tippecanoe	6,187	1	0	July 25, 1918	47° 1′ N., 15° 40′ W	U. S. Shipping Board	San Francisco, Calif.
Lake Portage	1,998	3	0	Aug. 3, 1918	47° 15′ N., 4° 44′ W	do	Duluth, Minn.
Berwind	2,589	4	0	do	47° 50′ N., 4° 43′ W	New York & Porto Rico Steamship Co	New York, N. Y.
Muriel (sch.)	120	0	0	do	45 miles west of Seal Island, Nova Scotia	Atlantic Maritime Co	Boston, Mass.
Annie Perry (sch.)	116	0	0	do	30 miles west of Seal Island, Nova Scotia	Philip P. Manta	Do.
Rob Roy (ga. s.)	111	0	0	do	35 miles west of Seal Island, Nova Scotia	Gorton-Pew Vessels Co	Gloucester, Mass.
Cruiser (ga. s.)	28	0	0	do	41° 45′ N., 67° 10′ W	Bridget A. Barnwell	Boston, Mass.
Aleda May (ga. s.)	31	0	0	do	do	L. J. Costa, jr	Do.
O. B. Jennings (tank)	10,289	0	1	Aug. 4, 1918	34° 59′ N., 73° 18′ W	Standard Oil Co. (N.J.)	New York, N. Y.
Stanley M. Seaman (sch.)	1,060	0	0	Aug. 5, 1918	do	Lewis K. Thurlow	Boston, Mass.
William H. Starbuck (ga. s.)	53	0	0	Aug. 10, 1918	41° 45′ N., 67° 10′ W	Robert A. Sanchez, jr	Providence, R. I.
Earl and Nettie (ga. s.)	24	0	0	do	do	Anton Henriksen	New York. N. Y.
Katie L. Palmer (ga. s.)	31	0	0	do	do	F. S. Willard Co	Portland, Me.
Mary E. Sennett (ga. s.)	27	0	0	do	do	John F. O'Hara	Boston, Mass.
Progress (ga. s.)	34	0	0	do	do	Robert L. Jackson	Vineyard Haven, Mass.
Reliance (ga. s.)	19	0	0	do	do	John Nelson	Gloucester, Mass.
Dorothy B. Barrett (sch.)	2,088	0	0	Aug. 14, 1918	Off Anglesea, N. J	Gardiner G. Deering	Bath, Me.
Montanan	6,659	5	0	Aug. 15, 1918	46° 47′ N., 13° 42′ W	American-Hawaiian Steamship Co	New York, N. Y.
Madrugada (ga. s.)	1,613	0	0	do	37° 50′ N., 74° 55′ W	Gravenhoist & Co	Do.
Cubore	7,117	1	8	do	46° 52′ N., 12° 00′ W	Ore Steamship Corp	Do.
Joseph Cudahy (tank)	3,302	1	0	Aug. 17, 1918	46° 27′ N., 17° 51′ W	American-Italian Commercial Corp	Do.
A. Piatt Andrew (sch.) [d]	141	0	0	Aug. 20, 1918	55 miles south of Canso, Nova Scotia	Chisholm Corp. et al	Gloucester, Mass.
Francis J. O'Hara, jr. (ga. s.) [d]	117	0	0	do	do	Jose P. Mesquita et al	Do.
Sylvania (sch.) [d]	136	0	0	Aug. 21, 1918	90 miles southeast of Canso, Nova Scotia	Jeffry F. Thomas et al	Do.
Lake Edon	2,371	5	11	do	4 miles off west coast of Cornwall, England	U. S. Shipping Board	Cleveland, Ohio.
J. J. Flaherty (sch.)	162	0	0	Aug. 25, 1918	30 miles northwest of St. Pierre-Miquelon	Gorton-Pew Vessels Co	Gloucester, Mass.
Rush (ga. s.)	145	0	0	Aug. 26, 1918	44° 30′ N., 58° 2′ W	Commonwealth Fisheries Co	Boston, Mass.
Onega	3,636	0	26	Aug. 30, 1918	Off Newquay, Cornwall, England	Macona Steamship Co	New York, N. Y.
Lake Owens	2,308	0	5	Sept. 2, 1918	3 miles off Trevose Head, Cornwall, England.	U. S. Shipping Board	Detroit, Mich.
Dora	7,037	0	0	Sept. 4, 1918	400 miles off French coast	do	New York, N. Y.
Buenaventura	4,876	15	0	Sept. 16, 1918	44° 36′ N., 13° 10′ W	United States Steel Products Co	Do.
Kingfisher	353	0	0	Sept. 20, 1918	43° 31′ N., 61° 53′ W	East Coast Fisheries Co	Portland, Me.
Ticonderoga	5,724	[e] 217	0	Sept. 30, 1918	44° 28′ N., 31° 27′ W	U. S. Shipping Board	New York, N. Y.
San Saba c	2,458	9	21	Oct. 4, 1918	15 miles southeast of Barnegat, N. J	Mallory Steamship Co	Do.
Lucia	6,744	4	0	Oct. 17, 1918	38° 5′ N., 50° 50′ W	U. S. Shipping Board	Do.
Saetia c	2,873	0	0	Nov. 9, 1918	10 miles southeast of Fenwick Island, Md	do	Do.
Lake Placid c	2,534	0	0	May 19, 1919	20 miles off Gothenburg, Sweden	do	Do.
Total, 1919 (43 vessels)	93,991	273	72				
Grand total (147 vessels)	362,751	475	252				

[a] Sunk by German raider Wolf. [b] Torpedoed, towed into port and burned. [c] Sunk by mine. [d] Sunk by German raider Triumph. [e] 102 Army and 115 Navy.

THE FOLLOWING NAMED UNDOCUMENTED AMERICAN VESSELS WERE ALSO DESTROYED.

Name of vessel.	Gross tons.	Lives lost.	Date of loss.	Approximate place of loss.	Owner.	Home port.
Lanao (Philippine)	692	0	Oct. 28,1916	36° 45′ N., 8° 25′ W	Findlay Miller Steamship Co	Manila, P. I.
Alcedo	983	21	Nov. 5,1917	75 miles west of Belle Ile, France	U. S. Navy	Washington, D. C.
Villamer (Philippine)	3,401	2	Nov. 7,1917	34° 54′ N., 27° 6′ E	Tabacalera Steamship Co	Manila, P. I.
Rizal (Philippine)	2,794	3	Nov. 9,1917	5 miles north of Cavally, Algeria	do	Do.
Jacob Jones	[a] 1,150	66	Dec. 6,1917	49° 23′ N., 6° 13′ W	U. S. Navy	Washington, D. C.
President Lincoln	18,167	26	May 31,1918	500 miles west of Brest, France	do	Do.
Texel (Dutch requisitioned)	3,210	0	June 2,1918	Off New Jersey	U. S. Shipping Board	Do.
Covington	16,339	6	July 1,1918	47° 21′ N., 7° 44′ W	U. S. Navy	Do.
San Diego [b]	[a] 13,680	6	July 19,1918	Off Fire Island, N. Y	do	Do.
Merak (Dutch requisitioned)	3,023	0	Aug. 6,1918	15 miles southeast of Cape Hatteras	U. S. Shipping Board	Do.
Diamond Shoals Light Vessel No. 71	[a] 590	0	do	Diamond Shoals, N. C	Department of Commerce	Do.
Tampa [b]	1,181	[b] 118	Sept. 26,1918	Bristol Channel	Coast Guard	Do.
Yselhaven [b] (Dutch requisitioned)	3,557	10	Mar. 14,1919	55° 12′ N., 0° 52′ W	U. S. Shipping Board	Do.
Total (13 vessels)	68,767	258				

[a] Displacement.

[b] Sunk by mine.

APPENDIX K.

MISCELLANEOUS.

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

1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821–1919.

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 1919 is furnished by the Bureau of Foreign and Domestic Commerce of the Department of Commerce:

Year.	Imports.			Exports.[a]		
	In cars and other land vehicles.[b]	In American vessels.	In foreign vessels.	In cars and other land vehicles.[b]	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		81,951,319	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	52,574,389		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		180,625,368	280,708,368

[a] Stated in mixed gold and currency values from 1862 to 1879, inclusive.
[b] Not separately stated prior to July 1, 1870.

1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821–1919—Continued.

Year.	Imports.			Exports.[a]		
	In cars and other land vehicles.[b]	In American vessels.	In foreign vessels.	In cars and other land vehicles.[b]	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	177,286,302	445,416,783	10,015,089	168,044,799	393,929,579
1873	17,070,548	174,789,834	471,806,765	10,799,430	171,566,758	494,915,886
1874	14,513,335	176,027,778	405,320,135	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	501,838,949
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	23,003,048	136,002,290	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	121,365,493	543,292,216	21,389,666	72,991,253	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	590,538,362	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	1,064,590,307
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	83,631,985	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	151,919,738	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	281,334,841	1,244,934,571	302,233,277	290,597,071	2,175,758,962
1916	197,908,390	449,872,543	1,550,102,577	507,416,794	499,035,673	3,327,030,498
1917	304,616,383	648,256,478	1,706,482,324	825,292,063	803,829,990	4,660,926,341
1918	385,228,158	710,777,017	1,849,650,228	776,438,160	977,718,929	4,165,554,282
1919	478,684,231	875,602,857	1,741,584,516	889,723,806	1,618,126,299	4,725,488,413

1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821–1919—Continued.

Year.	Total United States imports and exports.					
	By sea.[a]				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	143,059,693	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	268,188,899	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	309,021,059	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	381,516,788	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	485,793,548	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	20,388,235	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	316,660,281	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	194,356,746	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

[a] Includes also all water-borne foreign commerce of ports on the Great Lakes.

1. Foreign Carrying Trade of the United States, 1821–1919—Continued.

Year.	Total United States imports and exports.					
	By sea.[a]				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	1,525,753,766	1,714,829,043	11.0	100,894,925	1,815,723,968
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	214,695,032	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	2,230,938,633	10.3	220,976,009	2,451,914,642
1905	290,607,946	2,103,201,462	2,393,809,408	12.1	242,265,329	2,636,074,737
1906	322,347,205	2,367,667,354	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	260,837,147	2,721,962,475	2,982,799,622	8.7	319,132,528	3,301,932,150
1911	280,206,464	2,930,436,506	3,210,642,970	8.7	365,903,334	3,576,546,304
1912	322,451,565	3,109,018,858	3,431,470,423	9.4	426,116,920	3,857,587,343
1913	381,032,496	3,392,028,429	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	1,452,086,468	6,367,408,665	7,819,495,133	18.6	1,129,908,446	8,949,403,579
1918	1,688,495,946	6,015,204,510	7,703,700,456	21.9	1,161,666,318	8,865,366,774
1919	2,493,729,156	6,467,072,929	8,960,802,085	27.8	1,368,418,037	10,329,220,122

2. Tonnage of American and Foreign Vessels Entered and Cleared in the Foreign Trade of the United States, Fiscal Years 1821–1919.

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

Year.	Entered.				Cleared.				Total.			
	American.	Per cent.	Foreign.	Per cent.	American.	Per cent.	Foreign.	Per. cent	American.	Per cent.	Foreign.	Per cent.
1821	765,098	91	81,526	9	804,947	91	83,073	9	1,570,045	90	164,604	10
1822	787,961	89	100,541	11	813,748	90	97,490	10	1,501,709	88	198,031	12
1823	775,271	86	119,468	14	810,761	87	119,740	13	1,586,032	86	239,208	14
1824	850,033	89	102,367	11	919,278	89	102,552	11	1,769,311	90	204,919	10
1825	880,754	90	92,927	10	960,366	90	95,080	10	1,841,120	91	188,007	9
1826	942,206	89	105,654	11	953,012	90	99,417	10	1,895,218	89	205,071	11
1827	918,361	86	137,589	14	980,542	88	131,250	12	1,898,903	88	268,839	12
1828	868,381	86	150,223	14	897,404	86	151,030	14	1,765,785	85	301,253	15
1829	872,949	86	130,743	14	944,799	87	133,006	13	1,817,748	87	263,749	13
1830	967,227	88	131,900	12	971,760	88	133,436	12	1,938,987	88	265,336	12
1831	922,952	76	481,948	24	972,504	78	271,994	22	1,895,456	77	553,942	23
1832	949,622	70	393,038	30	974,865	71	387,505	29	1,924,487	71	780,543	29
1833	1,111,441	69	496,705	31	1,142,160	69	497,039	31	2,253,601	68	993,744	32
1834	1,074,670	65	568,052	35	1,134,020	66	577,700	34	2,208,690	66	1,145,752	34
1835	1,352,653	68	641,310	32	1,400,517	69	630,824	31	2,753,270	68	1,280,134	32
1836	1,255,384	64	680,213	36	1,315,523	66	674,721	34	2,570,907	65	1,354,934	35
1837	1,299,720	62	765,703	38	1,266,622	62	756,232	38	2,566,342	63	1,521,995	37
1838	1,302,764	68	592,110	32	1,408,761	69	604,166	31	2,711,735	69	1,196,276	31
1839	1,491,279	71	624,814	29	1,477,928	71	611,839	29	2,969,207	71	1,236,653	29
1840	1,576,946	68	712,363	32	1,647,009	69	706,486	31	3,223,955	69	1,418,849	31
1841	1,631,909	68	736,444	32	1,634,156	68	736,849	32	3,266,065	69	1,473,293	31
1842	1,510,111	67	732,775	33	1,536,451	67	740,497	33	3,046,562	68	1,473,272	32
1843	1,143,523	68	534,752	32	1,268,083	70	523,949	30	2,411,606	70	1,058,701	30
1844	1,977,438	68	916,922	32	2,010,924	68	906,814	32	3,988,362	69	1,823,736	31
1845	2,035,486	69	910,536	31	2,053,977	69	930,275	31	4,089,463	69	1,840,838	31
1846	2,151,114	69	959,739	31	2,221,028	69	968,178	31	4,372,142	70	1,927,917	30
1847	2,101,359	66	1,220,346	34	2,202,393	65	1,176,605	35	4,303,752	65	2,396,951	35

2. TONNAGE OF AMERICAN AND FOREIGN VESSELS ENTERED AND CLEARED IN THE FOREIGN TRADE OF THE UNITED STATES, FISCAL YEARS 1821–1919—Continued.

Year.	Entered.				Cleared.				Total.			
	American.	Per cent.	Foreign.	Per cent.	American.	Per cent.	Foreign.	Per cent.	American.	Per cent.	Foreign.	Per cent.
1848.....	2,393,482	63	1,405,191	37	2,461,280	63	1,404,159	37	4,854,762	64	2,809,350	36
1849.....	2,658,321	61	1,710,515	39	2,753,724	62	1,675,709	38	5,412,045	62	3,386,224	38
1850.....	2,573,016	59	1,175,623	41	2,632,788	60	1,728,214	40	5,205,804	60	3,503,837	40
1851.....	3,054,349	61	1,939,091	39	3,200,519	62	1,929,535	38	6,254,868	62	3,868,626	38
1852.....	3,235,522	61	2,057,358	39	3,230,590	61	2,047,575	39	6,466,112	62	4,104,933	38
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	4,948,878	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	6,165,924	70	2,624,005	30	12,087,209	71	4,977,916	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	3,090,948	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	6,812,090	53
1866.....	3,372,060	43	4,410,424	57	3,383,176	43	4,438,384	57	6,755,236	44	8,848,808	56
1867.....	3,455,052	44	4,318,673	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	5,347,694	62	3,381,363	38	4,372,570	62	6,784,031	39	10,720,264	61
1870.....	3,486,038	38	5,669,621	62	3,506,929	38	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	3,756,564	30	8,065,132	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	16,278,728	70
1876.....	3,611,436	28	8,899,312	72	3,732,415	29	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	75	3,872,203	26	10,935,318	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	29,219,229	81
1881.....	3,253,584	17	15,065,620	83	3,375,535	18	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	26,359,857	80
1884.....	3,202,293	22	11,866,535	78	3,236,641	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	21	24,456,029	79
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	21	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	23	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	78	4,536,151	22	16,624,882	78	9,006,106	22	33,168,351	78
1893.....	4,358,686	22	15,223,130	78	4,403,362	22	15,357,384	78	8,762,048	22	30,588,514	78
1894.....	4,654,679	23	15,334,984	77	4,739,918	23	15,531,772	77	9,394,597	23	30,866,756	77
1895.....	4,472,830	23	14,822,085	77	4,504,227	23	15,246,319	77	8,977,057	23	30,068,404	77
1896.....	5,196,320	25	15,792,864	75	5,329,599	25	16,084,986	75	10,525,919	25	31,877,850	75
1897.....	5,525,328	23	18,234,922	77	5,618,142	24	18,091,053	76	11,143,470	23	36,325,975	77
1898.....	5,240,046	20	20,339,353	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	22,072,223	78	12,344,570	22	44,099,576	78
1901.....	6,381,305	21	23,386,716	79	6,417,347	22	23,402,546	78	12,798,652	21	46,789,262	79
1902.....	6,961,200	23	23,693,232	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	27,897,500	78	16,208,213	22	56,404,100	78
1908.....	8,473,227	22	30,075,968	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.....	8,888,459	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
1918.....	19,283,530	42	26,172,407	58	19,206,233	42	26,807,749	58	38,489,763	42	52,980,156	58
1919.....	19,694,012	44	25,259,605	56	21,326,734	45	26,595,996	55	41,020,746	44	51,855,601	56

3. WATER-BORNE IMPORTS AND DOMESTIC EXPORTS OF UNITED STATES, BY NATIONALITY OF VESSELS, FISCAL YEARS 1915–1919.

Nationality of vessels.	1915	1916	1917	1918	1919
IMPORTS.					
American	$281,334,841	$449,872,543	$648,256,478	$710,777,017	$875,602,857
Austrian	3,025,275	7,408	19,153	190	11,472
Belgian	7,053,131	2,875,491	1,070,358	218,806	381,871
British	694,219,523	830,168,016	774,803,474	501,280,540	505,902,238
Danish	(a)	55,359,614	91,919,443	197,297,448	139,259,993
Dutch	124,687,344	110,888,920	113,965,111	111,809,995	117,250,889
French	68,341,417	91,006,098	100,779,934	89,931,305	81,759,679
German	31,081,662	416,149	907,550	11,358	507
Italian	49,072,575	45,878,084	32,432,151	24,622,487	21,292,866
Japanese	68,080,817	177,059,632	289,277,360	476,875,651	527,152,162
Norwegian	115,729,291	140,805,658	171,413,038	289,426,606	190,609,765
Spanish	(a)	14,284,512	26,489,080	23,830,878	24,583,180
All others	83,643,536	81,352,995	103,405,672	134,344,964	133,379,894
Total	1,526,269,412	1,999,975,120	2,354,738,802	2,560,427,245	2,617,187,373
DOMESTIC EXPORTS.					
American	284,410,965	490,559,739	794,604,353	961,698,576	1,584,401,547
Austrian	877,044	.....	.....	.....	.....
Belgian	15,439,965	31,946,584	60,786,422	84,241,569	110,572,726
British	1,394,215,920	2,110,758,160	2,858,235,887	2,428,564,249	2,561,116,671
Danish	(a)	62,936,331	94,459,741	155,365,743	182,857,080
Dutch	108,386,976	115,397,348	126,876,635	59,341,632	118,534,296
French	126,517,813	186,660,775	274,820,210	258,288,268	227,031,509
German	19,917,218	.....	1,049,340	.....	.....
Italian	75,668,508	142,661,161	178,477,022	206,463,364	221,339,443
Japanese	36,004,988	140,344,245	240,065,407	310,413,437	378,120,498
Norwegian	158,416,411	244,270,259	371,821,646	307,106,072	422,945,570
Spanish	(a)	56,811,688	117,896,809	129,169,640	103,778,532
All others	210,972,956	205,076,001	312,662,014	192,876,617	306,340,658
Total	2,430,828,764	3,787,422,291	5,431,755,486	5,093,529,167	6,217,038,530
TOTAL IMPORTS AND DOMESTIC EXPORTS.					
American	565,745,806	940,432,282	1,442,860,831	1,672,475,593	2,460,004,404
Austrian	3,902,319	7,408	19,153	190	11,472
Belgian	22,493,096	34,822,075	61,856,780	84,460,375	110,954,597
British	2,088,435,443	2,940,926,176	3,633,039,361	2,929,844,789	3,067,018,909
Danish	(a)	118,295,945	186,379,184	352,663,191	322,117,073
Dutch	233,074,320	226,286,268	240,841,746	171,151,627	235,785,185
French	194,859,230	277,666,873	375,600,144	348,219,573	308,791,188
German	50,998,880	416,049	1,956,890	11,358	507
Italian	124,741,083	188,339,245	210,909,173	231,085,851	242,632,309
Japanese	104,085,805	317,403,877	529,342,767	787,289,088	905,272,660
Norwegian	274,145,702	385,075,917	543,234,684	596,532,678	613,555,335
Spanish	(a)	71,096,200	144,385,889	153,000,518	128,361,712
All others	294,616,492	286,428,996	416,067,686	327,221,581	439,720,552
Total	3,957,098,176	5,787,397,411	7,786,494,288	7,653,956,412	8,834,225,903

a Included in "All others."

4. WATER-BORNE IMPORTS AND EXPORTS OF THE UNITED STATES, BY MONTHS, FISCAL YEARS 1915–1919.

Month.	1915	1916	1917	1918	1919
IMPORTS.					
July	$147,536,541	$129,867,009	$165,192,171	$197,069,889	$206,461,331
August	115,826,908	127,410,886	178,932,335	238,206,221	230,231,378
September	127,525,688	135,594,597	143,397,959	202,784,941	214,631,339
October	124,726,464	129,897,060	154,089,629	186,778,707	198,989,884
November	113,204,516	138,015,316	151,798,183	185,892,535	204,857,337
December	102,040,876	155,974,296	180,655,485	198,927,635	171,511,272
January	110,757,664	170,306,329	218,879,283	207,533,878	167,596,747
February	113,037,111	179,893,028	178,828,556	182,094,335	195,600,794
March	145,461,525	195,510,428	241,637,380	210,497,310	228,561,878
April	151,113,615	200,431,659	224,042,802	243,210,494	242,372,908
May	130,896,905	209,358,124	244,416,626	283,920,078	296,069,604
June	144,141,599	227,716,388	272,868,393	223,511,222	260,302,901
Total	1,526,269,412	1,999,975,120	2,354,738,802	2,560,427,245	2,617,187,373
EXPORTS.					
July	131,259,033	236,858,862	395,392,484	322,433,982	434,739,871
August	86,157,767	229,904,980	448,145,392	421,016,010	436,579,070
September	135,526,346	268,871,938	457,762,548	399,476,281	460,936,672
October	173,709,455	299,910,710	433,360,153	484,507,771	409,470,662
November	182,273,846	294,344,741	453,127,680	456,565,307	432,869,919
December	224,833,227	317,431,353	453,794,875	496,146,660	488,386,626
January	244,300,755	285,528,322	542,290,995	453,418,741	555,945,094
February	268,652,373	356,056,514	404,718,922	368,190,370	538,928,437
March	268,064,718	362,628,810	469,214,320	451,173,987	559,574,222
April	267,849,664	342,803,692	458,967,394	425,639,423	649,390,643
May	247,353,319	419,831,802	462,987,586	464,680,399	540,588,115
June	236,375,560	411,894,367	484,993,982	400,024,280	836,205,381
Total	2,466,356,063	3,826,066,091	5,464,756,331	5,143,273,211	6,343,614,712
TOTAL IMPORTS AND EXPORTS.					
July	278,795,574	366,725,871	560,584,655	519,503,871	641,201,202
August	201,984,675	357,315,866	627,077,727	659,222,231	666,810,448
September	263,052,034	404,466,535	601,160,507	602,261,222	675,568,011
October	298,435,919	429,807,770	587,449,782	671,286,478	608,460,546
November	295,478,362	432,360,057	604,925,863	642,457,842	637,727,256
December	326,874,103	473,405,649	634,450,360	695,074,295	659,897,898
January	355,058,419	455,834,651	761,170,278	660,952,619	723,541,841
February	381,689,484	535,949,542	583,547,478	550,284,705	734,529,231
March	413,526,243	558,139,238	710,851,700	661,671,297	788,136,100
April	418,963,279	543,235,351	683,010,196	668,849,917	891,763,551
May	378,250,224	629,189,926	707,404,212	748,600,477	836,657,719
June	380,517,159	639,610,755	757,862,375	623,535,502	1,096,508,282
Total	3,992,625,475	5,826,041,211	7,819,495,133	7,703,700,456	8,960,802,085

5. Activity of British Shipping.

The following table shows the net tonnage of ships which cleared with cargo from ports in the United Kingdom to the countries indicated for the seven months ended July 31, 1914 and 1919, showing the British shipping and the total shipping, respectively, so cleared:

FOREIGN COUNTRIES.

To—	Seven months ended July 31—			
	1914		1919	
	British.	Total.	British.	Total.
Russian:				
Northern ports	483,750	1,703,952	142,882	187,855
Southern ports	120,481	177,835	39,891	39,891
Pacific ports	34,304	51,978	15,246	15,246
Sweden	160,825	1,337,750	43,503	556,821
Norway	148,716	989,230	118,197	619,104
Denmark	103,353	1,124,153	87,046	766,578
Germany	1,646,810	3,306,654	17,181	32,404
Netherlands	1,074,805	2,064,582	348,389	777,770
Belgium	1,115,758	1,739,457	348,387	579,778
France	3,409,592	5,618,997	2,987,582	5,718,518
Spain	442,751	1,252,465	139,260	518,781
Portugal	161,862	424,217	71,836	187,830
Italy	1,192,036	2,694,774	1,244,776	1,580,245
Austria-Hungary	45,989	330,107	40,315	43,667
Greece	84,083	209,608	60,597	91,453
Turkey	242,143	275,322	67,997	71,083
Roumania	111,770	181,099	12,795	18,909
Egypt	904,815	996,748	.....	.....
Algeria	196,705	392,588	91,652	206,591
Portuguese East Africa	211,392	211,392	74,785	78,021
United States of America	3,060,626	4,253,959	1,654,453	1,881,245
Mexico, foreign West Indies, and Central America	259,895	328,327	49,903	54,223
Colombia	31,560	31,983	.....	.....
Brazil	604,977	653,302	138,934	190,717
Peru	129,129	149,167	16,804	16,804
Chile	97,998	308,804	65,498	65,498
Uruguay	200,795	218,781	70,188	86,540
Argentine Republic	1,714,457	2,124,348	415,650	538,580
China	50,229	61,985	35,102	35,102
Java	48,944	202,427	17,588	49,360
Japan	329,586	442,457	193,309	248,294
Other countries	184,222	483,754	186,097	412,064
Total	18,604,358	34,342,212	8,795,843	15,668,972

BRITISH POSSESSIONS.

Egypt	.....	.....	528,035	558,475
British North America	1,382,047	1,394,265	640,972	646,820
British India	1,043,541	1,087,245	591,070	591,070
Mauritius, Ceylon, Straits Settlements, and Hongkong	162,665	226,601	46,108	46,108
Australia	721,498	760,243	374,030	374,030
New Zealand	274,702	277,105	136,177	136,177
West Indies	73,502	76,304	69,098	71,732
Channel Islands	259,051	262,292	143,678	144,335
Gibraltar and Malta	183,280	224,934	545,928	677,461
Union of South Africa	467,262	491,468	142,078	142,078
Other possessions	400,661	425,460	254,149	261,402
Total	4,968,209	5,225,917	3,471,323	3,649,688

TOTAL FOREIGN COUNTRIES AND BRITISH POSSESSIONS.

Seven months ending July—	British.	Total.	Seven months ending July—	British.	Total.
1914	23,572,567	39,569,129	1919	12,267,166	19,318,660
1913	22,805,507	.....	1918	8,556,751	.....
1912	20,470,369	.....	1917	9,613,410	.....

6. American Merchant Vessels Sold to Aliens and Reported During the Year Ended June 30, 1919.

Official No.	Rig.	Name of vessel.	Gross tons.	Flag.	Date of sale.
127391	St. s.	A. M. Stewart	49	British	June —, 1915
165267	*Sch.	Agnes A. McNally	574	French	Jan. 8, 1917
216577	Ga. s.	Alabama	2,088	Belgian	May 5, 1919
106893	St. s.	Albemarle	377	Greek	Aug. 3, 1918
214970	Sch.	Albertha	82	Dutch	June 30, 1919
106185	Sch.	Alice P. Phillips	621	Cuban	Apr. 18, 1918
165826	Scow.	Alpena	19	British	Feb. 25, 1918
214898	Ga. y.	American Girl	41	.....do	Aug. 1, 1918
211831	Ga. y.	Athena	29	.....do	June 5, 1918
215997	Ga. s.	Atlas	209	Philippine	Apr. 15, 1918
105733	St. s.	Avon	1,417	British	Feb. 24, 1919
201887	*Sch.	Avondale	1,111	.....do	Oct. 17, 1916
31542	C. bt.	Bertha M. Bullis	98	.....do	Nov. 30, 1918
216879	St. s.	Buda II	2,486	French	Dec. 31, 1918
209576	Ga. s.	C. O. Bowers	23	Mexican	June 30, 1919
213417	Ga. s.	Caroline	37	Cuban	June 30, 1917
126590	St. s.	Cherokee	1,177	British	June 16, 1919
217160	Ga. s.	City of Austin	2,231	Italian	May 22, 1919
217696	Ga. s.	City of Orleans	2,347	.....do	June 30, 1919
209011	Ga. s.	Clara B	13	French	Dec. 31, 1918
127056	Sch.	Clara E. Randall	950	Portuguese	June 15, 1918
209456	*St. p.	Corona	200	Mexican	Jan. 28, 1919
126168	Sch.	Corona	394	Peruvian	June 30, 1919
204666	Ga. s.	Crowley No. 1	14	Mexican	Do.
204667	Ga. s.	Crowley No. 2	14	.....do	Do.
207314	Ga. s.	Cynthia	9	British	Sept. 3, 1918
206115	St. s.	Daring	124	.....do	Aug. 27, 1918
207064	*Sch.	Delawanna	1,290	.....do	Oct. 17, 1916
214371	*Sch.	Doctor Brooks	562	French	Jan. 8, 1917
203644	Scow.	Dredger	159	British	Jan. 1, 1919
135293	Sch.	Eagle	102	Honduran	Oct. 1, 1918
136430	Sch.	Edgar Randall	62	Cuban	June 30, 1919
111284	St. s.	Edward F. Cragin	2,402	Italian	Aug. 30, 1918
137065	Ga. s.	Ellen C	70	Mexican	Feb. 16, 1919
135990	St. s.	Elizabeth Monroe Smith	272	Colombian	July 11, 1918
206120	Sch.	Erminie	433	French	Jan. 18, 1918
137007	Sch.	Esperanza	32	Dominican	May 22, 1919
135594	Sch.	Eva A. Danenhower	228	British	June 10, 1919
204927	Ga. s.	Falcon	46	.....do	June 7, 1919
155407	Ga. y.	Fedelma	65	Dutch	Oct. 15, 1918
203196	Ga. s.	Fiorgyn	200	French	Jan. 10, 1919
120961	Sch.	Flora L. Nickerson	104	Portuguese	Aug. 23, 1918
214995	St. s.	Flush	1,474	British	May 24, 1919
121263	Ga. s.	Flyer	14	Russian	Sept. 24, 1918
167203	Bge.	40	451	Cuban	Dec. 20, 1918
204424	Ga. s.	Fox	11	British	Sept. 23, 1918
120513	St. s.	Fred Mercur	1,224	.....do	May 30, 1919
120750	St. s.	Frontenac	2,003	.....do	June 30, 1919
86119	Sch.	Georgia Gilkey	641	Spanish	Do.
202162	Sch.	Georgiana	122	British	Dec. 13, 1918
208640	Sch.	Gov. Foss	130	.....do	Oct. —, 1918
214679	Ga. s.	Griselle	86	Haitian	Mar. 4, 1919
42804	H. bt.	Halcyon	73	British	——— —, 1918
95684	St. s.	Hecla	1,110	.....do	May 30, 1919
210331	St. s.	Henlopen	254	French	July 10, 1918
95814	Sch.	Henry Crosby	411	.....do	Jan. 18, 1918
95698	St. s.	Herman Reessing	26	British	June 30, 1919
214104	Ga. y.	Industry	20	Mexican	Feb. 6, 1919
212041	Ga. y.	Iola	18	.....do	July 15, 1918
100729	St. y.	Irene	166	Chilean	Dec. 16, 1918
100750	Ga. s.	Irene and May	91	British	Apr. 17, 1919
76362	Bkn.	J. M. Griffith	606	Portuguese	Mar. 17, 1919
77416	Ga. s.	James Makee	223	Philippine	Mar. 3, 1919
75627	Sch.	James Slater	311	British	June 30, 1918
167365	C. bt.	James T. Dolan	128	.....do	Mar. 10, 1919
76211	Sch.	Jeremiah Godfrey	653	.....do	Feb. 24, 1919
208084	St. s.	John Hunsader	210	.....do	Apr. 24, 1919
77292	St. s.	John C. Mann	33	.....do	Sept. 30, 1918
76753	St. s.	John Rugee	1,216	.....do	June 1, 1919
205752	Sch.	Josie and Phebe	137	.....do	Feb. 7, 1919
214422	Ga. s.	June	484	.....do	Jan. 3, 1919
136466	St. s.	Ke Au Hou	263	Philippine	Dec. 5, 1918
210904	Ga. s.	Kingfisher	22	British	Jan. 13, 1919
140923	Ga. s.	La Paloma	24	Mexican	June 30, 1919
141602	Sch.	Latona	64	British	Do.
76369	Sch.	Laura Haldt	522	Brazilian	Dec. 18, 1918
209400	Ga. y.	Louise	22	Mexican	June 30, 1919
76182	St. s.	M. Sicken	212	British	Feb. 27, 1919
91592	Ga. s.	Magnolia	88	Mexican	Aug. 1, 1918

6. AMERICAN MERCHANT VESSELS SOLD TO ALIENS AND REPORTED DURING THE YEAR ENDED JUNE 30, 1919—Continued.

Official No.	Rig.	Name of vessel.	Gross tons.	Flag.	Date of sale.
92556	Sch.	Margaret B. Roper	414	Portuguese	June 4, 1919
107139	Ga. s.	Marie	887	Philippine	Mar. 3, 1919
209739	Sch.	Mary	140	British	Mar. 13, 1919
51171	C. bt.	Mary Gaffney	104	do	Jan. 21, 1919
91351	Sch.	Mary E. Morse	644	do	Jan. 15, 1918
92033	St. s.	Mary H. Boyce	700	do	May 5, 1919
163147	C. bt.	Mary J. Wood	105	do	Aug. 23, 1918
141596	Ga. s.	Maysie	64	do	Oct. 15, 1918
205523	Ga. y.	Melloise	22	Mexican	Dec. 23, 1918
90657	Sch.	Melvin S. Bacon	614	British	Feb. 24, 1919
91859	Sch.	Monitor	110	Portuguese	May 6, 1919
91968	Sch.	Mount Hope	1,105	do	June 15, 1918
201726	Ga. s.	Mystery	10	Cuban	Jan. —, 1919
204858	Ga. y.	Mystery	112	British	Aug. 26, 1919
130403	St. s.	National City	310	Peruvian	Jan. 8, 1919
209406	Ga. s.	Nellie P	36	Mexican	June 30, 1919
130699	St. s.	Nicaragua	1,201	British	Feb. 24, 1919
116748	St. s.	Nocan	294	Philippine	Oct. 3, 1918
130661	St. s.	North West	4,244	British	May 13, 1919
130863	Ga. s.	Nuuanu	988	Philippine	June 30, 1919
115173	Sch.	O. H. Brown	1,051	Italian	Apr. 27, 1918
216590	St. s.	Oakwood	1,951	Belgian	June 6, 1919
209841	Ga. s.	Oceania	39	British	June 30, 1919
201348	Sch.	Onato	140	do	Apr. 20, 1919
215335	Ga. s.	Pachena	34	do	Mar. 27, 1919
150772	Sch.	Patriot	81	do	May 17, 1919
150867	Slp. y.	Paukewis	17	do	Feb. 19, 1919
95952	St. s.	Pere Marquette 8	691	do	June 30, 1919
208615	Ga. s.	Polar Bear	81	do	Aug. 26, 1915
150894	*St. p.	R. L. Westcott	75	Mexican	June 30, 1919
111200	St. s.	R. W. Wilmot	569	French	July 10, 1918
110890	Ga. s.	Ramona	41	Japanese	Feb. 28, 1919
201098	Ga. s.	Restless	7	do	July 5, 1918
111325	St. s.	Richard B	63	British	June 30, 1919
150780	Ga. y.	Rondina	24	do	May 1, 1919
115555	Ga. s.	S. E. Jordan	9	do	Aug. 30, 1918
208123	Bge.	Samson	420	Cuban	Sept. —, 1918
116091	St. s.	Simon Langell	845	British	Mar. 2, 1919
115889	Sch.	Stephen G. Loud	506	Spanish	Aug. 17, 1918
116320	Sch.	Sunbeam	108	Cuban	June 30, 1919
212258	Ga. s.	Sunshine	26	British	Do.
115899	Sch.	Susan N. Pickering	336	Greek	June 21, 1919
115865	Sch.	Susie P. Oliver	272	French	Jan. 18, 1918
213983	Ga. s.	T. G. Powell	142	Mexican	Jan. 29, 1919
148269	Sch.	T. O. Smith	46	Cuban	June 30, 1919
145918	Sch.	Teresa and Alice	62	do	Do.
145549	Sch.	Thomas F. Pollard	707	Brazilian	Feb. 10, 1919
202367	Sch.	Thomas S. Gorton	140	British	Jan. 20, 1919
145706	*St. p.	Tornado	319	Mexican	——— —, 1917
167604	Bge.	25	244	do	June 30, 1919
167605	Bge.	26	244	do	Do.
116252	Ga. y.	Uinta	81	British	Oct. 4, 1918
212477	Sch.	Vasiliky	75	Cuban	Jan. 9, 1919
25908	Sch.	Vega	245	Peruvian	Feb. 7, 1919
200304	Sch.	Virginia Lyons	57	Cuban	June 30, 1919
210510	Ga. s.	Wanderer	13	British	Jan. 18, 1919
216180	Ga. s.	Whechasco	10	Japanese	June 30, 1919
81086	Sch.	William E. Downes	753	Spanish	July 2, 1918
145537	St. s.	Wm. G. Howard	43	Cuban	Dec. —, 1918
81791	St. s.	William S. Mack	3,720	British	Dec. 4, 1917
80661	Bk.	Will W. Case	582	do	July 6, 1910
		Merchant vessels (127)	62,587		
		Yachts (13)	690		
		Total (140)	63,277		

7.. VESSELS OF 500 GROSS TONS AND OVER ADAPTED FOR MERCHANT SERVICE TRANSFERRED TO THE NAVY OR THE WAR DEPARTMENT SINCE APRIL 6, 1917.

[Vessels indicated by a dagger (†) transferred to the War Department; all others transferred to the Navy Department.]

Name of vessel.	Former name.	Gross.	Net.	Dead-weight.
Aeolus	Grosser Kurfurst[a]	13,102	7,880	12,350
Agamemnon	Kaiser Wilhelm II[a]	19,360	6,352	8,700
America	Amerika[a]	22,621	13,637	20,765
Antigone	Neckar[a]	9,835	6,199	11,000
Aroostook	Bunker Hill	4,779	2,575	400
Astoria	Frieda Leonhardt[a]	2,822	1,818	4,650
Bath	Andromeda[a]	2,554	1,546	3,978
Beaufort	Rudolf Blumberg[a]	1,769	1,077	2,600
Beaver	Beaver	4,507	2,779	3,000
Black Hawk	Santa Catalina	6,381	3,857	9,200
Blue Ridge	Virginia	1,606	979	2,400
Bridgeport	Breslau[a]	7,524	4,808	6,000
Carrie Clark (*Sch.)	Carrie Clark	1,298	1,260	1,950
Camden	Kiel[a]	4,494	2,874	9,761
Charles	Harvard	3,737	2,317	1,277
Chesapeake	Chesapeake	1,101	732	1,100
Comfort	Havana	6,391	3,963	5,000
DeKalb	Prinz Eitel Friedrich[a]	8,797	4,812	8,200
Druid	Druid	539	367	600
Gen. Knox (*Sch.)	Gen. Knox	1,587	1,550	2,450
George Washington	George Washington[a]	25,569	15,378	13,300
†Great Northern	Great Northern	8,255	4,184	3,753
Gulfport	Locksun[a]	1,657	1,020	4,334
Houston	Liebenfels[a]	4,525	2,830	4,800
Huron	Friederich der Grosse[a]	10,771	6,584	11,080
J. B. Walker (*Sch.)	J. B. Walker	2,136	1,984	3,300
Josephus (*Sch.)	Josephus	1,406	1,340	2,200
Kittery	President[a]	1,849	924	1,690
Leviathan	Vaterland[a]	54,281	23,548	15,000
Long Beach	Hohenfelde[a]	2,974	1,887	1,967
Madawaska	Konig Wilhelm II[a]	9,409	5,764	6,850
Manna-Hata	Manna-Hata	1,103	735	1,024
Mercury	Barbarossa[a]	10,980	6,462	10,350
Mercy	Saratoga	6,391	3,963	5,000
Moccasin	Prinz Joachim[a]	4,760	2,981	4,760
Moosehead	Moosehead	677	324	700
Mount Vernon	Kronprinzessin Cecilie[a]	18,372	7,564	8,300
Nahunta (*Sch.)	West Point	1,213	1,168	1,870
Narragansett	Narragansett	3,539	2,134	930
Newport News	Odenwald[a]	3,537	2,098	5,270
Nopatin	Manhattan	3,539	2,134	930
†Northern Pacific	Northern Pacific	8,255	4,184	3,753
Old Dominion (*Sch.)	Old Dominion	1,802	1,727	2,700
Pensacola	Nicaria[a]	3,974	2,298	6,040
Pocahontas	Prinzess Irene[a]	10,892	6,443	10,550
Powhatan	Hamburg[a]	10,531	6,420	9,510
†President	President	730	468	800
President Grant	President Grant[a]	18,072	11,111	19,810
Quincy	Vogesen[a]	3,716	2,357	5,100
San Joaquin (*Sch.)	San Joaquin	1,551	1,523	2,400
Savannah	Saxonia[a]	4,424	2,782	6,930
Seneca (*Sch.)	Seneca	2,208	2,070	3,000
Shawmut	Massachusetts	4,779	2,575	400
Solitaire (*Sch.)	Solitaire	1,515	1,384	2,300
Susquehanna	Rhein[a]	10,058	6,398	11,650
Von Steuben	Kronprinz Wilhelm[a]	14,908	5,162	6,900
W. F. Babcock	W. F. Babcock	2,128	2,032	3,350
Yale	Yale	3,731	2,312	1,277
Total, 58 vessels		405,021	227,634	319,259

[a] German name.

STATISTICAL TABLES.

The following-named ports have been discontinued as ports of documentation: Stonington, Vinalhaven, Waldoboro, Wiscasset, Saco, Kennebunk, and York, Me.; Newburyport, Barnstable, Nantucket, and Edgartown, Mass.; Bristol, R. I.; Stonington, Conn.; Port Jefferson, Cold Spring, and Sag Harbor, N. Y.; Somers Point, Bridgeton, and Burlington, N. J.; Tappahannock and Chincoteague, Va.; St. Marys, Ga.; Brashear, La.; Eagle Pass, Tex.; Coos Bay and Yaguina, Oreg.; Plattsburg, Niagara Falls, and Dunkirk, N. Y.; Natchez, Miss.; Burlington, Iowa; La Crosse, Wis.; Galena and Rock Island, Ill.; Wheeling, W. Va.

No. 1.—Number and Gross Tonnage of Documented Vessels of the United States, by Customs Districts, June 30, 1919.

[This table does not include yachts, nor boats and lighters, decked and not masted, employed within the harbor of any town or city, nor canal boats and barges without sails or internal motive power of their own, employed wholly upon canals or the internal waters of a State, nor barges and boats plying on rivers and lakes of the United States and not engaged in trade with contiguous foreign territory and not carrying passengers, nor boats under 5 tons net.]

Customs district and port in which documented.	Registered.		Enrolled.		Licensed under 20 tons.		Total.	
ATLANTIC AND GULF COASTS.								
Maine and New Hampshire:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Eastport, Me	91	5,137	5	387	59	760	155	6,284
Calais, Me	5	383	8	1,146	.....	.....	13	1,529
Machias, Me	19	1,608	23	5,242	42	546	84	7,396
Ellsworth, Me	1	244	14	1,148	20	227	35	1,619
Southwest Harbor, Me	2	74	8	351	67	765	77	1,190
Castine, Me	1	112	37	2,534	50	436	88	3,082
Bangor, Me	1	90	10	1,072	6	85	17	1,247
Belfast, Me	3	1,194	13	3,719	13	157	29	5,070
Rockland, Me	11	3,740	54	11,406	103	1,173	168	16,319
Boothbay, Me	.....	.....	12	2,205	34	457	46	2,662
Bath, Me	1	6,846	30	20,897	25	388	56	28,131
Portland, Me	5	3,287	75	45,897	110	1,545	190	50,729
Portsmouth, N. H	1	21	4	454	12	153	17	628
Massachusetts:								
Gloucester, Mass	10	1,001	128	14,216	111	1,961	249	17,178
Salem, Mass	.....	.....	2	78	5	62	7	140
Marblehead, Mass	.....	.....	5	605	5	54	10	659
Boston, Mass	56	99,042	282	140,396	117	2,033	455	241,471
Plymouth, Mass	.....	.....	1	27	8	81	9	108
Provincetown, Mass	5	1,019	10	966	60	856	75	2,841
Barnstable, Mass	.....	.....	1	35	23	170	24	205
Vineyard Haven, Mass	.....	.....	6	189	52	602	58	791
New Bedford, Mass	27	3,659	15	3,007	74	710	116	7,376
Fall River, Mass	.....	.....	54	67,207	24	222	78	67,429
Rhode Island:								
Providence, R. I	6	14,834	33	4,951	92	1,065	131	20,850
Newport, R. I	.....	.....	40	6,768	89	1,029	129	7,797
Connecticut:								
New London, Conn	2	12,483	89	61,395	42	596	133	74,474
Hartford, Conn	.....	.....	64	26,596	14	178	78	26,774
New Haven, Conn	1	22	71	14,835	58	741	130	15,598
Bridgeport, Conn	.....	.....	49	5,204	122	1,275	171	6,479
New York:								
New York, N. Y	653	2,345,133	3,315	1,341,614	555	8,304	4,523	3,695,051
Albany, N. Y	.....	.....	492	81,661	32	656	524	82,317
Patchogue, N. Y	.....	.....	55	3,232	270	2,520	325	5,752
Greenport, N. Y	.....	.....	41	2,821	150	1,388	191	4,209
Newark, N. J	23	91,959	78	79,420	53	805	154	172,184
Perth Amboy, N. J	12	6,470	159	49,987	81	947	252	57,404
Philadelphia:								
Tuckerton, N. J	.....	.....	1	60	56	435	57	495
Philadelphia, Pa	114	538,113	575	244,814	515	8,325	1,204	791,252
Wilmington, Del	15	32,624	109	41,951	58	879	182	75,454
Maryland:								
Baltimore, Md	57	219,758	630	172,393	331	4,241	1,018	396,392
Annapolis, Md	.....	.....	46	1,868	128	1,424	174	3,292
Crisfield, Md	.....	.....	87	4,327	424	3,982	511	8,309
Washington, D. C	.....	.....	36	10,455	24	382	60	10,837
Alexandria, Va	.....	.....	2	73	8	123	10	196

No. 1.—Number and Gross Tonnage of Documented Vessels of the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Registered.		Enrolled.		Licensed under 20 tons.		Total.	
ATLANTIC AND GULF COASTS—continued.								
Virginia:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Reedville, Va	.....	.....	104	9,726	157	1,865	261	11,591
Richmond, Va	.....	.....	20	3,309	21	334	41	3,643
Petersburg, Va	.....	.....	3	164	5	66	8	230
Newport News, Va	61	118,615	30	7,424	169	2,404	260	128,443
Norfolk, Va	109	236,592	108	24,624	279	3,977	496	265,193
Cape Charles, Va	.....	.....	35	20,269	146	1,575	181	21,844
North Carolina:								
Elizabeth City, N. C	.....	.....	24	2,403	76	1,021	100	3,424
Manteo, N. C	.....	.....	2	62	23	280	25	342
Washington, N. C	.....	.....	17	817	77	934	94	1,751
Newbern, N. C	.....	.....	16	936	65	864	81	1,800
Beaufort, N. C	.....	.....	32	2,085	179	2,168	211	4,253
Wilmington, N. C	2	190	28	3,024	59	826	89	4,040
South Carolina:								
Georgetown, S. C	.....	.....	14	1,242	34	389	48	1,631
Charleston, S. C	7	4,739	27	7,891	110	1,353	144	13,983
Beaufort, S. C	.....	.....	5	476	54	539	59	1,015
Georgia:								
Savannah, Ga	9	6,080	51	54,084	67	1,012	127	61,176
Brunswick, Ga	4	2,020	15	4,408	27	290	46	6,718
Florida:								
Fernandina, Fla	.....	.....	12	877	15	192	27	1,069
Jacksonville, Fla	13	10,366	64	20,482	89	1,291	166	32,139
St. Augustine, Fla	.....	.....	5	191	46	521	51	712
Miami, Fla	19	881	11	577	86	1,031	116	2,489
Key West, Fla	36	8,096	15	1,351	121	1,376	172	10,823
Tampa, Fla	16	8,226	55	4,933	121	1,730	192	14,889
Cedar Keys, Fla	.....	.....	20	2,726	13	183	33	2,909
Apalachicola, Fla	.....	.....	13	1,367	33	370	46	1,737
Pensacola, Fla	29	16,343	62	4,833	28	490	119	21,666
Mobile:								
Mobile, Ala.[a]	44	40,805	35	7,295	92	1,366	171	49,466
Gulfport, Miss	17	12,835	34	1,887	202	3,829	253	18,551
New Orleans:								
New Orleans, La.[a]	47	73,748	25	9,008	66	1,232	138	83,988
Morgan City, La	10	4,755	40	3,547	147	1,833	197	10,135
Sabine: Port Arthur, Tex	58	88,884	75	107,429	41	507	174	196,820
Galveston:								
Galveston, Tex	25	9,016	44	12,729	109	1,420	178	23,165
Houston, Tex	1	73	20	3,094	46	547	67	3,714
Freeport, Tex	2	1,653	.....	.....	1	12	3	1,665
Port Lavaca, Tex	.....	.....	3	123	65	573	68	696
San Antonio:								
Port Aransas, Tex	2	980	8	1,237	16	157	26	2,374
Brownsville, Tex	.....	.....	.....	.....	1	8	1	8
Porto Rico: San Juan, P. R.	55	10,459	7	4,956	52	553	114	15,968
Total	1,688	4,044,209	7,848	2,809,195	7,060	91,856	16,596	6,945,260
PACIFIC COAST.								
Southern California:								
San Diego, Calif	94	2,415	3	1,182	4	47	101	3,644
Los Angeles, Calif	48	133,617	66	15,200	120	1,749	234	150,566
San Francisco:								
San Francisco, Calif	267	754,204	460	383,626	310	5,397	1,037	1,143,227
Eureka, Calif	19	16,724	5	458	12	193	36	17,375
Oregon:								
Marshfield, Oreg	.....	.....	17	5,392	60	665	77	6,057
Newport, Oreg	.....	.....	5	252	6	84	11	336
Astoria, Oreg	13	30,805	38	8,528	103	1,440	154	40,773
Portland, Oreg	96	358,507	105	42,641	45	687	246	401,835
Washington: Seattle, Wash	2,086	868,898	378	75,008	771	9,955	3,235	953,861
Alaska: Juneau, Alaska	549	71,480	75	3,104	394	4,907	1,018	79,491
Hawaii: Honolulu, Hawaii	3	785	30	18,188	16	343	49	19,316
Total	3,175	2,237,435	1,182	553,579	1,841	25,467	6,198	2,816,481
NORTHERN LAKES.								
Vermont: Burlington, Vt	.....	.....	14	3,498	.....	.....	14	3,498
St. Lawrence:								
Rouses Point, N. Y	.....	.....	98	9,873	.....	.....	98	9,873
Ogdensburg, N. Y	1	2,194	30	14,457	.....	.....	31	16,651
Cape Vincent, N. Y	.....	.....	57	2,929	.....	.....	57	2,929

[a] Seagoing vessels; for vessels in river trade, see p. 165.

NO. 1.—NUMBER AND GROSS TONNAGE OF DOCUMENTED VESSELS OF THE UNITED STATES, BY CUSTOMS DISTRICTS, JUNE 30, 1919—Continued.

Customs district and port in which documented.	Registered.		Enrolled.		Licensed under 20 tons.		Total.	
NORTHERN LAKES—contd.								
Rochester:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Oswego, N. Y.			37	106,417			37	106,417
Rochester, N. Y.			15	748			15	748
Buffalo: Buffalo, N. Y.	3	7,533	294	225,729			297	233,262
Ohio:								
Erie, Pa.			57	10,388			57	10,388
Cleveland, Ohio.	48	116,675	284	971,953			332	1,088,628
Sandusky, Ohio.			52	7,957			52	7,957
Toledo, Ohio.	9	20,462	39	6,263			48	26,725
Michigan:								
Detroit, Mich.	45	107,728	213	158,048			258	265,776
Port Huron, Mich.	8	17,216	90	30,016			98	47,232
Marquette, Mich.			123	81,790			123	81,790
Grand Haven, Mich.	1	1,857	349	39,700			350	41,557
Chicago: Chicago, Ill.[a]	13	29,481	220	82,260			233	111,741
Wisconsin: Milwaukee, Wis.[a]	11	17,936	475	47,902			486	65,838
Duluth and Superior: Duluth, Minn.[a]	30	67,000	427	835,752			457	902,752
Total	169	388,082	2,874	2,635,680			3,043	3,023,762
WESTERN RIVERS.								
New Orleans:								
New Orleans, La.[b]			126	23,503	117	1,951	243	25,454
Vicksburg, Miss.			17	3,406	22	295	39	3,701
Tennessee:								
Memphis, Tenn.			26	3,824	33	408	59	4,232
Nashville, Tenn.			8	829	25	294	33	1,123
Chattanooga, Tenn.			12	987	54	484	66	1,471
Mobile: Mobile, Ala.[b]			1	134	19	195	20	329
Kentucky:								
Paducah, Ky.			18	2,397	32	339	50	2,736
Louisville, Ky.			60	7,034	77	843	137	7,877
St. Louis:								
St. Louis, Mo.			115	22,500	242	2,842	357	25,342
Kansas City, Mo.			11	878	17	225	28	1,103
St. Joseph, Mo.					3	59	3	59
Omaha: Omaha, Nebr.			3	116	2	31	5	147
Dakota: Pembina, N. Dak.			36	1,657	10	143	46	1,800
Montana and Idaho: Great Falls, Mont.			7	207	5	103	12	310
Iowa:								
Des Moines, Iowa.			11	809	19	211	30	1,020
Sioux City, Iowa.					5	47	5	47
Dubuque, Iowa.			3	185	19	187	22	372
Minnesota: St. Paul, Minn.			11	882	11	153	22	1,035
Duluth and Superior: Duluth, Minn.			19	907			19	907
Wisconsin: Milwaukee, Wis.[c]			1	98	5	47	6	145
Chicago:								
Chicago, Ill.[c]			23	1,575	24	291	47	1,866
Peoria, Ill.			15	2,188	28	395	43	2,583
Indiana: Evansville, Ind.			39	4,169	42	488	81	4,657
Ohio: Cincinnati, Ohio.			44	8,539	45	529	89	9,068
Pittsburgh: Pittsburgh, Pa.			136	23,533	78	880	214	24,413
Total			742	110,357	934	11,440	1,676	121,797
SUMMARY.								
Atlantic and Gulf coasts	1,688	4,044,209	7,848	2,809,195	7,060	91,856	16,596	6,945,260
Pacific coast	3,175	2,237,435	1,182	553,579	1,841	25,467	6,198	2,816,481
Northern lakes	169	388,082	2,874	2,635,680			3,043	3,023,762
Western rivers			742	110,357	934	11,440	1,676	121,797
Grand total	5,032	6,669,726	12,646	6,108,811	9,835	128,763	27,513	12,907,300

[a] Lake vessels; for vessels in river trade, see below.
[b] Vessels in river trade only; for seagoing vessels, see p. 164.
[c] Vessels in river trade only; for lake vessels, see above.

No. 2.—Number and Gross Tonnage of Documented Vessels of the United States, by States and Territories, June 30, 1919.

State or Territory in which documented.	Registered.		Enrolled.		Licensed under 20 tons.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Maine	140	22,715	289	96,004	529	6,539	958	125,258
New Hampshire	1	21	4	454	12	153	17	628
Vermont	.....	.....	14	3,498	.....	.....	14	3,498
Massachusetts	98	104,721	504	226,726	479	6,751	1,081	338,198
Rhode Island	6	14,834	73	11,719	181	2,094	260	28,647
Connecticut	3	12,505	273	108,030	236	2,790	512	123,325
New York	657	2,354,860	4,434	1,789,481	1,007	12,868	6,098	4,157,209
New Jersey	35	98,429	238	129,467	190	2,187	463	230,083
Pennsylvania	114	538,113	768	278,735	593	9,205	1,475	826,053
Delaware	15	32,624	109	41,951	58	879	182	75,454
Maryland	57	219,758	763	178,588	883	9,647	1,703	407,993
District of Columbia	.....	.....	36	10,455	24	382	60	10,837
Virginia	170	355,207	302	65,589	785	10,344	1,257	431,140
North Carolina	2	190	119	9,327	479	6,093	600	15,610
South Carolina	7	4,739	46	9,609	198	2,281	251	16,629
Georgia	13	8,100	66	58,492	94	1,302	173	67,894
Florida	113	43,912	257	37,337	552	7,184	922	88,433
Alabama	44	40,805	36	7,429	111	1,561	191	49,795
Mississippi	17	12,835	51	5,293	224	4,124	292	22,252
Louisiana	57	78,503	191	36,058	330	5,016	578	119,577
Texas	88	100,606	150	124,612	279	3,224	517	228,442
Porto Rico	55	10,459	7	4,956	52	553	114	15,968
Tennessee	.....	.....	46	5,640	112	1,186	158	6,826
Kentucky	.....	.....	78	9,431	109	1,182	187	10,613
Missouri	.....	.....	126	23,378	262	3,126	388	26,504
Nebraska	.....	.....	3	116	2	31	5	147
North Dakota	.....	.....	36	1,657	10	143	46	1,800
Montana	.....	.....	7	207	5	103	12	310
Iowa	.....	.....	14	994	43	445	57	1,439
Minnesota	30	67,000	457	837,541	11	153	498	904,694
Wisconsin	11	17,936	476	48,000	5	47	492	65,983
Michigan	54	126,801	775	309,554	.....	.....	829	436,355
Illinois	13	29,481	258	86,023	52	686	323	116,190
Indiana	.....	.....	39	4,169	42	488	81	4,657
Ohio	57	137,137	419	994,712	45	529	521	1,132,378
California	428	906,960	534	400,466	446	7,386	1,408	1,314,812
Oregon	109	389,312	165	56,813	214	2,876	488	449,001
Washington	2,086	868,898	378	75,008	771	9,955	3,235	953,861
Alaska	549	71,480	75	3,104	394	4,907	1,018	79,491
Hawaii	3	785	30	18,188	16	343	49	19,316
Total	5,032	6,669,726	12,646	6,108,811	9,835	128,763	27,513	12,907,300

No. 3.—Number and Gross Tonnage of Documented Steam and Gas Vessels of the United States by Customs Districts, June 30, 1919.

[These vessels are included in statement No. 1.]

Customs district and port in which documented.	Registered.				Enrolled.				Licensed.				Total.			
	Steam.		Gas.		Steam.		Gas.		Steam.		Gas.		Steam.		Gas.	
ATLANTIC AND GULF COASTS.																
Maine and New Hampshire:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Eastport, Me	4	422	71	1,544	1	39	1	21	.....	.....	57	738	5	461	129	2,303
Calais, Me	.....	.....	3	74	.....	.....	1	60	.....	.....	.....	.....	.....	.....	4	134
Machias, Me	1	43	11	214	.....	.....	6	243	1	54	39	478	2	97	56	935
Ellsworth, Me	.....	.....	.....	.....	1	111	3	128	1	17	18	203	2	128	21	331
Southwest Harbor, Me	.....	.....	2	74	.....	.....	3	83	1	34	59	676	1	34	64	833
Castine, Me	.....	.....	.....	.....	3	202	6	301	1	19	37	319	4	221	43	620
Bangor, Me	.....	.....	.....	.....	3	329	.....	.....	2	51	2	17	5	380	2	17
Belfast, Me	1	142	.....	.....	6	2,032	.....	.....	1	19	10	117	8	2,193	10	117
Rockland, Me	.....	.....	3	68	13	1,668	5	193	1	24	89	1,044	14	1,692	97	1,305
Boothbay, Me	.....	.....	.....	.....	2	65	1	41	2	30	24	340	4	95	25	381
Bath, Me	1	6,846	.....	.....	12	15,863	2	968	4	78	1	8	17	22,787	3	976
Portland, Me	.....	.....	.....	.....	38	38,558	19	1,247	13	249	91	1,236	51	38,807	110	2,483
Portsmouth, N. H	.....	.....	1	21	2	162	.....	.....	3	40	6	94	5	202	7	115
Massachusetts:																
Gloucester, Mass	.....	.....	6	503	12	1,761	84	8,877	9	289	93	1,543	21	2,050	183	10,923
Salem, Mass	.....	.....	.....	.....	1	55	1	23	1	22	4	40	2	77	5	63
Marblehead, Mass	.....	.....	.....	.....	1	40	.....	.....	.....	.....	4	48	1	40	4	48
Boston, Mass	24	83,066	9	3,695	159	87,888	29	2,161	21	555	80	1,305	204	171,507	118	7,161
Plymouth, Mass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	31	.....	.....	3	31
Provincetown, Mass	.....	.....	.....	.....	1	82	2	65	.....	.....	57	834	1	82	59	899
Barnstable, Mass	.....	.....	.....	.....	.....	.....	1	35	.....	.....	22	164	.....	.....	23	199
Vineyard Haven, Mass	.....	.....	.....	.....	.....	.....	5	140	2	46	47	540	2	46	52	680
New Bedford, Mass	1	163	3	283	9	2,774	5	185	2	35	72	675	12	2,972	80	1,143
Fall River, Mass	.....	.....	.....	.....	20	42,028	2	53	.....	.....	24	222	20	42,028	26	275
Rhode Island:																
Providence, R. I	2	14,490	.....	.....	22	3,668	7	235	3	73	85	965	27	18,231	92	1,200
Newport, R. I	.....	.....	.....	.....	29	6,294	6	206	9	193	78	805	38	6,487	84	1,011
Connecticut:																
New London, Conn	2	12,483	.....	.....	39	41,793	6	437	5	154	37	442	46	54,430	43	879
Hartford, Conn	.....	.....	.....	.....	14	7,681	1	29	3	77	11	101	17	7,758	12	130
New Haven, Conn	.....	.....	.....	.....	33	5,775	9	321	5	114	46	575	38	5,889	55	896
Bridgeport, Conn	.....	.....	.....	.....	25	3,253	15	506	5	149	75	780	30	3,402	90	1,286

No. 3.—Number and Gross Tonnage of Documented Steam and Gas Vessels of the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Registered.				Enrolled.				Licensed.				Total.			
	Steam.		Gas.		Steam.		Gas.		Steam.		Gas.		Steam.		Gas.	
ATLANTIC AND GULF COASTS—continued.																
New York:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
New York, N. Y	469	2,138,230	29	52,738	1,081	608,240	129	11,283	108	2,787	434	5,402	1,658	2,749,257	592	69,423
Albany, N. Y					89	14,337			28	608	4	48	117	14,947	4	48
Patchogue, N. Y					4	381	25	879	2	46	238	2,248	6	427	263	3,127
Greenport, N. Y					13	1,538	21	954	2	36	118	1,144	15	1,574	139	2,098
Newark, N. J	17	90,075			64	76,103	1	26	13	387	38	396	94	166,565	39	422
Perth Amboy, N. J					43	10,968	6	250			60	732	43	10,968	66	982
Philadelphia:																
Tuckerton, N. J							1	60			51	398			52	458
Philadelphia, Pa	97	525,057	1	96	195	71,306	49	1,985	42	1,189	310	4,285	334	597,552	360	6,366
Wilmington, Del	12	30,513	1	632	30	10,172	12	958	3	65	33	494	45	40,750	46	2,084
Maryland:																
Baltimore, Md	53	216,848			144	85,190	35	2,281	37	918	138	1,759	234	302,956	173	4,040
Annapolis, Md							6	188			62	702			68	890
Crisfield, Md							10	453			49	532			59	985
Washington, D. C					13	8,915			8	172	8	112	21	9,087	8	112
Alexandria, Va					1	43	1	30	2	24	3	61	3	67	4	91
Virginia:																
Reedville, Va					32	5,350	13	1,114			76	968	32	5,350	89	2,082
Richmond, Va					9	1,511	1	28	1	23	9	143	10	1,534	10	171
Petersburg, Va					1	98	1	22			5	66	1	98	6	88
Newport News, Va	28	86,165	1	739	12	6,719	4	131	3	78	133	1,922	43	92,962	138	2,792
Norfolk, Va	67	193,136	2	2,338	62	17,123	17	765	18	440	251	3,420	147	210,699	270	6,523
Cape Charles, Va					14	5,988	2	73			96	1,111	14	5,988	98	1,184
North Carolina:																
Elizabeth City, N. C					9	788	3	117	14	295	42	507	23	1,083	45	624
Manteo, N. C											14	158			14	158
Washington, N. C					9	588	3	83	2	44	39	497	11	632	42	580
New Bern, N. C					7	396	3	142	6	129	45	539	13	525	48	681
Beaufort, N. C							29	1,523			117	1,571			146	3,094
Wilmington, N. C	1	97	1	93	23	2,283	3	130	15	252	30	388	39	2,632	34	611
South Carolina:																
Georgetown, S. C					11	1,121	3	121	8	140	26	249	19	1,261	29	370
Charleston, S. C	3	963			12	6,403	9	263	6	155	93	1,094	21	7,521	102	1,357
Beaufort, S. C					2	354					13	160	2	354	13	160

Georgia:																
Savannah, Ga	3	349	.....	.....	43	52,929	6	1,091	6	189	25	393	52	53,467	31	1,484
Brunswick, Ga	.....	.....	.....	.....	12	1,576	.....	.....	.....	.....	24	254	12	1,576	24	254
Florida:																
Fernandina, Fla	.....	.....	.....	.....	3	402	9	475	.....	.....	15	192	3	402	24	667
Jacksonville, Fla	6	8,170	1	27	35	17,373	23	1,590	8	205	80	1,062	49	25,748	104	2,679
St. Augustine, Fla	.....	.....	.....	.....	.....	.....	5	191	.....	.....	45	513	.....	.....	50	704
Miami, Fla	1	81	14	284	.....	.....	11	577	1	16	84	1,006	2	97	109	1,867
Key West, Fla	10	4,965	2	23	6	436	5	169	2	56	69	797	18	5,457	76	989
Tampa, Fla	3	4,839	.....	.....	11	3,204	19	907	2	33	83	1,174	16	8,076	102	2,081
Cedar Keys, Fla	.....	.....	.....	.....	2	271	.....	.....	3	72	5	68	5	343	5	68
Apalachicola, Fla	.....	.....	.....	.....	12	1,330	1	37	2	51	26	281	14	1,381	27	318
Pensacola, Fla	4	2,804	4	1,706	11	1,067	4	236	7	130	12	185	22	4,001	20	2,127
Mobile:																
Mobile, Ala.[a]	12	22,559	3	1,579	19	5,094	9	363	12	244	53	737	43	27,897	65	3,679
Gulfport, Miss	5	6,257	4	2,487	4	196	7	286	5	134	33	543	14	6,587	44	3,316
New Orleans:																
New Orleans, La.[a]	30	63,919	8	2,283	8	8,370	.....	.....	.....	.....	.....	.....	38	72,289	8	2,283
Morgan City, La	.....	.....	1	119	30	1,997	6	369	11	184	118	1,498	41	2,181	125	1,986
Sabine: Port Arthur, Tex	24	55,506	7	9,650	35	86,958	5	743	4	77	34	391	63	142,541	46	10,784
Galveston:																
Galveston, Tex	4	567	3	284	16	6,889	4	294	4	141	99	1,219	24	7,597	106	1,797
Freeport, Tex	1	488	.....	.....	.....	.....	.....	.....	.....	.....	1	12	1	488	1	12
Houston, Tex	.....	.....	.....	.....	9	623	4	156	2	39	44	508	11	662	48	664
Port Lavaca, Tex	.....	.....	.....	.....	1	39	.....	.....	.....	.....	29	283	1	39	29	283
San Antonio: Port Aransas, Tex	1	333	.....	.....	1	80	1	66	.....	.....	13	133	2	413	14	199
Porto Rico: San Juan, P. R	5	3,071	4	553	5	2,512	.....	.....	1	10	6	80	11	5,593	10	633
Total	892	3,572,647	195	82,107	2,589	1,389,382	726	47,967	483	11,691	4,604	56,775	3,964	4,973,720	5,525	186,849
PACIFIC COAST.																
Southern California:																
San Diego, Calif	3	188	76	1,875	2	883	.....	.....	.....	.....	4	47	5	1,071	80	1,922
Los Angeles, Calif	24	131,982	22	824	9	11,793	36	1,728	.....	.....	117	1,708	33	143,775	175	4,260
San Francisco:																
San Francisco, Calif	153	657,452	24	13,792	269	286,076	93	10,985	20	495	288	4,859	442	944,023	405	29,637
Eureka, Calif	2	4,956	1	2,904	3	336	2	122	.....	.....	12	193	5	5,292	15	3,219
Oregon:																
Marshfield, Oreg	.....	.....	.....	.....	13	5,240	4	152	1	15	59	650	14	5,265	63	802
Newport, Oreg	.....	.....	.....	.....	2	92	2	107	1	14	5	70	3	106	7	177
Astoria, Oreg	10	27,756	2	1,812	18	3,967	18	839	3	77	99	1,343	31	31,800	119	3,994
Portland, Oreg	75	329,945	16	24,489	87	36,942	12	605	10	221	35	466	172	367,108	63	25,560
Washington: Seattle, Wash	254	672,036	694	44,689	146	56,664	116	5,644	52	1,049	607	7,759	452	729,749	1,417	58,092
Alaska: Juneau, Alaska	88	32,456	284	5,971	6	399	19	824	7	114	332	4,080	101	32,969	635	10,875
Hawaii: Honolulu, Hawaii	.....	.....	1	99	14	8,956	8	2,767	.....	.....	15	330	14	8,956	24	3,196
Total	609	1,856,771	1,120	96,455	569	411,348	310	23,773	94	1,985	1,573	21,505	1,272	2,270,104	3,003	141,733

[a] Seagoing vessels; for vessels in river trade see p. 170.

NO. 3.—NUMBER AND GROSS TONNAGE OF DOCUMENTED STEAM AND GAS VESSELS OF THE UNITED STATES, BY CUSTOMS DISTRICTS. JUNE 30, 1919—Continued.

Customs district and port in which documented.	Registered.				Enrolled.				Licensed.				Total.			
	Steam.		Gas.		Steam.		Gas.		Steam.		Gas.		Steam.		Gas.	
NORTHERN LAKES.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons*
Vermont: Burlington, Vt	.....	.....	.....	.....	9	3,060	1	12	.....	.....	.....	.....	9	3,060	1	12
St. Lawrence:																
Rouses Point, N. Y	.....	.....	.....	.....	4	163	4	79	.....	.....	.....	.....	4	163	4	79
Ogdensburg, N. Y	1	2,194	.....	.....	18	9,800	.....	.....	.....	.....	.....	.....	19	11,994	.....	.....
Cape Vincent, N. Y	.....	.....	.....	.....	13	1,537	19	276	.....	.....	.....	.....	13	1,537	19	276
Rochester:																
Oswego, N. Y	.....	.....	.....	.....	31	105,769	3	278	.....	.....	.....	.....	31	105,769	3	278
Rochester, N. Y	.....	.....	.....	.....	4	639	11	109	.....	.....	.....	.....	4	639	11	109
Buffalo: Buffalo, N. Y	3	7,533	.....	.....	167	192,761	14	162	.....	.....	.....	.....	170	200,294	14	162
Ohio:																
Erie, Pa	.....	.....	.....	.....	44	10,237	13	151	.....	.....	.....	.....	44	10,237	13	151
Cleveland, Ohio	48	116,675	.....	.....	248	937,272	11	145	.....	.....	.....	.....	296	1,053,947	11	145
Sandusky, Ohio	.....	.....	.....	.....	26	5,828	22	313	.....	.....	.....	.....	26	5,828	22	313
Toledo, Ohio	9	20,462	.....	.....	16	2,013	9	105	.....	.....	.....	.....	25	22,475	9	105
Michigan:																
Detroit, Mich	45	107,728	.....	.....	103	137,667	30	510	.....	.....	.....	.....	148	245,395	30	510
Port Huron, Mich	8	17,216	.....	.....	47	21,012	11	150	.....	.....	.....	.....	55	38,228	11	150
Marquette, Mich	.....	.....	.....	.....	56	73,838	40	584	.....	.....	.....	.....	56	73,838	40	584
Grand Haven, Mich	.....	.....	.....	.....	109	36,600	235	2,506	.....	.....	.....	.....	109	36,600	235	2,506
Chicago: Chicago, Ill.[a]	12	29,463	1	18	111	69,199	95	1,545	.....	.....	.....	.....	123	98,662	96	1,563
Wisconsin: Milwaukee, Wis.[a]	11	17,936	.....	.....	128	28,491	297	3,198	.....	.....	.....	.....	139	46,427	297	3,198
Duluth and Superior: Duluth, Minn.[a]	30	67,000	.....	.....	240	698,986	23	332	.....	.....	.....	.....	270	765,986	23	332
Total	167	386,207	1	18	1,374	2,334,872	838	10,455	.....	.....	.....	.....	1,541	2,721,079	839	10,473
WESTERN RIVERS.																
New Orleans:																
New Orleans, La.[b]	.....	.....	.....	.....	91	14,255	31	4,800	21	522	96	1,429	112	14,777	127	6,229
Vicksburg, Miss	.....	.....	.....	.....	17	3,406	.....	.....	4	76	18	219	21	3,482	18	219
Tennessee:																
Memphis, Tenn	.....	.....	.....	.....	22	3,643	2	112	5	89	27	306	27	3,732	29	418
Nashville, Tenn	.....	.....	.....	.....	7	732	1	97	.....	.....	25	294	7	732	26	391
Chattanooga, Tenn	.....	.....	.....	.....	11	955	.....	.....	1	6	20	213	12	961	20	213
Mobile: Mobile, Ala.[b]	.....	.....	.....	.....	1	134	.....	.....	3	33	13	130	4	167	13	130
Kentucky:																
Paducah, Ky	.....	.....	.....	.....	12	1,872	3	115	.....	.....	32	339	12	1,872	35	454
Louisville, Ky	.....	.....	.....	.....	46	6,518	9	321	3	34	73	804	49	6,552	82	1,125

St. Louis:																
St. Louis, Mo					84	19,753	27	2,255	9	159	175	2,133	93	19,912	202	4,388
Kansas City, Mo					5	690	6	188	1	8	16	217	6	698	22	405
St. Joseph, Mo									1	30	2	29	1	30	2	29
Nebraska: Omaha, Nebr					1	51	2	65			2	31	1	51	4	96
Dakota: Pembina, N. Dak					2	72	27	1,152			10	143	2	72	37	1,295
Montana and Idaho: Great Falls, Mont							7	207	1	22	4	81	1	22	11	288
Iowa:																
Des Moines, Iowa					11	809			1	9	17	190	12	818	17	190
Sioux City, Iowa											5	47			5	47
Dubuque, Iowa					2	132			1	14	13	122	3	146	13	122
Minnesota: St. Paul, Minn					4	258	1	57	2	41	8	104	6	299	9	161
Duluth and Superior: Duluth, Minn.[c]					7	123	7	110					7	123	7	110
Wisconsin: Milwaukee, Wis.[c]					1	98					5	47	1	98	5	47
Chicago:																
Chicago, Ill.[c]					18	1,307	2	69			21	253	18	1,307	23	322
Peoria, Ill					13	2,074	1	42	4	45	23	344	17	2,119	24	386
Indiana: Evansville, Ind					31	3,552	5	366			36	406	31	3,552	41	772
Ohio: Cincinnati, Ohio					41	8,430	1	20	1	9	43	502	42	8,439	44	522
Pittsburgh: Pittsburgh, Pa					128	22,430	2	77	7	106	69	736	135	22,536	71	813
Total					555	91,294	134	10,053	65	1,203	753	9,119	620	92,497	887	19,172
SUMMARY.																
Atlantic and Gulf coasts	892	3,572,647	195	82,107	2,589	1,389,382	726	47,967	483	11,691	4,604	56,775	3,964	4,973,720	5,525	186,849
Pacific coast	609	1,856,771	1,120	96,455	569	411,348	310	23,773	94	1,985	1,573	21,505	1,272	2,270,104	3,003	141,733
Northern lakes	167	386,207	1	18	1,374	2,334,872	838	10,455					1,541	2,721,079	839	10,473
Western rivers					555	91,294	134	10,053	65	1,203	753	9,119	620	92,497	887	19,172
Grand total	1,668	5,815,625	1,316	178,580	5,087	4,226,896	2,008	92,248	642	14,879	6,930	87,399	7,397	10,057,400	10,254	358,227

[a] Lake vessels; for vessels in river trade, see p. 171.
[b] Vessels in river trade only; for seagoing vessels, see p. 169.
[c] Vessels in river trade only; for lake vessels, see p. 170.

No. 4.—Number and Gross Tonnage of Documented Metal Vessels of the United States, by Customs Districts, June 30, 1919.

[These vessels are included in statement No. 1.]

Customs district and port in which documented.	Registered.		Enrolled.		Licensed under 20 tons.		Total.	
ATLANTIC AND GULF COASTS.								
Maine and New Hampshire:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Bangor, Me	.....	.....	1	147	.....	.....	1	147
Belfast, Me	.....	.....	1	1,245	.....	.....	1	1,245
Rockland, Me	.....	.....	7	6,009	.....	.....	7	6,009
Bath, Me	1	6,846	7	16,230	.....	.....	8	23,076
Portland, Me	.....	.....	7	12,977	.....	.....	7	12,977
Massachusetts:								
Marblehead, Mass	.....	.....	1	43	.....	.....	1	43
Boston, Mass	25	86,334	53	66,018	2	23	80	152,375
New Bedford, Mass	.....	.....	2	1,329	.....	.....	2	1,329
Fall River, Mass	.....	.....	11	32,289	.....	.....	11	32,289
Rhode Island:								
Providence, R. I	2	14,490	.....	.....	.....	.....	2	14,490
Newport, R. I	.....	.....	2	589	.....	.....	2	589
Connecticut:								
New London, Conn	2	12,483	17	34,761	.....	.....	19	47,244
Hartford, Conn	.....	.....	9	7,242	.....	.....	9	7,242
New Haven, Conn	.....	.....	16	3,543	.....	.....	16	3,543
New York:								
New York, N. Y	483	2,166,901	523	564,161	5	86	1,011	2,731,148
Albany, N. Y	.....	.....	20	5,948	2	46	22	5,994
Newark, N. J	17	90,075	30	64,273	1	34	48	154,382
Perth Amboy, N. J	.....	.....	27	12,953	.....	.....	27	12,953
Philadelphia:								
Tuckerton, N. J	.....	.....	1	60	.....	.....	1	60
Philadelphia, Pa	88	504,158	138	65,952	11	439	237	570,549
Wilmington, Del	12	30,513	22	10,241	1	25	35	40,779
Maryland:								
Baltimore, Md	47	203,915	85	78,127	4	102	136	282,144
Washington, D. C	.....	.....	8	8,565	.....	.....	8	8,565
Virginia:								
Reedville, Va	.....	.....	1	145	.....	.....	1	145
Richmond, Va	.....	.....	4	1,258	.....	.....	4	1,258
Newport News, Va	24	77,923	4	3,328	.....	.....	28	81,251
Norfolk, Va	52	154,895	23	12,070	2	52	77	167,017
Cape Charles, Va	.....	.....	22	19,536	.....	.....	22	19,536
North Carolina:								
Elizabeth City, N. C	.....	.....	3	333	1	20	4	353
Washington, N. C	.....	.....	1	96	.....	.....	1	96
Beaufort, N. C	.....	.....	1	98	.....	.....	1	98
Wilmington, N. C	1	97	6	697	.....	.....	7	794
South Carolina:								
Georgetown, S. C	.....	.....	2	186	.....	.....	2	186
Charleston, S. C	3	963	6	5,835	1	39	10	6,837
Georgia:								
Savannah, Ga	3	1,655	25	51,596	.....	.....	28	53,251
Brunswick, Ga	.....	.....	4	785	.....	.....	4	785
Florida:								
Jacksonville, Fla	3	2,987	12	9,731	.....	.....	15	12,718
Key West, Fla	3	4,663	2	705	.....	.....	5	5,368
Tampa, Fla	4	4,942	6	2,520	.....	.....	10	7,462
Cedar Keys, Fla	.....	.....	1	93	.....	.....	1	93
Pensacola, Fla	2	2,471	3	586	.....	.....	5	3,057
Mobile: Mobile, Ala.[a]	7	16,717	5	3,444	1	23	13	20,184
New Orleans:								
New Orleans, La.[a]	19	38,486	6	5,440	.....	.....	25	43,926
Morgan City, La	.....	.....	1	42	.....	.....	1	42
Sabine: Port Arthur, Tex	21	39,420	45	97,764	.....	.....	66	137,184
Galveston:								
Galveston, Tex	4	1,156	7	3,016	.....	.....	11	4,172
Houston, Tex	.....	.....	7	1,911	1	11	8	1,922
Freeport, Tex	2	1,653	.....	.....	.....	.....	2	1,653
San Antonio: Port Aransas, Tex	.....	.....	1	80	.....	.....	1	80
Porto Rico: San Juan, P. R	4	2,213	5	3,321	.....	.....	9	5,534
Total	829	3,465,956	1,191	1,217,318	32	900	2,052	4,684,174
PACIFIC COAST.								
Southern California:								
San Diego, Calif	1	116	.....	.....	.....	.....	1	116
Los Angeles, Calif	22	126,241	2	2,434	.....	.....	24	128,675

[a] Seagoing vessels; for vessels in river trade, see p. 173.

No. 4.—Number and Gross Tonnage of Documented Metal Vessels of the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Registered.		Enrolled.		Licensed under 20 tons.		Total.	
PACIFIC COAST—continued.								
San Francisco:	*No.*	*Tons.*	*No.*	*Tons.*	*No*	*Tons.*	*No.*	*Tons.*
San Francisco, Calif.	110	565,602	90	194,377	5	108	205	760,087
Eureka, Calif.	1	2,382	.....	.....	.....	.....	1	2,382
Oregon: Portland, Oreg.	47	253,639	6	8,807	.....	.....	53	262,446
Washington: Seattle, Wash.	149	610,928	16	21,364	.....	.....	165	632,292
Alaska: Juneau, Alaska	8	3,339	.....	.....	.....	.....	8	3,339
Hawaii: Honolulu, Hawaii	.....	.....	8	5,935	.....	.....	8	5,935
Total	338	1,562,247	122	232,917	5	108	465	1,795,272
NORTHERN LAKES.								
Vermont: Burlington, Vt.	.....	.....	3	2,829	.....	.....	3	2,829
St. Lawrence:								
Ogdensburg, N. Y.	1	2,194	6	7,884	.....	.....	7	10,078
Cape Vincent, N. Y.	.....	.....	2	414	.....	.....	2	414
Rochester: Oswego, N. Y.	.....	.....	20	104,815	.....	.....	20	104,815
Buffalo: Buffalo, N. Y.	3	7,533	157	200,593	.....	.....	160	208,126
Ohio:								
Erie, Pa.	.....	.....	7	3,339	.....	.....	7	3,339
Cleveland, Ohio.	48	116,675	216	935,755	.....	.....	264	1,052,430
Sandusky, Ohio.	.....	.....	9	4,093	.....	.....	9	4,093
Toledo, Ohio.	9	20,462	1	102	.....	.....	10	20,564
Michigan:								
Detroit, Mich.	43	105,711	81	128,702	.....	.....	124	234,413
Port Huron, Mich.	8	17,216	7	8,263	.....	.....	15	25,479
Marquette, Mich.	.....	.....	16	67,816	.....	.....	16	67,816
Grand Haven, Mich.	.....	.....	21	28,136	.....	.....	21	28,136
Chicago: Chicago, Ill.[a]	12	29,463	42	56,780	.....	.....	54	86,243
Wisconsin: Milwaukee, Wis.	10	17,616	14	14,272	.....	.....	24	31,888
Duluth and Superior: Duluth, Minn.	30	67,000	218	773,231	.....	.....	248	840,231
Total	164	383,870	820	2,337,024	.....	.....	984	2,720,894
WESTERN RIVERS.								
New Orleans:								
New Orleans, La.[b]	.....	.....	50	16,815	3	110	53	16,925
Vicksburg, Miss.	.....	.....	2	2,182	2	19	4	2,201
Tennessee:								
Memphis, Tenn.	.....	.....	9	1,950	7	89	16	2,039
Chattanooga, Tenn.	.....	.....	.....	.....	8	80	8	80
Kentucky:								
Paducah, Ky.	.....	.....	.....	.....	1	10	1	10
Louisville, Ky.	.....	.....	3	414	1	14	4	428
St. Louis:								
St. Louis, Mo.	.....	.....	25	9,847	23	272	48	10,119
Kansas City, Mo.	.....	.....	2	497	1	8	3	505
St. Joseph, Mo.	.....	.....	.....	.....	1	30	1	30
Iowa:								
Des Moines, Iowa	.....	.....	1	58	.....	.....	1	58
Dubuque, Iowa	.....	.....	.....	.....	1	12	1	12
Minnesota: St. Paul, Minn.	.....	.....	1	62	.....	.....	1	62
Duluth and Superior: Duluth, Minn.[c]	.....	.....	1	21	.....	.....	1	21
Chicago: Chicago, Ill.[c]	.....	.....	2	125	3	33	5	158
Indiana: Evansville, Ind.	.....	.....	2	277	2	32	4	309
Ohio: Cincinnati, Ohio.	.....	.....	2	664	.....	.....	2	664
Pittsburgh: Pittsburgh, Pa.	.....	.....	10	1,892	.....	.....	10	1,892
Total	.....	.....	110	34,804	53	709	163	35,513
SUMMARY.								
Atlantic and Gulf coasts	829	3,465,956	1,191	1,217,318	32	900	2,052	4,684,174
Pacific coast	338	1,562,247	122	232,917	5	108	465	1,795,272
Northern lakes	164	383,870	820	2,337,024	.....	.....	984	2,720,894
Western rivers	.....	.....	110	34,804	53	709	163	35,513
Grand total	1,331	5,412,073	2,243	3,822,063	90	1,717	3,664	9,235,853

[a] Lake vessels; for vessels in river trade, see below.
[b] Vessels in river trade only; for seagoing vessels, see p. 172.
[c] Vessels in river trade only; for lake vessels, see above.

No. 5.—Number and Gross Tonnage of Documented Steam and Gas Metal Vessels of the United States, by Customs Districts, June 30, 1919.

[These vessels are included in statements Nos. 1, 3, and 4.]

Customs district and port in which documented.	Registered.				Enrolled.				Licensed under 20 tons.				Total.			
	Steam.		Gas.		Steam.		Gas.		Steam.		Gas.		Steam.		Gas.	
ATLANTIC AND GULF COASTS.																
Maine and New Hampshire:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Bangor, Me					1	147							1	147		
Belfast, Me					1	1,245							1	1,245		
Rockland, Me					2	409							2	409		
Bath, Me	1	6,846			3	14,926	2	968					4	21,772	2	968
Portland, Me					7	8,755							7	8,755		
Massachusetts:																
Boston, Mass	20	77,221	1	3,253	49	60,227					2	23	69	137,448	3	3,276
New Bedford, Mass					2	1,329							2	1,329		
Fall River, Mass					11	32,289							11	32,289		
Rhode Island:																
Providence, R. I	2	14,490											2	14,490		
Newport, R. I					2	589							2	589		
Connecticut:																
New London, Conn	2	12,483			16	34,404							18	46,887		
Hartford, Conn					9	7,242							9	7,242		
New Haven, Conn					16	3,543							16	3,543		
New York:																
New York, N. Y	447	2,107,346	13	32,087	435	499,961	9	5,519	1	20	4	66	883	2,607,327	26	37,672
Albany					20	5,948			2	46			22	5,994		
Newark, N. J	17	90,075			30	64,273			1	34			48	154,382		
Perth Amboy, N. J					15	3,736							15	3,736		
Philadelphia:																
Tuckerton, N. J							1	60							1	60
Philadelphia, Pa	87	503,820			119	57,519	4	351	10	425	1	14	216	561,764	5	365
Wilmington, Del	12	30,513			19	8,361	1	146	1	25			32	38,899	1	146
Maryland:																
Baltimore, Md	47	203,915			78	75,354	2	387	3	88	1	14	128	279,357	3	401
Washington, D. C					8	8,565							8	8,565		
Virginia:																
Reedville, Va					1	145							1	145		
Richmond, Va					4	1,258							4	1,258		
Newport News, Va	24	77,923			4	3,328							28	81,251		
Norfolk, Va	52	154,895			22	11,844	1	226	2	52			76	166,791	1	226
Cape Charles, Va					12	5,702							12	5,702		

North Carolina:																
Elizabeth City, N. C.					3	333			1	20			4	353		
Washington, N. C.					1	96							1	96		
Beaufort, N. C.							1	98							1	98
Wilmington, N. C.	1	97			6	697							7	794		
South Carolina:																
Georgetown, S. C.					2	186							2	186		
Charleston, S. C.	3	963			6	5,835			1	39			10	6,837		
Georgia:																
Savannah, Ga.	1	197			23	50,746	2	850					24	50,943	2	850
Brunswick, Ga.					4	785							4	785		
Florida:																
Jacksonville, Fla.	2	2,960	1	27	11	9,589	1	142					13	12,549	2	169
Key West, Fla.	2	4,147			1	41							3	4,188		
Tampa, Fla.	3	4,839			6	2,520							9	7,359		
Pensacola, Fla.	2	2,471			3	586							5	3,057		
Mobile: Mobile, Ala.	6	15,869			3	2,667	1	70	1	23			10	18,559	1	70
New Orleans:																
New Orleans, La.[a]	17	36,501			6	5,440							23	41,941		
Morgan City, La.					1	42							1	42		
Sabine: Port Arthur, Tex.	8	20,786	3	2,616	23	83,227	3	664					31	104,013	6	3,280
Galveston:																
Galveston, Tex.	2	269	1	255	7	3,016							9	3,285	1	255
Houston, Tex.					2	201					1	11	2	201	1	11
Freeport, Tex.	1	488											1	488		
San Antonio: Port Aransas, Tex.					1	80							1	80		
Porto Rico: San Juan, P. R.	3	1,723	1	490	4	2,486							7	4,209	1	490
Total	762	3,370,837	20	38,728	999	1,079,672	28	9,481	23	772	9	128	1,784	4,451,281	57	48,337
PACIFIC COAST.																
Southern California:																
San Diego, Calif.	1	116											1	116		
Los Angeles, Calif.	22	126,241			2	2,434							24	128,675		
San Francisco:																
San Francisco, Calif.	94	531,765			55	139,204	8	3,152	3	61	2	47	152	671,030	10	3,199
Eureka, Calif.	1	2,382											1	2,382		
Oregon: Portland, Oreg.	47	253,639			6	8,807							53	262,446		
Washington: Seattle, Wash.	138	596,426	1	229	14	19,217	1	832					152	615,643	2	1,061
Alaska: Juneau, Alaska	7	2,956											7	2,956		
Hawaii: Honolulu, Hawaii					8	5,935							8	5,935		
Total	310	1,513,525	1	229	85	175,597	9	3,984	3	61	2	47	398	1,689,183	12	4,260

[a] Seagoing vessels only; for vessels in river trade, see p. 176.

No. 5.—Number and Gross Tonnage of Documented Steam and Gas Metal Vessels of the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Registered.				Enrolled.				Licensed under 20 tons.				Total.			
	Steam.		Gas.		Steam.		Gas.		Steam.		Gas.		Steam.		Gas.	
NORTHERN LAKES.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Vermont: Burlington, Vt.					3	2,829							3	2,829		
St. Lawrence:																
Ogdensburg, N. Y.	1	2,194			3	5,928							4	8,122		
Cape Vincent, N. Y.					2	414							2	414		
Rochester: Oswego, N. Y.					20	104,815							20	104,815		
Buffalo: Buffalo, N. Y.	3	7,533			84	178,932	4	52					87	186,465	4	52
Ohio:																
Erie, Pa.					7	3,339							7	3,339		
Cleveland, Ohio.	48	116,675			207	918,494	1	13					255	1,035,169	1	13
Sandusky, Ohio.					7	3,234							7	3,234		
Toledo, Ohio.	9	20,462			1	102							10	20,564		
Michigan:																
Detroit, Mich.	43	105,711			57	121,804	1	17					100	227,515	1	17
Port Huron, Mich.	8	17,216			7	8,263							15	25,479		
Marquette, Mich.					16	67,816							16	67,816		
Grand Haven, Mich.					19	28,047	2	89					19	28,047	2	89
Chicago: Chicago, Ill.[a]	12	29,463			39	53,465	2	115					51	82,928	2	115
Wisconsin: Milwaukee, Wis.	10	17,616			12	11,461							22	29,077		
Duluth and Superior: Duluth, Minn.[a]	30	67,000			169	678,394							199	745,394		
Total	164	383,870			653	2,187,337	10	286					817	2,571,207	10	286
WESTERN RIVERS.																
New Orleans:																
New Orleans, La.[b]					39	8,996	8	3,536	3	110			42	9,106	8	3,536
Vicksburg, Miss.					2	2,182					2	19	2	2,182	2	19
Tennessee:																
Memphis, Tenn.					8	1,920			1	34	6	55	9	1,954	6	55
Chattanooga, Tenn.											1	11			1	11
Kentucky:																
Paducah, Ky.											1	10			1	10
Louisville, Ky.					1	352	2	62			1	14	1	352	3	76
St. Louis:																
St. Louis, Mo.					21	8,276	4	1,571	2	49	18	195	23	8,325	22	1,766
Kansas City, Mo.					2	497			1	8			3	505		
St. Joseph, Mo.									1	30			1	30		
Iowa:																
Des Moines, Iowa					1	58							1	58		
Dubuque, Iowa											1	12			1	12

Minnesota: St. Paul, Minn.					1	62							1	62		
Duluth and Superior: Duluth, Minn.[c]					1	21							1	21		
Chicago: Chicago, Ill.[c]					2	125					3	33	2	125	3	33
Indiana: Evansville, Ind					1	195	1	82			1	18	1	195	2	100
Ohio: Cincinnati, Ohio					2	664							2	664		
Pittsburgh: Pittsburgh, Pa.					9	1,572							9	1,572		
Total					90	24,920	15	5,251	8	231	34	367	98	25,151	49	5,618
SUMMARY.																
Atlantic and Gulf coasts	762	3,370,827	20	38,728	999	1,079,672	28	9,481	23	772	9	128	1,784	4,451,281	57	48,337
Pacific coast	310	1,513,525	1	229	85	175,597	9	3,984	3	61	2	47	398	1,689,183	12	4,260
Northern lakes	164	383,870			653	2,187,337	10	286					817	2,571,207	10	286
Western rivers					90	24,920	15	5,251	8	231	34	367	98	25,151	49	5,618
Grand total	1,236	5,268,232	21	38,957	1,827	3,467,526	62	19,002	34	1,064	45	542	3,097	8,736,822	128	58,501

[a] Lake vessels only; for vessels in river trade, see p. 177.
[b] Vessels in river trade only; for seagoing vessels, see p. 175.
[c] Vessels in river trade only; for lake vessels, see p. 176.

139723—19——12

No. 6.—Class, Number, and Gross Tonnage of Documented Metal Vessels of the United States, by Customs Districts, June 30, 1919.

Customs district and port in which documented.	Sailing vessels.		Steam vessels.		Gas vessels.		Barges.		Total.	
ATLANTIC AND GULF COASTS.										
Maine and New Hampshire:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Bangor, Me	.....	.....	1	147	.....	.....	.....	.....	1	147
Belfast, Me	.....	.....	1	1,245	.....	.....	.....	.....	1	1,245
Rockland, Me	5	5,600	2	409	.....	.....	.....	.....	7	6,009
Bath, Me	.....	.....	4	21,772	2	968	.....	.....	6	22,740
Portland, Me	2	4,558	7	8,755	.....	.....	.....	.....	9	13,313
Massachusetts:										
Marblehead, Mass	1	43	.....	.....	.....	.....	.....	.....	1	43
Boston, Mass	8	11,651	69	137,448	3	3,276	.....	.....	80	152,375
New Bedford, Mass	.....	.....	2	1,329	.....	.....	.....	.....	2	1,329
Fall River, Mass	.....	.....	11	32,289	.....	.....	.....	.....	11	32,289
Rhode Island:										
Providence, R. I	.....	.....	2	14,490	.....	.....	.....	.....	2	14,490
Newport, R. I	.....	.....	2	589	.....	.....	.....	.....	2	589
Connecticut:										
New London, Conn	.....	.....	18	46,887	.....	.....	1	357	19	47,244
Hartford, Conn	.....	.....	9	7,242	.....	.....	.....	.....	9	7,242
New Haven, Conn	.....	.....	16	3,543	.....	.....	.....	.....	16	3,543
New York:										
New York, N. Y	31	49,052	883	2,607,327	26	37,672	71	37,097	1,011	2,731,148
Albany, N. Y	.....	.....	22	5,994	.....	.....	.....	.....	22	5,994
Newark, N. J	.....	.....	48	154,382	.....	.....	.....	.....	48	154,382
Perth Amboy, N. J	10	8,163	15	3,736	.....	.....	2	1,054	27	12,953
Philadelphia:										
Tuckerton, N. J	.....	.....	.....	.....	1	60	.....	.....	1	60
Philadelphia, Pa	3	3,320	216	561,764	5	365	13	5,100	237	570,549
Wilmington, Del	2	1,734	32	38,899	1	146	.....	.....	35	40,779
Maryland:										
Baltimore, Md	1	836	128	279,357	3	401	4	1,550	136	282,144
Washington, D. C	.....	.....	8	8,565	.....	.....	.....	.....	8	8,565
Virginia:										
Reedville, Va	.....	.....	1	145	.....	.....	.....	.....	1	145
Richmond, Va	.....	.....	4	1,258	.....	.....	.....	.....	4	1,258
Newport News, Va	.....	.....	28	81,251	.....	.....	.....	.....	28	81,251
Norfolk, Va	.....	.....	76	166,791	1	226	.....	.....	77	167,017
Cape Charles, Va	.....	.....	12	5,702	.....	.....	10	13,834	22	19,536
North Carolina:										
Elizabeth City, N. C	.....	.....	4	353	.....	.....	.....	.....	4	353
Washington, N. C	.....	.....	1	96	.....	.....	.....	.....	1	96
Beaufort, N. C	.....	.....	.....	.....	1	98	.....	.....	1	98
Wilmington, N. C	.....	.....	7	794	.....	.....	.....	.....	7	794
South Carolina:										
Georgetown, S. C	.....	.....	2	186	.....	.....	.....	.....	2	186
Charleston, S. C	.....	.....	10	6,837	.....	.....	.....	.....	10	6,837
Georgia:										
Savannah, Ga	1	827	24	50,943	2	850	1	631	28	53,251
Brunswick, Ga	.....	.....	4	785	.....	.....	.....	.....	4	785
Florida:										
Jacksonville, Fla	.....	.....	13	12,549	2	169	.....	.....	15	12,718
Key West, Fla	.....	.....	3	4,188	.....	.....	2	1,180	5	5,368
Tampa, Fla	1	103	9	7,359	.....	.....	.....	.....	10	7,462
Cedar Keys, Fla	.....	.....	.....	.....	.....	.....	1	93	1	93
Pensacola, Fla	.....	.....	5	3,057	.....	.....	.....	.....	5	3,057
Mobile: Mobile, Ala	1	848	10	18,559	1	70	1	707	13	20,184
New Orleans:										
New Orleans, La.[a]	2	1,985	23	41,941	.....	.....	.....	.....	25	43,926
Morgan City, La	.....	.....	1	42	.....	.....	.....	.....	1	42
Sabine: Port Arthur, Tex	17	22,989	31	104,013	6	3,280	12	6,902	66	137,184
Galveston:										
Galveston, Tex	.....	.....	9	3,285	1	255	1	632	11	4,172
Houston, Tex	.....	.....	2	201	1	11	5	1,710	8	1,922
Freeport, Tex	.....	.....	1	488	.....	.....	1	1,165	2	1,653
San Antonio: Port Aransas, Tex	.....	.....	1	80	.....	.....	.....	.....	1	80
Porto Rico: San Juan, P. R	1	835	7	4,209	1	490	.....	.....	9	5,534
Total	86	112,544	1,784	4,451,281	57	48,337	125	72,012	2,052	4,684,174
PACIFIC COAST.										
Southern California:										
San Diego, Calif	.....	.....	1	116	.....	.....	.....	.....	1	116
Los Angeles, Calif	.....	.....	24	128,675	.....	.....	.....	.....	24	128,675
San Francisco:										
San Francisco, Calif	41	84,511	152	671,030	10	3,199	2	1,347	205	760,087
Eureka, Calif	.....	.....	1	2,382	.....	.....	.....	.....	1	2,382

[a] Seagoing vessels; for vessels in river trade, see p. 179.

No. 6.—Class, Number, and Gross Tonnage of Documented Metal Vessels of the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Sailing vessels.		Steam vessels.		Gas vessels.		Barges.		Total.	
PACIFIC COAST—continued.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Oregon: Portland, Oreg.	.....	.....	53	262,446	.....	.....	.....	.....	53	262,446
Washington: Seattle, Wash.	5	9,865	152	615,643	2	1,061	6	5,723	165	632,292
Alaska: Juneau, Alaska	.....	.....	7	2,956	.....	.....	1	383	8	3,339
Hawaii: Honolulu, Hawaii	.....	.....	8	5,935	.....	.....	.....	.....	8	5,935
Total	46	94,376	398	1,689,183	12	4,260	9	7,453	465	1,795,272
NORTHERN LAKES.										
Vermont: Burlington, Vt	.....	.....	3	2,829	.....	.....	.....	.....	3	2,829
St. Lawrence:										
Ogdensburg, N. Y.	.....	.....	4	8,122	.....	.....	3	1,956	7	10,078
Cape Vincent, N. Y.	.....	.....	2	414	.....	.....	.....	.....	2	414
Rochester: Oswego, N. Y.	.....	.....	20	104,815	.....	.....	.....	.....	20	104,815
Buffalo: Buffalo, N. Y.	.....	.....	87	186,465	4	52	[a] 69	21,609	160	208,126
Ohio:										
Erie, Pa.	.....	.....	7	3,339	.....	.....	.....	.....	7	3,339
Cleveland, Ohio	3	10,377	255	1,035,169	1	13	5	6,871	264	1,052,430
Sandusky, Ohio	.....	.....	7	3,234	.....	.....	2	859	9	4,093
Toledo, Ohio	.....	.....	10	20,564	.....	.....	.....	.....	10	20,564
Michigan:										
Detroit, Mich.	1	1,014	100	227,515	1	17	22	5,867	124	234,403
Port Huron, Mich.	.....	.....	15	25,479	.....	.....	.....	.....	15	25,479
Marquette, Mich.	.....	.....	16	67,816	.....	.....	.....	.....	16	67,816
Grand Haven, Mich.	.....	.....	19	28,047	2	89	.....	.....	21	28,136
Chicago: Chicago, Ill.[b]	1	3,200	51	82,928	2	115	.....	.....	54	86,243
Wisconsin: Milwaukee, Wis.	1	746	22	29,077	.....	.....	1	2,065	24	31,888
Duluth and Superior: Duluth, Minn.[b]	20	73,974	199	745,394	.....	.....	29	20,863	248	850,231
Total	26	89,311	817	2,571,207	10	286	131	60,090	984	2,720,894
WESTERN RIVERS.										
New Orleans:										
New Orleans, La.[c]	.....	.....	42	9,106	8	3,536	3	4,283	53	16,925
Vicksburg, Miss.	.....	.....	2	2,182	2	19	.....	.....	4	2,201
Tennessee:										
Memphis, Tenn.	.....	.....	9	1,954	6	55	1	30	16	2,039
Chattanooga, Tenn.	.....	.....	.....	.....	1	11	7	69	8	80
Kentucky:										
Paducah, Ky.	.....	.....	.....	.....	1	10	.....	.....	1	10
Louisville, Ky.	.....	.....	1	352	3	76	.....	.....	4	428
St. Louis:										
St. Louis, Mo.	.....	.....	23	8,325	22	1,766	3	28	48	10,119
Kansas City, Mo.	.....	.....	3	505	.....	.....	.....	.....	3	505
St. Joseph, Mo.	.....	.....	1	30	.....	.....	.....	.....	1	30
Iowa:										
Des Moines, Iowa	.....	.....	1	58	.....	.....	.....	.....	1	58
Dubuque, Iowa	.....	.....	.....	.....	1	12	.....	.....	1	12
Minnesota: St. Paul, Minn.	.....	.....	1	62	.....	.....	.....	.....	1	62
Duluth and Superior: Duluth, Minn.[d]	.....	.....	1	21	.....	.....	.....	.....	1	21
Chicago: Chicago, Ill.[d]	.....	.....	2	125	3	33	.....	.....	5	158
Indiana: Evansville, Ind.	.....	.....	1	195	2	100	1	14	4	309
Ohio: Cincinnati, Ohio	.....	.....	2	664	.....	.....	.....	.....	2	664
Pittsburgh: Pittsburgh, Pa.	.....	.....	9	1,572	.....	.....	1	320	10	1,892
Total	.....	.....	98	25,151	49	5,618	16	4,744	163	35,513
SUMMARY.										
Atlantic and Gulf coasts	86	112,544	1,784	4,451,281	57	48,337	125	72,012	2,052	4,684,174
Pacific coast	46	94,376	398	1,689,183	12	4,260	9	7,453	465	1,795,272
Northern lakes	26	89,311	817	2,571,207	10	286	131	60,090	984	2,720,894
Western rivers	.....	.....	98	25,151	49	5,618	16	4,744	163	35,513
Grand total	158	296,231	3,097	8,736,822	128	58,501	281	144,299	3,664	9,235,853

[a] Includes 1 canal boat of 294 tons.
[b] Lake vessels; for vessels in river trade, see below.
[c] Vessels in river trade only; for seagoing vessels, see p. 178.
[d] Vessels in river trade only; for lake vessels, see above.

No. 7.—Number and Gross Tonnage of Each Class of Documented Wooden and Metal Vessels of the United States, June 30, 1919.

Class and material.	Registered.		Enrolled.		Licensed.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Wooden vessels:								
Sailing	637	413,126	1,498	467,090	1,967	23,214	4,102	903,430
Steam	432	547,393	3,260	759,370	608	13,815	4,300	1,320,578
Gas	1,295	139,623	1,946	73,246	6,885	86,857	10,126	299,726
Canal	.....	.....	489	56,137	.....	.....	489	56,137
Barge	1,337	157,511	3,210	930,905	285	3,160	4,832	1,091,576
Total	3,701	1,257,653	10,403	2,286,748	9,745	127,046	23,849	3,671,447
Metal vessels:								
Sailing	49	86,419	109	209,812	.....	.....	158	296,231
Steam	1,236	5,268,232	1,827	3,467,526	34	1,064	3,097	8,736,822
Gas	21	38,957	62	19,002	45	542	128	58,501
Canal	.....	.....	1	294	.....	.....	1	294
Barge	25	18,465	244	125,429	11	111	280	144,005
Total	1,331	5,412,073	2,243	3,822,063	90	1,717	3,664	9,235,853
Grand total	5,032	6,669,726	12,646	6,108,811	9,835	128,763	27,513	12,907,300

No. 8.—Balance Sheet of Tonnage Accounts, Showing the Increase and Decrease of Documented Vessels, June 30, 1919.

	Registered.		Enrolled.		Licensed.		Total.	
DEBIT.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Built	797	2,608,977	705	711,458	451	6,186	1,953	3,326,621
Foreign built, act Aug. 18, 1914	6	10,863	1	2,486	.....	.....	7	13,349
Foreign built, act Sept. 7, 1916	14	78,167	.....	.....	.....	.....	14	78,167
Foreign wrecks, act Feb. 24, 1915	2	1,228	3	1,814	.....	.....	5	3,042
Renationalized, act Mar. 3, 1897	3	475	15	2,714	2	28	20	3,217
Purchased from United States	1	693	14	4,713	4	65	19	5,471
Purchased from State	.....	.....	4	185	1	18	5	203
Rebuilt	78	139,257	222	98,110	148	2,235	448	239,602
Redocumented	6	4,571	51	14,572	25	337	82	19,480
From yachting	6	424	32	1,248	49	736	87	2,408
Trade changed	1,308	2,093,598	829	1,521,590	75	1,572	2,212	3,616,760
Total	2,221	4,938,253	1,876	2,358,890	755	11,177	4,852	7,308,320
CREDIT.								
Lost	142	208,952	168	101,058	105	1,395	415	311,405
Abandoned	15	3,728	213	24,977	282	3,277	510	31,982
Sold to aliens	76	35,649	44	26,848	7	90	127	62,587
Sold to United States	6	8,222	114	39,092	15	254	135	47,568
Sold to State	.....	.....	.....	.....	1	14	1	14
Exempt, act Apr. 18, 1874	2	98	80	20,119	4	45	86	20,262
Net under 5 tons	3	24	4	30	43	360	50	414
Rebuilt	64	92,619	233	138,686	151	2,112	448	233,417
To yachting	1	17	12	566	52	537	65	1,120
To inland waters	.....	.....	.....	.....	1	9	1	9
Trade changed	893	1,522,924	1,175	2,091,596	144	2,240	2,212	3,616,760
	+1,019	+3,066,020	−167	−84,082	−50	+844	+802	+2,982,782
Total	2,221	4,938,253	1,876	2,358,890	755	11,177	4,852	7,308,320

This balance sheet shows that the tonnage of the United States has increased 2,982,782 during the year ended June 30, 1919. The increase (+) and decrease (−) are distributed among the several kinds of documents as follows:

Documents.	Number.	Tons.
Registers	+1,019	+3,066,020
Enrollments	− 167	− 84,082
Licenses	− 50	+ 844
Net increase	+ 802	+2,982,782

No. 9.—Balance Sheet of Tonnage Accounts, Showing the Increase and Decrease in Each Class of Vessels, June 30, 1919.

	Sail.		Steam.		Gas.		Canal.		Barge.		Total.	
DEBIT.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Built	84	79,234	891	3,107,064	633	50,027	15	2,731	330	87,565	1,953	3,326,621
Foreign built, act Aug. 18, 1914			7	13,349							7	13,349
Foreign built, act Sept. 7, 1916			14	78,167							14	78,167
Foreign wrecks, act Feb. 24, 1915	3	2,945	1	30	1	67					5	3,042
Renationalized, act Mar. 3, 1897	2	467	14	2,659	4	91					20	3,217
Purchased from United States	3	2,115	12	3,245	4	111					19	5,471
Purchased from State	4	148			1	55					5	203
Rebuilt	37	16,516	111	190,667	258	20,219			42	12,200	448	239,602
Redocumented	7	3,719	17	7,746	25	403	7	861	26	6,751	82	19,480
From yachting	7	233	11	697	68	1,456			1	22	87	2,408
Trade changed	788	565,601	1,068	2,960,093	340	83,187			16	7,879	2,212	3,616,760
Total	935	670,978	2,146	6,363,717	1,334	155,616	22	3,592	415	114,417	4,852	7,308,320
CREDIT.												
Lost	122	67,148	120	214,762	131	18,318	6	844	36	10,333	415	311,405
Abandoned	158	7,767	84	12,741	182	3,289	34	3,691	52	4,494	510	31,982
Sold to aliens	46	18,330	34	31,554	37	10,731	4	435	6	1,537	127	62,587
Sold to United States	2	1,428	89	39,222	25	1,008			19	5,910	135	47,568
Sold to State					1	14					1	14
Exempt, act Apr. 18, 1874							7	779	79	19,483	86	20,262
Net under 5 tons	9	56	1	35	40	323					50	414
Rebuilt	131	20,484	118	185,120	159	13,556			40	14,257	448	233,417
To yachting	6	38	2	303	55	755			2	24	65	1,120
To inland waters					1	9					1	9
Trade changed	788	565,601	1,068	2,960,093	340	83,187			16	7,879	2,212	3,616,760
	−327	−9,874	+630	+2,919,887	+363	+24,426	−29	−2,157	+165	+50,500	+802	+2,982,782
Total	935	670,978	2,146	6,363,717	1,334	155,616	22	3,592	415	114,417	4,852	7,308,320

This balance sheet shows a decrese (−) of 327 vessels and 9,874 tons in sailing and 29 vessels and 2,157 tons in canal classification; an increase (+) of 630 vessels and 2,919,887 tons in steam, 363 vessels and 24,426 tons in gas, and 165 vessels and 50,500 tons in barge classification, or a total of 802 vessels and 2,982,782 tons.

No. 10.—Documented Sailing and Steam Tonnage Constituting

Year ended—	Registered vessels.						Enrolled vessels.					
	Sailing.[a]		Steam.		Total.		Sailing.[b]		Steam.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Dec. 31, 1789	.....	123,893	.....	.....	.....	123,893	.....	77,669	.....	.....	.....	77,669
1790	.....	346,254	.....	.....	.....	346,254	.....	132,123	.....	.....	.....	132,123
1791	.....	363,110	.....	.....	.....	363,110	.....	139,036	.....	.....	.....	139,036
1792	.....	411,438	.....	.....	.....	411,438	.....	153,019	.....	.....	.....	153,019
1793	.....	367,734	.....	.....	.....	367,734	.....	143,827	.....	.....	.....	143,827
1794	.....	438,863	.....	.....	.....	438,863	.....	167,228	.....	.....	.....	167,228
1795	.....	529,471	.....	.....	.....	529,471	.....	192,846	.....	.....	.....	192,846
1796	.....	576,733	.....	.....	.....	576,733	.....	226,297	.....	.....	.....	226,297
1797	.....	597,777	.....	.....	.....	597,777	.....	248,587	.....	.....	.....	248,587
1798	.....	603,376	.....	.....	.....	603,376	.....	263,584	.....	.....	.....	263,584
1799	.....	662,197	.....	.....	.....	662,197	.....	245,429	.....	.....	.....	245,429
1800	.....	669,921	.....	.....	.....	669,921	.....	268,254	.....	.....	.....	268,254
1801	.....	[c] 632,907	.....	.....	.....	632,907	.....	278,271	.....	.....	.....	278,271
1802	.....	[c] 560,381	.....	.....	.....	560,381	.....	294,111	.....	.....	.....	294,111
1803	.....	597,157	.....	.....	.....	597,157	.....	313,235	.....	.....	.....	313,235
1804	.....	672,530	.....	.....	.....	672,530	.....	330,251	.....	.....	.....	330,251
1805	.....	749,341	.....	.....	.....	749,341	.....	350,743	.....	.....	.....	350,743
1806	.....	808,285	.....	.....	.....	808,285	.....	361,059	.....	.....	.....	361,059
1807	.....	848,307	.....	.....	.....	848,307	.....	379,787	.....	.....	.....	379,787
1808	.....	769,054	.....	.....	.....	769,054	.....	432,006	.....	.....	.....	432,006
1809	.....	910,059	.....	.....	.....	910,059	.....	398,184	.....	.....	.....	398,184
1810	.....	984,269	.....	.....	.....	984,269	.....	397,704	.....	.....	.....	397,704
1811	.....	[c] 768,852	.....	.....	.....	768,852	.....	420,674	.....	.....	.....	420,674
1812	.....	760,624	.....	.....	.....	760,624	.....	465,945	.....	.....	.....	465,945
1813	.....	674,853	.....	.....	.....	674,853	.....	445,449	.....	.....	.....	445,449
1814	.....	674,633	.....	.....	.....	674,633	.....	435,139	.....	.....	.....	435,139
1815	.....	854,295	.....	.....	.....	854,295	.....	462,807	.....	.....	.....	462,807
1816	.....	800,760	.....	.....	.....	800,760	.....	519,026	.....	.....	.....	519,026
1817	.....	809,725	.....	.....	.....	809,725	.....	535,798	.....	.....	.....	535,798
1818	.....	[d] 606,089	.....	.....	.....	606,089	.....	562,307	.....	.....	.....	562,307
1819	.....	612,930	.....	.....	.....	612,930	.....	589,288	.....	.....	.....	589,288
1820	.....	619,048	.....	.....	.....	619,048	.....	600,977	.....	.....	.....	600,977
1821	.....	619,896	.....	.....	.....	619,896	.....	612,712	.....	.....	.....	612,712
1822	.....	628,150	.....	.....	.....	628,150	.....	634,619	.....	.....	.....	634,619
1823	.....	639,921	.....	.....	.....	639,921	.....	609,156	.....	24,879	.....	634,035
1824	.....	669,973	.....	.....	.....	669,973	.....	636,032	.....	21,610	.....	657,642
1825	.....	700,788	.....	.....	.....	700,788	.....	634,838	.....	23,061	.....	657,899
1826	.....	737,978	.....	.....	.....	737,978	.....	696,123	.....	34,059	.....	730,182
1827	.....	747,170	.....	.....	.....	747,170	.....	766,788	.....	40,198	.....	806,986
1828	.....	812,619	.....	.....	.....	812,619	.....	822,753	.....	39,418	.....	862,171
1829	.....	[d] 650,143	.....	.....	.....	650,143	.....	534,320	.....	54,037	.....	588,357
1830	.....	[d] 575,056	.....	1,419	.....	576,475	.....	528,394	.....	63,053	.....	591,447
1831	.....	619,575	.....	877	.....	620,452	.....	551,449	.....	68,568	.....	620,017
1832	.....	686,809	.....	181	.....	686,990	.....	633,056	.....	90,633	.....	723,689
1833	.....	749,482	.....	545	.....	750,027	.....	723,890	.....	101,306	.....	825,196
1834	.....	857,098	.....	340	.....	857,438	.....	746,908	.....	122,474	.....	869,382
Sept. 30, 1835[e]	.....	885,482	.....	340	.....	885,822	.....	784,138	.....	122,474	.....	906,612
1836	.....	897,321	.....	454	.....	897,775	.....	807,425	.....	145,102	.....	952,527
1837	.....	809,343	.....	1,104	.....	810,447	.....	897,350	.....	153,661	.....	1,051,011
1838	.....	819,801	.....	2,791	.....	822,592	.....	943,367	.....	190,632	.....	1,133,999
1839	.....	829,096	.....	5,149	.....	834,245	.....	1,032,023	.....	189,879	.....	1,221,902
1840	.....	895,610	.....	4,155	.....	899,765	.....	1,042,676	.....	198,184	.....	1,240,860
1841	.....	945,057	.....	746	.....	945,803	.....	973,571	.....	174,342	.....	1,147,913
1842	.....	970,658	.....	4,701	.....	975,359	.....	859,619	.....	225,050	.....	1,084,669
June 30, 1843	.....	1,003,932	.....	5,373	.....	1,009,305	.....	883,534	.....	231,494	.....	1,115,028
1844	.....	1,061,855	.....	6,910	.....	1,068,765	.....	908,268	.....	265,270	.....	1,173,538
1845	.....	1,088,680	.....	6,492	.....	1,095,172	.....	962,817	.....	319,527	.....	1,282,344
1846	.....	1,124,000	.....	6,287	.....	1,130,287	.....	1,057,684	.....	341,606	.....	1,399,290
1847	.....	1,235,682	.....	5,631	.....	1,241,313	.....	1,155,042	.....	399,210	.....	1,554,252
1848	.....	1,344,819	.....	16,068	.....	1,360,887	.....	1,335,809	.....	411,823	.....	1,747,632
1849	.....	1,418,072	.....	20,870	.....	1,438,942	.....	1,406,710	.....	441,525	.....	1,848,235

[a] Including barges.

[b] Including canal boats and barges.

[c] 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.)

[d] 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).

THE TOTAL MERCHANT MARINE OF THE UNITED STATES, 1789–1919.

Licensed vessels under 20 tons.						Total merchant marine.						Annual increase or decrease (—).	Year.
Sailing.[a]		Steam.		Total.		Sailing.[b]		Steam.		Total.			
No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*Per ct.*	
.....	.....	.....	.....	.....	.....	.....	201,562	.....	.....	.....	201,562	.....	[f]1789
.....	.....	.....	.....	.....	.....	.....	478,377	.....	.....	.....	478,377	137.33	[f]1790
.....	.....	.....	.....	.....	.....	.....	502,146	.....	.....	.....	502,146	4.96	[f]1791
.....	.....	.....	.....	.....	.....	.....	564,457	.....	.....	.....	564,457	12.40	[f]1792
.....	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
.....	39,393	.....	.....	.....	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	.....	1,260,752	.....	.....	.....	1,260,752	2.90	1819
.....	60,142	.....	.....	.....	60,142	.....	1,280,167	.....	.....	.....	1,280,167	1.54	1820
.....	66,350	.....	.....	.....	66,350	.....	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	.....	1,367,553	.....	21,610	.....	1,389,163	3.94	1824
.....	64,424	.....	.....	.....	64,424	.....	1,400,050	.....	23,061	.....	1,423,111	2.44	1825
.....	66,031	.....	.....	.....	66,031	.....	1,500,132	.....	34,059	.....	1,534,191	7.80	1826
.....	66,451	.....	.....	.....	66,451	.....	1,580,409	.....	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	.....	2,090,983	.....	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	.....	3,234,016	5.71	1849

[e] Nine months.

[f] 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.[a]		Total.		Sailing.		Steam.[a]		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
June 30, 1850	.....	1,540,769	.....	44,942	.....	1,585,711	.....	1,418,550	.....	481,005	.....	1,899,555
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	.....	1,829,564	.....	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	.....	86,873	.....	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	.....	1,568,032	.....	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	975,142	20,438	2,733,167
1869	3,054	1,353,170	227	213,252	3,281	1,566,422	16,633	1,638,692	3,099	887,401	19,732	2,526,093
1870	2,742	1,324,256	200	192,544	2,942	1,516,800	18,431	1,798,418	3,094	879,522	21,525	2,677,940
1871	2,545	1,244,228	176	180,914	2,721	1,425,142	19,229	1,901,731	3,151	903,543	22,380	2,805,274
1872	2,516	1,232,982	183	177,666	2,699	1,410,648	20,204	2,041,347	3,273	929,962	23,477	2,971,309
1873	2,553	1,229,865	206	193,423	2,759	1,423,288	21,426	2,257,498	3,458	958,417	24,884	3,215,915
1874	2,535	1,233,678	193	195,245	2,728	1,428,923	20,864	2,326,577	3,624	985,569	24,488	3,312,146
1875	2,769	1,362,138	212	191,689	2,981	1,553,827	20,297	2,266,584	3,616	971,806	23,913	3,238,390
1876	2,821	1,394,594	188	198,227	3,009	1,592,821	13,735	1,656,504	3,673	968,300	17,408	2,624,804
1877	2,807	1,421,060	181	190,133	2,988	1,611,193	12,961	1,592,834	3,732	975,033	16,693	2,567,867
1878	2,866	1,458,209	173	170,838	3,037	1,629,047	12,635	1,528,979	3,780	990,382	16,415	2,519,361
1879	2,549	1,335,211	168	156,323	2,717	1,491,534	12,654	1,598,792	3,840	1,012,810	16,494	2,611,602
1880	2,246	1,206,206	132	146,604	2,378	1,352,810	12,331	1,509,766	4,079	1,058,587	16,410	2,649,353
1881	2,191	1,182,817	135	152,769	2,326	1,335,586	11,590	1,551,246	4,227	1,105,955	15,817	2,657,201
1882	2,051	1,137,725	134	154,570	2,185	1,292,295	11,611	1,612,837	4,514	1,194,383	16,126	2,807,220
1883	2,006	1,130,190	168	171,905	2,174	1,302,095	11,432	1,630,831	4,359	1,227,739	15,791	2,858,570
1884	1,939	1,120,033	188	184,188	2,127	1,304,221	11,218	1,623,196	4,294	1,263,332	15,512	2,886,528
1885	1,937	1,101,593	182	186,406	2,119	1,287,999	11,050	1,606,578	4,345	1,289,995	15,395	2,896,573
1886	1,584	934,546	185	176,633	1,769	1,111,179	10,866	1,611,181	4,417	1,327,582	15,283	2,938,763
1887	1,436	841,992	185	173,571	1,621	1,015,563	10,508	1,659,081	4,396	1,349,683	14,904	3,008,764
1888	1,330	760,386	200	183,398	1,530	943,784	10,531	1,720,923	4,565	1,444,435	15,096	3,165,358
1889	1,462	827,124	219	194,471	1,681	1,021,595	10,409	1,651,437	4,744	1,550,044	15,153	3,201,481
1890	1,294	749,065	233	197,630	1,527	946,695	10,320	1,752,241	4,743	1,639,643	15,063	3,391,884
1891	1,316	765,955	271	239,995	1,587	1,005,950	10,358	1,837,810	4,904	1,753,417	15,262	3,591,227
1892	1,270	765,776	254	228,899	1,532	994,675	10,391	1,857,522	5,070	1,821,997	15,461	3,679,519
1893	1,094	638,700	249	261,103	1,343	899,803	10,404	1,934,855	5,216	1,897,978	15,620	3,832,833
1894	1,104	650,089	246	266,091	1,350	916,180	9,473	1,776,243	5,172	1,898,973	14,645	3,675,216
1895	1,021	586,142	239	252,045	1,260	838,187	9,206	1,768,900	5,202	1,936,204	14,408	3,705,104
1896	1,013	580,072	244	264,882	1,257	844,954	8,753	1,744,351	5,246	2,018,149	13,999	3,762,500
1897	983	547,110	247	258,474	1,230	805,584	8,505	1,791,067	5,217	2,075,469	13,722	3,866,536
1898	824	443,645	312	294,064	1,136	737,709	8,517	1,864,380	5,208	2,053,210	13,725	3,917,500
1899	964	488,216	367	360,030	1,331	848,246	8,274	1,830,477	5,232	2,090,821	13,506	3,921,298
1900	992	485,352	338	341,342	1,330	826,694	8,415	1,949,744	5,371	2,289,825	13,786	4,239,569
1901	972	459,407	355	429,722	1,327	889,129	8,629	2,070,411	5,542	2,462,084	14,171	4,532,495
1902	885	423,730	341	458,825	1,226	882,555	8,522	2,122,923	5,693	2,686,772	14,215	4,809,695
1903	813	361,366	357	527,410	1,170	888,776	8,474	2,243,661	5,761	2,846,835	14,235	5,090,496
1904	856	344,612	348	554,156	1,204	898,768	8,347	2,278,861	5,920	3,004,928	14,267	5,283,789
1905	992	353,333	380	601,180	1,372	954,513	8,136	2,291,539	5,990	3,100,263	14,126	5,391,802
1906	1,032	348,201	406	591,285	1,441	939,486	8,090	2,283,705	6,087	3,339,228	14,177	5,622,933
1907	992	269,021	442	602,125	1,434	871,146	7,931	2,327,020	6,179	3,627,686	14,110	5,954,706
1908	1,113	341,331	478	598,737	1,591	940,068	7,755	2,252,644	6,360	4,055,295	14,115	6,307,939
1909	1,135	308,979	498	578,526	1,633	887,505	7,654	2,273,987	6,418	4,107,066	14,072	6,381,053
1910	1,029	234,848	497	556,977	1,526	791,825	7,482	2,321,207	6,567	4,272,521	14,049	6,593,728
1911	1,145	286,941	558	585,730	1,703	872,671	7,179	2,230,215	6,754	4,410,605	13,933	6,640,820
1912	1,311	312,395	701	619,706	2,012	932,101	6,910	2,177,485	7,002	4,475,201	13,912	6,652,686
1913	1,478	356,628	827	671,148	2,305	1,027,776	6,786	2,153,144	7,215	4,573,196	14,001	6,726,340
1914	1,521	351,278	884	724,874	2,405	1,076,152	6,520	2,111,933	7,316	4,607,041	13,836	6,718,974
1915	1,687	521,697	1,107	1,349,846	2,794	1,871,543	6,021	1,889,674	7,327	4,495,051	13,348	6,384,725
1916	1,810	592,054	1,324	1,599,661	3,134	2,191,715	5,762	1,775,665	7,203	4,371,381	12,965	6,147,046
1917	1,879	588,665	1,604	1,857,734	3,483	2,446,399	5,710	1,819,360	7,193	4,476,928	12,903	6,296,288
1918	1,934	587,925	2,079	3,015,781	4,013	3,603,706	5,710	1,837,278	7,103	4,355,615	12,813	6,192,893
1919	2,048	675,521	2,984	5,994,205	5,032	6,669,726	5,551	1,789,667	7,095	4,319,144	12,646	6,108,811

[a] Includes gasoline vessels since 1897.

TOTAL MERCHANT MARINE OF THE UNITED STATES, 1789–1919—Continued.

Licensed vessels under 20 tons.						Total merchant marine.						Annual increase or decrease (—).	Year.
Sailing.		Steam.[a]		Total.		Sailing.		Steam.[a]		Total.			
No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	Per ct.	
.....	50,188	.....	.....	.....	50,188	.....	3,009,507	.....	525,947	.....	3,535,454	6.04	1850
.....	53,799	.....	.....	.....	53,799	.....	3,188,832	.....	583,607	.....	3,772,439	6.70	1851
.....	55,765	.....	.....	.....	55,765	.....	3,495,200	.....	643,240	.....	4,138,440	9.70	1852
.....	60,714	.....	.....	.....	60,714	.....	3,802,392	.....	604,618	.....	4,407,010	6.49	1853
.....	57,948	.....	.....	.....	57,948	.....	4,126,295	.....	676,607	.....	4,802,902	8.96	1854
.....	61,134	.....	.....	.....	61,134	.....	4,441,716	.....	770,285	.....	5,212,001	8.52	1855
.....	42,364	.....	.....	.....	42,364	.....	4,198,576	.....	673,077	.....	4,871,653	— 6.53	1856
.....	43,505	.....	.....	.....	43,505	.....	4,235,059	.....	705,784	.....	4,940,843	1.42	1857
.....	47,980	.....	.....	.....	47,980	.....	4,320,418	.....	729,390	.....	5,049,808	2.20	1858
.....	50,669	.....	.....	.....	50,669	.....	4,376,285	.....	768,753	.....	5,145,038	1.90	1859
.....	54,693	.....	.....	.....	54,693	.....	4,485,931	.....	867,937	.....	5,353,868	4.06	1860
.....	57,786	.....	.....	.....	57,786	.....	4,662,609	.....	877,204	.....	5,539,813	3.47	1861
.....	48,908	.....	.....	.....	48,908	.....	4,401,701	.....	710,463	.....	5,112,164	— 7.72	1862
.....	52,749	.....	.....	.....	52,749	.....	4,357,537	.....	575,519	.....	5,155,056	.84	1863
.....	52,035	.....	.....	.....	52,035	.....	4,008,440	.....	977,960	.....	4,986,400	— 3.27	1864
.....	40,106	.....	.....	.....	40,106	.....	4,029,643	.....	1,067,139	.....	5,096,782	2.21	1865
.....	39,315	.....	.....	.....	39,315	.....	3,227,206	.....	1,083,512	.....	4,310,778	—15.42	1866
.....	41,097	.....	.....	.....	41,097	.....	3,112,607	.....	1,191,880	.....	4,304,487	— .14	1867
4,134	50,526	179	2,334	4,313	52,860	24,548	3,152,344	3,619	1,199,415	28,167	4,351,759	1.10	1868
4,254	49,211	220	2,915	4,474	52,126	23,941	3,041,073	3,546	1,103,568	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	1,075,095	28,998	4,246,507	2.41	1870
4,310	49,011	240	3,180	4,550	52,191	26,084	3,194,970	3,567	1,087,637	29,651	4,282,607	.85	1871
4,641	51,865	297	3,925	4,938	55,790	27,361	3,326,194	3,753	1,111,553	31,114	4,437,747	3.62	1872
4,678	52,221	351	4,603	5,029	56,824	28,657	3,539,584	4,015	1,156,443	32,672	4,696,027	5.82	1873
4,901	54,787	369	4,796	5,270	59,583	28,300	3,615,042	4,186	1,185,610	32,486	4,800,652	2.23	1874
4,984	56,342	407	5,173	5,391	61,515	28,050	3,685,064	4,235	1,168,668	32,285	4,853,732	1.10	1875
5,058	55,988	459	5,845	5,517	61,833	21,614	3,107,086	4,320	1,172,372	25,934	4,279,458	—11.83	1876
5,223	57,509	482	6,031	5,705	63,540	20,991	3,071,403	4,395	1,171,197	25,386	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	4,212,765	— .70	1878
5,439	59,426	561	7,039	6,000	66,465	20,642	2,993,429	4,569	1,176,172	25,211	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	4,068,034	— 2.43	1880
5,424	58,673	498	6,274	5,922	64,947	19,205	2,792,736	4,860	1,264,998	24,065	4,057,734	— .25	1881
5,516	59,545	541	6,873	6,057	66,418	19,177	2,810,107	5,191	1,355,826	24,368	4,165,933	2.66	1882
5,530	61,272	722	13,550	6,252	74,822	18,968	2,822,293	5,249	1,413,194	24,217	4,235,487	1.67	1883
5,524	62,091	919	18,389	6,443	80,480	18,681	2,805,320	5,401	1,465,909	24,082	4,271,229	.84	1884
5,577	62,846	872	18,516	6,449	81,362	18,564	2,771,017	5,399	1,494,917	23,963	4,265,934	— .12	1885
5,617	62,425	865	18,769	6,482	81,194	18,067	2,608,152	5,467	1,522,984	23,534	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	4,105,845	— .61	1887
5,726	62,536	929	20,238	6,655	82,774	17,587	2,543,846	5,694	1,648,070	23,281	4,191,916	2.10	1888
5,828	63,364	961	21,035	6,789	84,399	17,699	2,541,924	5,924	1,765,551	23,623	4,307,475	2.75	1889
5,888	64,103	989	21,815	6,877	85,918	17,502	2,565,409	5,965	1,859,088	23,467	4,424,497	2.71	1890
6,009	64,730	1,041	22,852	7,050	87,582	17,683	2,668,495	6,216	2,016,264	23,899	4,684,759	5.88	1891
6,322	67,206	1,068	23,521	7,390	90,727	17,991	2,690,504	6,392	2,074,417	24,383	4,764,921	1.71	1892
6,453	68,244	1,096	24,191	7,549	92,435	17,951	2,641,799	6,561	2,183,272	24,512	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	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	4,635,960	— 1.03	1895
6,547	72,249	1,105	24,177	7,652	96,426	16,313	2,396,672	6,595	2,307,208	22,908	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	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	4,749,738	— .40	1898
6,653	69,534	1,238	25,160	7,891	94,694	15,891	2,388,227	6,837	2,476,011	22,728	4,864,238	2.41	1899
6,873	71,946	1,344	26,630	8,217	98,576	16,280	2,507,042	7,053	2,657,797	23,333	5,164,839	6.18	1900
7,042	73,447	1,517	29,147	8,559	102,594	16,643	2,603,265	7,414	2,920,953	24,057	5,524,218	6.96	1901
7,129	74,375	1,693	31,277	8,832	105,652	16,546	2,621,028	7,727	3,176,874	24,273	5,797,902	4.95	1902
7,084	74,230	1,936	33,843	9,020	108,073	16,371	2,679,257	8,054	3,408,088	24,425	6,087,345	4.99	1903
6,892	72,644	2,195	36,334	9,087	108,978	16,095	2,696,117	8,463	3,595,418	24,558	6,291,535	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	6,456,543	2.62	1905
6,381	67,776	3,007	44,774	9,388	112,550	15,506	2,699,682	9,500	3,975,287	25,006	6,674,969	3.38	1906
5,938	63,385	3,429	49,557	9,367	112,942	14,861	2,659,426	10,050	4,279,368	24,911	6,938,794	3.95	1907
5,631	60,296	4,088	57,142	9,719	117,438	14,499	2,654,271	10,926	4,711,174	25,425	7,365,445	6.15	1908
5,258	56,565	4,725	63,632	9,983	120,197	14,047	2,639,531	11,641	4,749,224	25,688	7,388,755	.32	1909
4,777	51,666	5,388	70,863	10,165	122,529	13,288	2,607,721	12,452	4,900,361	25,740	7,508,082	1.61	1910
4,360	47,565	5,995	77,734	10,355	125,299	12,684	2,564,721	13,307	5,074,069	25,991	7,638,790	1.74	1911
4,042	44,445	6,562	84,951	10,604	129,396	11,577	2,534,325	14,951	5,179,858	26,528	7,714,183	.99	1912
3,722	41,205	7,042	91,197	10,764	132,402	11,988	2,553,271	15,082	5,333,247	27,070	7,886,518	2.23	1913
3,411	37,951	7,291	95,611	10,702	133,562	11,452	2,501,162	15,491	5,427,526	26,943	7,928,688	.53	1914
3,045	34,248	7,514	98,913	10,559	133,161	10,753	2,445,619	15,948	5,943,810	26,701	8,389,429	5.81	1915
2,811	31,867	7,534	99,021	10,345	130,888	10,383	2,399,586	16,061	6,070,063	26,444	8,469,649	.95	1916
2,566	29,651	7,445	98,699	10,011	128,350	10,155	2,437,676	16,242	6,433,361	26,397	8,871,037	4.74	1917
2,409	28,001	7,476	99,918	9,885	127,919	10,053	2,453,204	16,658	7,471,314	26,711	9,924,518	11.87	1918
2,263	26,485	7,572	102,278	9,835	128,763	9,862	2,491,673	17,651	10,415,627	27,513	12,907,300	30.05	1919

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

No. 10A.—Number and Gross Tonnage of Canal Boats and Barges Documented in the United States, in Specified Years, 1868–1919.

[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 [a]	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 [b]	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	73,383	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	77,583	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	966,898
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	61,979	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
1918	519	58,588	4,947	1,185,081	5,466	1,243,669
1919	490	56,431	5,112	1,235,581	5,602	1,292,012

[a] See act Apr. 18, 1874.

[b] 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, 1868–1919.

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

Year.	Sailing.		Steam.[a]		Canal boats.		Barges.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1868	1,855	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	264,609	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	45,585	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	918	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	185	40,965	3,127	605,102
1885	1,322	313,129	1,175	335,859	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	60,785	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	1,739	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
1918	133	159,564	2,295	2,504,901	101	11,219	410	121,819	2,939	2,797,503
1919	125	151,383	2,380	2,731,552	103	11,525	435	129,302	3,043	3,023,762

[a] Includes gasoline vessels since 1897.

No. 11.—Number and Gross Tonnage of Sailing Vessels, Steam Vessels, Gas Vessels, Canal Boats, and Barges in the United States, by Customs Districts, June 30, 1919.

[This table does not include yachts, nor boats and lighters, decked and not masted, employed within the harbor of any town or city, nor canal boats and barges without sails or internal motive power of their own, employed wholly upon canals or the internal waters of a State, nor barges and boats plying on rivers or lakes of the United States and not engaged in the trade with contiguous foreign territory, and not carrying passengers, nor boats under 5 tons net.]

Customs district and port in which documented.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Maine and New Hampshire:												
Eastport, Me.	21	3,520	5	461	129	2,303					155	6,284
Calais, Me.	9	1,395			4	134					13	1,529
Machias, Me.	26	6,364	2	97	56	935					84	7,396
Ellsworth, Me.	12	1,160	2	128	21	331					35	1,619
Southwest Harbor, Me.	12	323	1	34	64	833					77	1,190
Castine, Me.	40	2,155	4	221	43	620			1	86	88	3,082
Bangor, Me.	10	850	5	380	2	17					17	1,247
Belfast, Me.	7	1,221	8	2,193	10	117			4	1,539	29	5,070
Rockland, Me.	54	13,162	14	1,692	97	1,305			3	160	168	16,319
Boothbay, Me.	15	2,121	4	95	25	381			2	65	46	2,662
Bath, Me.	13	3,486	17	22,787	3	976			23	882	56	28,131
Portland, Me.	28	9,352	51	38,807	110	2,483			1	87	190	50,729
Portsmouth, N. H.	4	225	5	202	7	115			1	86	17	628
Massachusetts:												
Gloucester, Mass.	40	3,701	21	2,050	183	10,923			5	504	249	17,178
Salem, Mass.			2	77	5	63					7	140
Marblehead, Mass.	3	71	1	40	4	48			2	500	10	659
Boston, Mass.	109	54,206	204	171,509	118	7,161			24	8,595	455	241,471
Plymouth, Mass.	6	77			3	31					9	108
Provincetown, Mass.	15	1,860	1	82	59	899					75	2,841
Barnstable, Mass.	1	6			23	199					24	205
Vineyard Haven, Mass.	4	65	2	46	52	680					58	791
New Bedford, Mass.	24	3,261	12	2,972	80	1,143					116	7,376
Fall River, Mass.	28	23,706	20	42,028	26	275			4	1,420	78	67,429
Rhode Island:												
Providence, R. I.	12	1,419	27	18,231	92	1,260					131	20,850
Newport, R. I.	4	130	38	6,487	84	1,011			3	169	129	7,797
Connecticut:												
New London, Conn.	16	10,493	46	54,430	43	879			28	8,672	133	74,474
Hartford, Conn.	4	477	17	7,758	12	130			45	18,409	78	26,774
New Haven, Conn.	15	774	38	5,889	55	896	3	419	19	7,620	130	15,598
Bridgeport, Conn.	47	1,054	30	3,402	90	1,286			4	737	171	6,479
New York:												
New York, N. Y.	304	247,529	1,658	2,749,257	592	69,423	82	11,266	1,887	617,576	4,523	3,695,051
Albany, N. Y.	1	86	117	14,945	4	48	299	32,866	103	34,372	524	82,317
Patchogue, N. Y.	46	1,285	6	427	263	3,127			10	913	325	5,752
Greenport, N. Y.	36	527	15	1,574	139	2,098			1	10	191	4,209
Newark, N. J.	11	2,708	94	166,565	39	422	2	249	8	2,240	154	172,184
Perth Amboy, N. J.	75	25,902	43	10,968	66	982			68	19,552	252	57,404

Philadelphia:												
Tuckerton, N. J.	3	16			52	458			2	21	57	495
Philadelphia, Pa.	311	108,669	334	597,552	360	6,366	1	106	198	78,559	1,204	791,252
Wilmington, Del.	50	16,207	45	40,750	46	2,084			41	16,413	182	75,454
Maryland:												
Baltimore, Md.	367	36,979	234	302,956	173	4,040			244	52,417	1,018	396,392
Annapolis, Md.	104	2,386			68	890			2	16	174	3,292
Crisfield, Md.	451	7,284			59	985			1	40	511	8,309
Washington, D. C.	31	1,638	21	9,087	8	112					60	10,837
Alexandria, Va.	3	38	3	67	4	91					10	196
Virginia:												
Reedville, Va.	139	3,903	32	5,350	89	2,082			1	256	261	11,591
Richmond, Va.	14	301	10	1,534	10	171			7	1,637	41	3,643
Petersburg, Va.	1	44	1	98	6	88					8	230
Newport News, Va.	79	32,689	43	92,962	138	2,792					260	128,443
Norfolk, Va.	64	42,552	147	210,699	270	6,523			15	5,419	496	265,193
Cape Charles, Va.	59	838	14	5,988	98	1,184			10	13,834	181	21,844
North Carolina:												
Elizabeth City, N. C.	26	605	23	1,083	45	624			6	1,112	100	3,424
Manteo, N. C.	10	172			14	158			1	12	25	342
Washington, N. C.	41	539	11	632	42	580					94	1,751
Newbern, N. C.	20	594	13	525	48	681					81	1,800
Beaufort, N. C.	63	626			146	3,094			2	533	211	4,253
Wilmington, N. C.	14	186	39	2,632	34	611			2	611	89	4,040
South Carolina:												
Georgetown, S. C.			19	1,261	29	370					48	1,631
Charleston, S. C.	19	4,278	21	7,521	102	1,357			2	827	144	13,983
Beaufort, S. C.	44	501	2	354	13	160					59	1,015
Georgia:												
Savannah, Ga.	43	5,594	52	53,467	31	1,484			1	631	127	61,176
Brunswick, Ga.	8	4,016	12	1,576	24	254			2	872	46	6,718
Florida:												
Fernandina, Fla.			3	402	24	667					27	1,069
Jacksonville, Fla.	10	2,569	49	25,748	104	2,679			3	1,143	166	32,139
St. Augustine, Fla.	1	8			50	704					51	712
Miami, Fla.	3	118	2	97	109	1,867			2	407	166	2,489
Key West, Fla.	72	1,640	18	5,457	76	989			6	2,737	172	10,823
Tampa, Fla.	72	4,658	16	8,076	102	2,081			2	74	192	14,889
Cedar Keys, Fla.	3	19	5	343	5	68			20	2,479	33	2,909
Apalachicola, Fla.	5	38	14	1,381	27	318					46	1,737
Pensacola, Fla.	68	11,721	22	4,001	20	2,127			9	3,817	119	21,666
Mobile:												
Mobile, Ala.[a]	53	13,878	43	27,897	65	2,679			10	5,012	171	49,466
Gulfport, Miss.	194	7,814	14	6,587	44	3,316			1	834	253	18,551
New Orleans:												
New Orleans, La.[a]	91	8,913	38	72,289	8	2,283			1	503	138	83,988
Morgan City, La.	19	183	41	2,181	125	1,986			12	5,785	197	10,135
Sabine: Port Arthur, Tex.	24	27,916	63	142,541	46	10,784			41	15,579	174	196,820

[a] Seagoing vessels; for vessels in river trade, see p. 191.

No. 11.—Number and Gross Tonnage of Sailing Vessels, Steam Vessels, Gas Vessels, Canal Boats, and Barges in the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Galveston:												
Galveston, Tex.	19	1,760	24	7,597	106	1,797	.....	.....	29	12,011	178	23,165
Freeport, Tex.	.....	.....	1	488	1	12	.....	.....	1	1,165	3	1,665
Houston, Tex.	1	73	11	662	48	664	.....	.....	7	2,315	67	3,714
Port Lavaca, Tex.	35	271	1	39	29	283	.....	.....	3	103	68	696
San Antonio:												
Port Aransas, Tex.	4	46	2	413	14	199	.....	.....	6	1,716	26	2,374
Brownsville, Tex.	1	8	.....	.....	.....	.....	.....	.....	.....	.....	1	8
Porto Rico: San Juan, P. R.	91	9,651	11	5,593	10	633	.....	.....	2	91	114	15,968
Total	3,782	786,610	3,964	4,973,720	5,525	186,849	387	44,906	2,938	953,175	16,596	6,945,260
PACIFIC COAST.												
Southern California:												
San Diego, Calif.	8	179	5	1,071	80	1,922	.....	.....	8	472	101	3,644
Los Angeles, Calif.	1	11	33	143,775	175	4,260	.....	.....	25	2,520	234	150,566
San Francisco:												
San Francisco, Calif.	187	166,791	442	944,023	405	29,636	.....	.....	3	2,777	1,037	1,143,227
Eureka, Calif.	15	8,628	5	5,292	15	3,219	.....	.....	1	236	36	17,375
Oregon:												
Marshfield, Oreg.	.....	.....	14	5,255	63	802	.....	.....	.....	.....	77	6,057
Newport, Oreg.	.....	.....	3	106	7	177	.....	.....	1	53	11	336
Astoria, Oreg.	4	4,979	31	31,800	119	3,994	.....	.....	.....	.....	154	40,773
Portland, Oreg.	8	7,663	172	367,108	63	25,560	.....	.....	3	1,504	246	401,835
Washington: Seattle, Wash.	89	65,387	452	729,749	1,417	58,092	.....	.....	1,277	100,633	3,235	953,861
Alaska: Juneau, Alaska	28	794	101	32,969	635	10,875	.....	.....	254	34,853	1,018	79,491
Hawaii: Honolulu, Hawaii	11	7,164	14	8,956	24	3,196	.....	.....	.....	.....	49	19,316
Total	351	261,596	1,272	2,270,104	3,003	141,733	.....	.....	1,572	143,048	6,198	2,816,481
NORTHERN LAKES.												
Vermont: Burlington, Vt.	.....	.....	9	3,060	1	12	4	426	.....	.....	14	3,498
St. Lawrence:												
Rouses Point, N. Y.	1	108	4	163	4	79	89	9,523	.....	.....	98	9,873
Ogdensburg, N. Y.	3	1,150	19	11,994	.....	.....	.....	.....	9	3,507	31	16,651
Cape Vincent, N. Y.	3	63	13	1,537	19	276	.....	.....	22	1,053	57	2,929
Rochester:												
Oswego, N. Y.	1	100	31	105,769	3	278	.....	.....	2	270	37	106,417
Rochester, N. Y.	.....	.....	4	639	11	109	.....	.....	.....	.....	15	748
Buffalo: Buffalo, N. Y.	6	4,331	170	200,294	14	162	8	1,295	99	27,180	297	233,262

Ohio:												
Erie, Pa			44	10,237	13	151					57	10,388
Cleveland, Ohio	13	22,357	296	1,053,947	11	145			12	12,179	332	1,088,628
Sandusky, Ohio	1	489	26	5,828	22	313			3	1,327	52	7,957
Toledo, Ohio	4	1,960	25	22,475	9	105			10	2,185	48	26,725
Michigan:												
Detroit, Mich	8	4,280	148	245,395	30	510	2	281	70	15,310	258	265,776
Port Huron, Mich	17	7,865	55	38,228	11	150			15	989	98	47,232
Marquette, Mich	5	1,810	56	73,838	40	584			22	5,558	123	81,790
Grand Haven, Mich	6	2,451	109	36,600	235	2,506					350	41,557
Chicago: Chicago, Ill.[a]	14	11,516	123	98,662	96	1,563					233	111,741
Wisconsin: Milwaukee, Wis.[a]	12	3,341	139	46,427	297	3,198			38	12,872	486	65,838
Duluth and Superior: Duluth, Minn.[a]	31	89,562	270	765,986	23	332			133	46,872	457	902,752
Total	125	151,383	1,541	2,721,079	839	10,473	103	11,525	435	129,302	3,043	3,023,762
WESTERN RIVERS.												
New Orleans:												
New Orleans, La.[b]			112	14,777	127	6,229			4	4,448	243	25,454
Vicksburg, Miss			21	3,482	18	219					39	3,701
Tennessee:												
Memphis, Tenn			27	3,732	29	418			3	82	59	4,232
Nashville, Tenn			7	732	26	391					33	1,123
Chattanooga, Tenn			12	961	20	213			34	297	66	1,471
Mobile: Mobile, Ala.[b]			4	167	13	130			3	32	20	329
Kentucky:												
Paducah, Ky			12	1,872	35	454			3	410	50	2,736
Louisville, Ky			49	6,552	82	1,125			6	200	137	7,877
St. Louis:												
St. Louis, Mo	2	72	93	19,912	202	4,388			60	970	357	25,342
Kansas City, Mo			6	698	22	405					28	1,103
St. Joseph, Mo			1	30	2	29					3	59
Nebraska: Omaha, Nebr			1	51	4	96					5	147
Dakota: Pembina, N. Dak			2	72	37	1,295			7	433	46	1,800
Montana and Idaho: Great Falls, Mont			1	22	11	288					12	310
Iowa:												
Des Moines, Iowa			12	818	17	190			1	12	30	1,020
Sioux City, Iowa					5	47					5	47
Dubuque, Iowa			3	146	13	122			6	104	22	372
Minnesota: St. Paul, Minn			6	299	9	161			7	575	22	1,035
Duluth and Superior: Duluth, Minn.[c]			7	123	7	110			5	674	19	907
Wisconsin: Milwaukee, Wis.[c]			1	98	5	47					6	145
Chicago:												
Chicago, Ill.[c]			18	1,307	23	322			6	237	47	1,866
Peoria, Ill			17	2,119	24	386			2	78	43	2,583
Indiana: Evansville, Ind			31	3,552	41	772			9	333	81	4,657
Ohio: Cincinnati, Ohio			42	8,439	44	522			3	107	89	9,068
Pittsburgh: Pittsburgh, Pa			135	22,536	71	813			8	1,064	214	24,413
Total	2	72	620	92,497	887	19,172			167	10,056	1,676	121,797

[a] Lake vessels; for vessels in river trade, see below. [b] Vessels in river trade only; for seagoing vessels, see p. 189. [c] Vessels in river trade only; for lake vessels, see above.

No. 11.—Number and Gross Tonnage of Sailing Vessels, Steam Vessels, Gas Vessels, Canal Boats, and Barges in the United States, by Customs Districts, June 30, 1919—Continued.

Customs district and port in which documented.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
SUMMARY.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Atlantic and Gulf coasts	3,782	786,610	3,964	4,973,720	5,525	186,849	387	44,906	2,938	953,175	16,596	6,945,260
Pacific coast	351	261,596	1,272	2,270,104	3,003	141,733	.....	.....	1,572	143,048	6,198	2,816,481
Northern lakes	125	151,383	1,541	2,721,079	839	10,473	103	11,525	435	129,302	3,043	3,023,762
Western rivers	2	72	620	92,497	887	19,172	.....	.....	167	10,056	1,676	121,797
Grand total	4,260	1,199,661	7,397	10,057,400	10,254	358,227	490	56,431	5,112	1,235,581	27,513	12,907,300

No. 12.—Number and Gross Tonnage of Sailing Vessels, Steam Vessels, Gas Vessels, Canal Boats, and Barges in the United States, by States, June 30, 1919.

State or Territory in which documented.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Maine	247	45,109	113	66,895	564	10,435	.....	.....	34	2,819	958	125,258
New Hampshire	4	225	5	202	7	115	.....	.....	1	86	17	628
Vermont	.....	.....	9	3,060	1	12	4	426	.....	.....	14	3,498
Massachusetts	230	86,953	263	218,804	553	21,422	.....	.....	35	11,019	1,081	338,198
Rhode Island	16	1,549	65	24,718	176	2,211	.....	.....	3	169	260	28,647
Connecticut	82	12,798	131	71,479	200	3,191	3	419	96	35,438	512	123,325
New York	401	255,179	2,037	3,086,599	1,049	75,600	478	54,950	2,133	684,881	6,098	4,157,209
New Jersey	89	28,626	137	177,533	157	1,862	2	249	78	21,813	463	230,083
Pennsylvania	311	108,669	513	630,325	444	7,330	1	106	206	79,623	1,475	826,053
Delaware	50	16,207	45	40,750	46	2,084	.....	.....	41	16,413	182	75,454
Maryland	922	46,649	234	302,956	300	5,915	.....	.....	247	52,473	1,703	407,993
District of Columbia	31	1,638	21	9,087	8	112	.....	.....	.....	.....	60	10,837
Virginia	359	80,365	250	316,698	615	12,931	.....	.....	33	21,146	1,257	431,140
North Carolina	174	2,722	86	4,872	329	5,748	.....	.....	11	2,268	600	15,610
South Carolina	63	4,779	42	9,136	144	1,887	.....	.....	2	827	251	16,629
Georgia	51	9,610	64	55,043	55	1,738	.....	.....	3	1,503	173	67,894
Florida	234	20,771	129	45,505	517	11,500	.....	.....	42	10,657	922	88,433
Alabama	53	13,878	47	28,064	78	2,809	.....	.....	13	5,044	191	49,795
Mississippi	194	7,814	35	10,069	62	3,535	.....	.....	1	834	292	22,252
Louisiana	110	9,096	191	89,247	260	10,498	.....	.....	17	10,736	578	119,577
Texas	84	30,074	102	151,740	244	13,739	.....	.....	87	32,889	517	228,442
Porto Rico	91	9,651	11	5,593	10	633	.....	.....	2	91	114	15,968
Tennessee	.....	.....	46	5,425	75	1,022	.....	.....	37	379	158	6,826
Kentucky	.....	.....	61	8,424	117	1,579	.....	.....	9	610	187	10,613
Missouri	2	72	100	20,640	226	4,822	.....	.....	60	970	388	26,504
Nebraska	.....	.....	1	51	4	96	.....	.....	.....	.....	5	147
North Dakota	.....	.....	2	72	37	1,205	.....	.....	7	433	46	1,800
Montana	.....	.....	1	22	11	288	.....	.....	.....	.....	12	310
Iowa	.....	.....	15	964	35	359	.....	.....	7	116	57	1,439
Minnesota	31	89,562	283	766,408	39	603	.....	.....	145	48,121	498	904,694
Wisconsin	12	3,341	140	46,525	302	3,245	.....	.....	38	12,872	492	65,983
Michigan	36	16,406	368	394,061	316	3,750	2	281	107	21,857	829	436,355
Illinois	14	11,516	158	102,088	143	2,271	.....	.....	8	315	323	116,190
Indiana	.....	.....	31	3,552	41	772	.....	.....	9	333	81	4,657
Ohio	18	24,806	389	1,090,689	86	1,085	.....	.....	28	15,798	521	1,132,378
California	211	175,609	485	1,094,161	675	39,037	.....	.....	37	6,005	1,408	1,314,812
Oregon	12	12,642	220	404,269	252	30,533	.....	.....	4	1,557	488	449,001
Washington	89	65,387	452	729,749	1,417	58,092	.....	.....	1,277	100,633	3,235	953,861
Alaska	28	794	101	32,969	635	10,875	.....	.....	254	34,853	1,018	79,491
Hawaii	11	7,164	14	8,956	24	3,196	.....	.....	.....	.....	49	19,316
Total	4,260	1,199,661	7,397	10,057,400	10,254	358,227	490	56,431	5,112	1,235,581	27,513	12,907,300

No. 13.—Sailing, Steam, and Gas Vessels of the United States, According to Size, June 30, 1919.

Geographical distribution.	Class 0. 5 to 49 tons.		Class 1. 50 to 99 tons.		Class 2. 100 to 499 tons.		Class 3. 500 to 999 tons		Class 4. 1,000 to 2,499 tons.		Class 5. 2,500 to 4,999 tons.		Class 6. 5,000 tons and over.		Total.	
SAILING VESSELS.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Atlantic and Gulf coasts	2,473	41,185	355	24,665	373	87,909	353	276,208	216	318,485	12	38,158	.....	.....	3,782	786,610
Pacific coast	79	1,690	33	2,308	50	16,733	87	60,516	90	144,430	12	35,919	.....	.....	351	261,596
Northern lakes	9	252	6	484	32	9,430	40	26,718	12	21,159	23	78,213	3	15,127	125	151,383
Western rivers	2	72	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	72
Total	2,563	43,199	394	27,457	455	114,072	480	363,442	318	484,074	47	152,290	3	15,127	4,260	1,199,661
STEAM VESSELS.																
Atlantic and Gulf coasts	802	24,393	698	52,122	1,092	239,111	210	150,889	359	674,469	465	1,585,673	338	2,247,063	3,964	4,973,720
Pacific coast	174	4,907	160	12,071	286	74,385	144	104,428	118	201,211	181	561,066	209	1,312,036	1,272	2,270,104
Northern lakes	450	12,471	215	16,499	155	37,656	82	59,568	197	409,534	256	963,907	186	1,221,444	1,541	2,721,079
Western rivers	168	4,918	232	17,658	181	39,386	31	20,181	8	10,354	.....	.....	.....	.....	620	92,497
Total	1,594	46,689	1,305	98,350	1,714	390,538	467	335,066	682	1,295,568	902	3,110,646	733	4,780,543	7,397	10,057,400
GAS VESSELS.																
Atlantic and Gulf coasts	5,201	75,391	163	11,589	117	19,043	12	9,088	27	53,161	4	13,118	1	5,459	5,525	186,849
Pacific coast	2,750	48,764	161	10,936	48	9,666	11	8,393	30	55,604	3	8,370	.....	.....	3,003	141,733
Northern lakes	827	9,329	9	575	3	569	.....	.....	.....	.....	.....	.....	.....	.....	839	10,473
Western rivers	850	12,026	28	2,020	5	1,871	3	1,782	1	1,473	.....	.....	.....	.....	887	19,172
Total	9,628	145,510	361	25,120	173	31,149	26	19,263	58	110,238	7	21,488	1	5,459	10,254	358,227
Grand total	13,785	235,398	2,060	150,927	2,342	535,759	973	717,771	1,058	1,889,880	956	3,284,424	737	4,801,129	21,911	11,615,288

No. 14.—Number and Gross Tonnage of Vessels of the United States Engaged in the Cod and Mackerel Fisheries, by Customs Districts, June 30, 1919.

Customs district and port in which documented.	Sailing.				Steam.				Gas.				Total.	
	Enrolled.		Licensed.		Enrolled.		Licensed.		Enrolled.		Licensed.			
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Maine and New Hampshire:														
Eastport, Me									1	21	3	49	4	70
Machias, Me											3	25	3	25
Ellsworth, Me			1	7							4	49	5	56
Southwest Harbor, Me			3	22					2	60	22	209	27	291
Castine, Me	4	534	3	16					2	121	3	19	12	690
Bangor, Me											1	5	1	5
Belfast, Me											2	27	2	27
Rockland, Me			6	40							39	390	45	430
Boothbay, Me											14	227	14	227
Bath, Me			2	17							1	8	3	25
Portland, Me			2	15	4	1,156	3	63	16	1,483	51	700	76	3,417
Portsmouth, N. H			1	5									1	5
Massachusetts:														
Gloucester, Mass	21	2,457	3	34	5	1,132	7	221	83	8,812	88	1,490	207	14,146
Marblehead, Mass	2	65	1	6									3	71
Boston, Mass	8	960	6	58	19	4,741	1	49	23	1,787	20	441	77	8,036
Plymouth, Mass			3	26							2	19	5	45
Provincetown, Mass	7	819	2	14	1	82			2	65	53	794	65	1,774
Barnstable, Mass			1	6							2	14	3	20
Vineyard Haven, Mass							2	46	1	25	12	224	15	295
New Bedford, Mass	1	48									5	106	6	154
Fall River, Mass											1	16	1	16
Connecticut: New London, Conn											3	40	3	40
New York: Greenport, N. Y			6	50							3	33	9	83
California: San Francisco, Calif	5	1,566											5	1,566
Oregon:														
Marshfield, Oreg											1	24	1	24
Astoria, Oreg											14	327	14	327
Portland, Oreg	2	3,250			2	346			4	170	6	105	14	3,871
Washington: Seattle, Wash	2	412											2	412
Total	52	10,111	40	316	31	7,457	13	379	134	12,544	353	5,341	623	36,148

No. 15.—Number and Gross Tonnage of Vessels of the United States Engaged in the Whale Fisheries, by Ports, June 30, 1919.

Port.	Sailing.		Steam.		Gas.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Massachusetts:								
Provincetown, Mass	4	776					4	776
New Bedford, Mass	9	1,324			2	156	11	1,480
California: San Francisco, Calif	1	73			1	362	2	435
Washington: Seattle, Wash			5	654	1	523	6	1,177
Alaska: Juneau, Alaska			3	482			3	482
Total	14	2,173	8	1,136	4	1,041	26	4,350

No. 16.—Documented Tonnage of the United States Merchant Marine 1789–

Year ended—	Foreign trade.		Coasting trade.						Whale fisheries.	
	Registered.		Enrolled.		Licensed.		Total.		Registered.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Dec. 31, 1789	.....	123,893	.....	68,607	.....	.....	.....	68,607	.....	.....
1790	.....	346,254	.....	103,775	.....	.....	.....	103,775	.....	.....
1791	.....	363,110	.....	106,494	.....	.....	.....	106,494	.....	.....
1792	.....	411,438	.....	120,957	.....	.....	.....	120,957	.....	.....
1793	.....	367,734	.....	114,853	.....	7,218	.....	122,071	.....	.....
1794	.....	438,863	.....	145,601	.....	16,977	.....	162,578	.....	.....
1795	.....	529,471	.....	164,796	.....	19,602	.....	184,398	.....	.....
1796	.....	576,733	.....	195,424	.....	22,417	.....	217,841	.....	.....
1797	.....	597,777	.....	214,077	.....	23,326	.....	237,403	.....	.....
1798	.....	603,376	.....	227,344	.....	24,099	.....	251,443	.....	.....
1799	.....	657,142	.....	220,904	.....	25,736	.....	246,640	.....	5,055
1800	.....	667,107	.....	345,295	.....	27,197	.....	272,492	.....	2,814
1801	.....	[a] 630,558	.....	246,255	.....	28,296	.....	274,551	.....	2,349
1802	.....	[a] 557,760	.....	260,543	.....	29,080	.....	289,623	.....	2,621
1803	.....	585,910	.....	268,676	.....	30,384	.....	299,060	.....	11,247
1804	.....	660,514	.....	286,840	.....	30,697	.....	317,537	.....	12,016
1805	.....	744,224	.....	301,366	.....	31,297	.....	332,663	.....	5,117
1806	.....	798,507	.....	309,977	.....	30,563	.....	340,540	.....	9,778
1807	.....	840,163	.....	318,190	.....	30,838	.....	349,028	.....	8,144
1808	.....	765,252	.....	387,684	.....	33,135	.....	420,819	.....	3,802
1809	.....	906,855	.....	371,501	.....	33,662	.....	405,163	.....	3,204
1810	.....	981,019	.....	371,114	.....	34,233	.....	405,347	.....	3,250
1811	.....	[a] 763,607	.....	386,259	.....	34,103	.....	420,362	.....	5,245
1812	.....	758,636	.....	443,181	.....	34,791	.....	477,972	.....	1,988
1813	.....	672,700	.....	433,405	.....	37,704	.....	471,109	.....	2,153
1814	.....	674,633	.....	425,714	.....	40,445	.....	466,159	.....	.....
1815	.....	824,295	.....	435,067	.....	40,599	.....	475,666	.....	.....
1816	.....	800,760	.....	479,979	.....	42,186	.....	522,165	.....	.....
1817	.....	804,851	.....	481,458	.....	43,572	.....	525,030	.....	4,874
1818	.....	[b] 589,944	.....	503,140	.....	46,234	.....	549,374	.....	16,135
1819	.....	581,230	.....	523,556	.....	47,502	.....	571,058	.....	31,700
1820	.....	583,657	.....	539,080	.....	48,945	.....	588,025	.....	35,391
1821	.....	593,825	.....	559,436	.....	55,409	.....	614,845	.....	26,071
1822	.....	582,701	.....	573,080	.....	51,109	.....	624,189	.....	45,449
1823	.....	600,003	.....	566,409	.....	51,396	.....	617,805	.....	39,918
1824	.....	636,807	.....	589,223	.....	52,340	.....	641,563	.....	33,166
1825	.....	665,409	.....	587,273	.....	53,588	.....	640,861	.....	35,379
1826	.....	696,221	.....	666,420	.....	55,910	.....	722,330	.....	41,757
1827	.....	701,517	.....	732,938	.....	56,221	.....	789,159	.....	45,653
1828	.....	757,998	.....	787,226	.....	55,680	.....	842,906	.....	54,621
1829	.....	[b] 592,859	.....	490,468	.....	18,390	.....	508,858	.....	57,284
1830	.....	[b] 537,563	.....	496,640	.....	20,339	.....	516,979	.....	38,912
1831	.....	538,136	.....	516,086	.....	23,638	.....	539,724	.....	82,316
1832	.....	614,121	.....	624,159	.....	25,468	.....	649,627	.....	72,869
1833	.....	648,869	.....	717,423	.....	26,776	.....	744,199	.....	101,158
1834	.....	749,378	.....	755,463	.....	28,156	.....	783,619	.....	108,060
Sept. 30, 1835 (9 mos.)	.....	788,173	.....	769,795	.....	27,543	.....	797,338	.....	97,649
1836	.....	753,094	.....	846,116	.....	26,907	.....	873,023	.....	144,681
1837	.....	683,205	.....	927,256	.....	29,731	.....	956,981	.....	127,242
1838	.....	702,962	.....	1,008,146	.....	32,959	.....	1,041,105	.....	119,630
1839	.....	702,400	.....	1,120,311	.....	33,241	.....	1,153,552	.....	131,845
1840	.....	762,838	.....	1,144,664	.....	32,030	.....	1,176,694	.....	136,927
1841	.....	788,398	.....	1,076,036	.....	31,032	.....	1,107,068	.....	157,405
1842	.....	832,746	.....	1,018,253	.....	27,500	.....	1,045,753	.....	151,613
June 30, 1843 (9 mos.)	.....	856,930	.....	1,048,209	.....	27,947	.....	1,076,156	.....	152,375
1844	.....	900,471	.....	1,078,868	.....	30,747	.....	1,109,615	.....	168,294
1845	.....	904,476	.....	1,190,898	.....	32,320	.....	1,223,218	.....	190,696
1846	.....	943,307	.....	1,289,871	.....	25,706	.....	1,315,577	.....	186,980
1847	.....	1,047,454	.....	1,452,623	.....	35,978	.....	1,488,601	.....	193,859
1848	.....	1,168,707	.....	1,620,988	.....	38,329	.....	1,659,317	.....	192,180
1849	.....	1,258,756	.....	1,731,411	.....	38,965	.....	1,770,376	.....	180,186
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

[a] The decrease of registered tonnage ior 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.)

[b] 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.)

EMPLOYED IN THE FOREIGN TRADE, THE COASTING TRADE, AND THE FISHERIES 1919.

Whale fisheries.			Cod and mackerel fisheries.						Total merchant marine.		Year.
Enrolled.	Total.		Enrolled.		Licensed.		Total.				
Tons.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	
.....	.....	.....	.....	9,062	.....	.....	.....	9,062	.....	201,562	c 1789
.....	.....	.....	.....	28,348	.....	.....	.....	28,348	.....	478,377	c 1790
.....	.....	.....	.....	32,542	.....	.....	.....	32,542	.....	502,146	c 1791
.....	.....	.....	.....	32,062	.....	.....	.....	32,062	.....	564,457	c 1792
.....	.....	.....	.....	28,974	.....	1,985	.....	30,959	.....	520,764	1793
4,129	.....	4,129	.....	17,498	.....	5,550	.....	23,048	.....	628,618	1794
3,163	.....	3,163	.....	24,887	.....	6,046	.....	30,933	.....	747,965	1795
2,364	.....	2,364	.....	28,509	.....	6,453	.....	34,962	.....	831,900	1796
1,104	.....	1,104	.....	33,406	.....	7,222	.....	40,628	.....	876,912	1797
763	.....	763	.....	35,477	.....	7,269	.....	42,746	.....	898,328	1798
592	.....	5,647	.....	23,933	.....	6,046	.....	29,979	.....	939,408	1799
652	.....	3,466	.....	22,307	.....	7,120	.....	29,427	.....	972,492	1800
736	.....	3,085	.....	31,280	.....	8,102	.....	39,382	.....	947,576	1801
580	.....	3,201	.....	32,988	.....	8,534	.....	41,522	.....	892,106	1802
1,143	.....	12,390	.....	43,416	.....	8,396	.....	51,812	.....	949,172	1803
323	.....	12,339	.....	43,088	.....	8,926	.....	52,014	.....	1,042,404	1804
898	.....	6,015	.....	48,479	.....	8,986	.....	57,465	.....	1,140,367	1805
729	.....	10,507	.....	50,353	.....	8,830	.....	59,183	.....	1,208,737	1806
907	.....	9,051	.....	60,690	.....	9,616	.....	70,306	.....	1,268,548	1807
724	.....	4,526	.....	43,598	.....	8,400	.....	51,998	.....	1,242,595	1808
573	.....	3,777	.....	26,110	.....	8,377	.....	34,487	.....	1,350,282	1809
339	.....	3,589	.....	26,251	.....	8,577	.....	34,828	.....	1,424,783	1810
54	.....	5,299	.....	34,361	.....	8,873	.....	43,234	.....	1,232,502	1811
942	.....	2,930	.....	21,822	.....	8,637	.....	30,459	.....	1,269,997	1812
789	.....	2,942	.....	11,255	.....	8,622	.....	19,877	.....	1,166,628	1813
562	.....	562	.....	8,863	.....	8,992	.....	17,855	.....	1,159,209	1814
1,230	.....	1,230	.....	26,510	.....	10,427	.....	36,937	.....	1,368,128	1815
1,168	.....	1,168	.....	37,879	.....	10,247	.....	48,126	.....	1,372,219	1816
350	.....	5,224	.....	53,990	.....	10,817	.....	64,807	.....	1,399,912	1817
615	.....	16,750	.....	58,552	.....	10,555	.....	69,107	.....	1,225,185	1818
686	.....	32,386	.....	65,045	.....	11,033	.....	76,078	.....	1,260,752	1819
1,054	.....	36,445	.....	60,843	.....	11,197	.....	72,040	.....	1,280,167	1820
1,924	.....	27,995	.....	51,352	.....	10,941	.....	62,293	.....	1,298,958	1821
3,134	.....	48,583	.....	58,405	.....	10,821	.....	69,226	.....	1,324,699	1822
585	.....	40,503	.....	67,041	.....	11,214	.....	78,255	.....	1,336,566	1823
180	.....	33,346	.....	68,239	.....	9,208	.....	77,447	.....	1,389,163	1824
.....	.....	35,379	.....	70,626	.....	10,836	.....	81,462	.....	1,423,111	1825
227	.....	41,984	.....	63,535	.....	10,121	.....	73,656	.....	1,534,191	1826
339	.....	45,992	.....	73,709	.....	10,230	.....	83,939	.....	1,620,607	1827
180	.....	54,801	.....	74,765	.....	10,922	.....	85,687	.....	1,741,392	1828
.....	.....	57,284	.....	97,889	.....	3,908	.....	101,797	.....	1,260,798	1829
793	.....	39,705	.....	94,014	.....	3,515	.....	97,529	.....	1,191,776	1830
481	.....	82,797	.....	103,450	.....	3,739	.....	107,189	.....	1,267,846	1831
377	.....	73,246	.....	99,153	.....	3,303	.....	102,456	.....	1,439,450	1832
478	.....	101,636	.....	107,295	.....	4,152	.....	111,447	.....	1,606,151	1833
364	.....	108,424	.....	113,555	.....	3,931	.....	117,486	.....	1,758,907	1834
.....	.....	97,649	.....	136,817	.....	4,964	.....	141,781	.....	1,824,941	1835
1,573	.....	146,254	.....	104,838	.....	4,893	.....	109,731	.....	1,882,102	1836
1,895	.....	129,137	.....	121,866	.....	5,497	.....	127,363	.....	1,896,686	1837
5,230	.....	124,860	.....	120,623	.....	6,090	.....	126,713	.....	1,995,640	1838
440	.....	132,285	.....	101,151	.....	7,091	.....	108,242	.....	2,096,479	1839
.....	.....	136,927	.....	96,196	.....	8,109	.....	104,305	.....	2,180,764	1840
.....	.....	157,405	.....	71,877	.....	5,996	.....	77,783	.....	2,130,744	1841
377	.....	151,990	.....	66,039	.....	4,863	.....	70,902	.....	2,092,391	1842
142	.....	152,517	.....	66,677	.....	6,323	.....	73,000	.....	2,158,603	1843
320	.....	168,614	.....	94,350	.....	7,046	.....	101,396	.....	2,280,096	1844
207	.....	190,903	.....	91,240	.....	7,165	.....	98,405	.....	2,417,002	1845
440	.....	187,420	.....	108,979	.....	6,802	.....	115,781	.....	2,562,085	1846
.....	.....	193,859	.....	101,629	.....	7,503	.....	109,132	.....	2,839,046	1847
433	.....	192,613	.....	126,210	.....	7,195	.....	133,405	.....	3,154,042	1848
.....	.....	180,186	.....	116,824	.....	7,874	.....	124,698	.....	3,334,016	1849
.....	.....	146,017	.....	143,758	.....	8,160	.....	151,918	.....	3,535,454	1850
.....	.....	181,644	.....	138,015	.....	8,141	.....	146,156	.....	3,772,439	1851

c 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 1789–1919—

Year ended—	Foreign trade.		Coasting trade.						Whale fisheries.	
	Registered.		Enrolled.		Licensed.		Total.		Registered.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
June 30, 1852	.....	1,705,650	.....	2,008,022	.....	47,851	.....	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	.....	198,594
1859	.....	2,321,674	.....	2,439,320	.....	41,609	.....	2,480,929	.....	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	.....	27,865	.....	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	3,560	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	42,228	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	1,389,815	23,258	3,243,656	4,401	49,783	27,659	3,293,439	162	39,108
1875	2,816	1,515,598	22,654	3,169,687	4,462	50,011	27,116	3,219,698	165	38,229
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	1,589,348	15,082	2,444,801	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	15,263	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	2,884,068	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	1,088,041	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	55,208	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	3,133,812	6,180	77,604	20,401	3,211,416	88	21,976
1890	1,451	928,062	14,223	3,330,377	6,258	79,058	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	883,199	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	792,870	12,998	3,808,433	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	94,224	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	6,615,490	9,829	121,556	23,392	6,737,046	35	8,876
1913	2,261	1,019,165	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
1917	3,453	2,440,776	12,680	6,269,581	9,590	123,022	22,270	6,392,583	30	5,623
1918	3,986	3,599,213	12,583	6,161,288	9,411	121,186	21,994	6,282,474	27	4,493
1919	5,006	6,665,376	12,429	6,078,699	9,429	122,727	21,858	6,201,426	26	4,350

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

Whale fisheries.			Cod and mackerel fisheries.						Total merchant marine.		Year.
Enrolled.	Total.		Enrolled.		Licensed.		Total.				
Tons.	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	
.....	.....	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	753	9,124	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	4,696,027	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	925	11,504	2,188	80,207	32,285	4,853,732	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	4,242,900	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	24,368	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	1,739	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	24,383	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	802	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	6,674,969	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	25,791	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	7,453	976	34,173	26,943	7,928,688	1914
.....	39	8,829	233	24,620	602	6,882	835	31,502	26,701	8,339,429	1915
.....	33	6,707	238	27,998	445	5,386	683	33,384	26,744	8,469,649	1916
.....	30	5,623	223	26,707	421	5,348	644	32,055	26,397	8,871,037	1917
.....	27	4,493	230	31,605	474	6,733	704	38,338	26,711	9,924,518	1918
.....	26	4,350	217	30,112	406	6,036	623	36,148	27,513	12,907,300	1919

No. 17.—Employment of the Tonnage of the United States, June 30, 1919.

Class.	Sailing.		Steam.		Gas.		Canal.		Barge.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Registered:												
Foreign trade	672	497,372	1,660	5,814,489	1,312	177,539	.....	.....	1,362	175,976	5,006	6,665,376
Whale fisheries	14	2,173	8	1,136	4	1,041	.....	.....	.....	.....	26	4,350
Total	686	499,545	1,668	5,815,625	1,316	178,580	.....	.....	1,362	175,976	5,032	6,669,726
Enrolled:												
Coasting trade	1,555	666,791	5,056	4,219,439	1,874	79,704	490	56,431	3,454	1,056,334	12,429	6,078,699
Cod and mackerel fisheries	52	10,111	31	7,457	134	12,544	.....	.....	.....	.....	217	30,112
Total	1,607	676,902	5,087	4,226,896	2,008	92,248	490	56,431	3,454	1,056,334	12,646	6,108,811
Licensed:												
Coasting trade	1,927	22,898	629	14,500	6,577	82,058	.....	.....	296	3,271	9,429	122,727
Cod and mackerel fisheries	40	316	13	379	353	5,341	.....	.....	.....	.....	406	6,036
Total	1,967	23,214	642	14,879	6,930	87,399	.....	.....	296	3,271	9,835	128,763
Grand total	4,260	1,199,661	7,397	10,057,400	10,254	358,227	490	56,431	5,112	1,235,581	27,513	12,907,300
SUMMARY.												
Foreign trade	672	497,372	1,660	5,814,489	1,312	177,539	.....	.....	1,362	175,976	5,006	6,665,376
Coasting trade	3,482	689,689	5,685	4,233,939	8,451	161,762	490	56,431	3,750	1,059,605	21,858	6,201,426
Total	4,154	1,187,061	7,345	10,048,428	9,763	339,301	490	56,431	5,112	1,235,581	26,864	12,836,802
Whale fisheries	14	2,173	8	1,136	4	1,041	.....	.....	.....	.....	26	4,350
Cod and mackerel fisheries	102	10,427	44	7,836	487	17,885	.....	.....	.....	.....	623	36,148
Total	116	12,600	52	8,972	491	18,926	.....	.....	.....	.....	649	40,498
Grand total	4,260	1,199,661	7,397	10,057,400	10,254	358,227	490	56,431	5,112	1,235,581	27,513	12,907,300

No. 18.—Class, Number, and Gross Tonnage of Vessels Built in the United States and Documented During Year Ended June 30, 1919, by Customs Districts.

[This table does not include yachts nor boats and lighters, decked and not masted, employed within the harbor of any town or city; nor canal boats and barges, without sails or internal motive power of their own, employed wholly upon canals or the internal waters of a State; nor barges or boats plying on rivers or lakes of the United States and not engaged in trade with contiguous foreign territory and not carrying passengers; nor boats under 5 tons net.]

Customs district and port in which built.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
ATLANTIC AND GULF COASTS.												
Maine and New Hampshire:	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Eastport, Me	1	1,901			3	803					4	1,804
Machias, Me	5	5,725			2	59					7	5,784
Ellsworth, Me					3	190					3	190
Castine, Me					1	65					1	65
Bangor, Me	1	714									1	714
Belfast, Me	5	6,220									5	6,220
Rockland, Me	6	7,554	1	54	10	233					17	7,841
Boothbay, Me	5	4,224			3	97					8	4,321
Bath, Me	7	10,144	9	30,489	2	968			1	25	19	41,626
Portland, Me	3	1,792	12	23,977	5	182					20	25,951
Portsmouth, N. H			7	17,857							7	17,857
Massachusetts:												
Gloucester, Mass	2	532	2	847	14	1,092					18	2,471
Boston, Mass			5	39,584	8	125					13	39,709
Provincetown, Mass					1	21					1	21
New Bedford, Mass					1	11					1	11
Fall River, Mass	1	1,348	3	1,245							4	2,593
Rhode Island: Providence, R. I					6	100					6	100
Connecticut:												
New London, Conn	2	2,819	4	17,585	3	54					9	20,458
New Haven, Conn					1	12					1	12
Bridgeport, Conn					1	10					1	10
New York:												
New York, N. Y	1	664	31	113,623	30	553	1	124	139	50,562	202	165,526
Albany, N. Y			3	193	3	35	3	396	19	5,176	28	5,800
Patchogue, N. Y					1	42					1	42
Greenport, N. Y			2	172	3	111					5	283
Newark, N. J			85	304,179	2	21					87	304,200
Perth Amboy, N. J					8	80			1	146	9	226
Philadelphia:												
Tuckerton, N. J					1	7					1	7
Philadelphia, Pa			74	388,213	14	225			4	852	92	389,290
Wilmington, Del	3	3,709	16	38,950	2	233			2	376	23	43,268
Maryland:												
Baltimore, Md	8	6,471	28	134,542	11	253			14	4,755	61	146,021
Annapolis, Md					2	25					2	25
Crisfield, Md	2	872	1	207	1	64					4	1,143
Virginia:												
Reedville, Va					5	598					5	598
Newport News, Va			4	26,809	10	190					14	26,999
Norfolk, Va			2	360	12	345			3	1,605	17	2,310
Cape Charles, Va					1	11					1	11
North Carolina:												
Manteo, N. C					1	10					1	10
Washington, N. C	1	6			2	33			1	436	4	475
Beaufort, N. C					4	145			2	1,103	6	1,248
Wilmington, N. C	2	2,524	1	9					1	241	4	2,774
South Carolina:												
Georgetown, S. C			1	54							1	54
Charleston, S. C	1	10			1	13					2	23
Georgia:												
Savannah, Ga	2	1,636	6	12,273							8	13,909
Brunswick, Ga	2	2,063	2	5,102							4	7,165
Florida:												
Fernandina, Fla					1	12					1	12
Jacksonville, Fla	2	738	7	17,587	4	1,692					13	20,017
St. Augustine, Fla					3	63					3	63
Miami, Fla					3	77					3	77
Key West, Fla					9	187					9	187
Tampa, Fla	2	771	4	9,809	1	6					7	10,586
Apalachicola, Fla					1	14			1	772	2	786
Pensacola, Fla	3	2,191			4	1,706					7	3,897
Mobile:												
Mobile, Ala			9	20,069							9	20,069
Gulfport, Miss	6	3,148	5	12,755	3	3,231			3	2,502	17	21,636

No. 18.—Class, Number, and Gross Tonnage of Vessels Built in the United States and Documented During Year Ended June 30, 1919, by Customs Districts—Continued.

Customs district and port in which built.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
ATLANTIC AND GULF COASTS—contd.												
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
New Orleans:												
New Orleans, La.[a]	....	.....	5	8,175	2	28	....	.....	....	.....	7	8,203
Morgan City, La	....	.....	5	5,322	4	119	....	.....	....	.....	9	5,441
Sabine: Port Arthur, Tex.	1	884	14	38,932	10	13,651	....	.....	5	987	30	54,454
Galveston:												
Galveston, Tex	....	.....	6	16,851	....	.....	....	.....	....	.....	6	16,851
Houston, Tex	....	.....	....	.....	2	22	....	.....	....	.....	2	22
Port Lavaca, Tex	....	.....	....	.....	1	8	....	.....	....	.....	1	8
Porto Rico: San Juan, P. R.	2	149	....	.....	3	516	....	.....	2	91	7	756
Total	76	67,909	354	1,285,824	229	28,348	4	520	198	69,629	861	1,452,230
PACIFIC COAST.												
Southern California:												
San Diego, Calif	....	.....	....	.....	6	199	....	.....	2	58	8	257
Los Angeles, Calif	....	.....	34	162,614	41	1,051	....	.....	8	884	83	164,549
San Francisco:												
San Francisco, Calif	3	4,829	45	265,703	34	946	....	.....	....	.....	82	272,424
Eureka, Calif	....	.....	....	.....	....	.....	....	.....	1	236	1	236
Oregon:												
Marshfield, Oreg	....	.....	7	21,064	....	.....	....	.....	....	.....	7	21,064
Astoria, Oreg	....	.....	15	41,924	11	163	....	.....	....	.....	26	42,087
Portland, Oreg	3	4,313	91	367,779	8	2,564	....	.....	3	1,075	105	375,731
Washington: Seattle, Wash	2	2,183	107	465,498	164	14,619	....	.....	47	5,194	320	487,494
Alaska: Juneau, Alaska	....	.....	1	98	27	327	....	.....	6	127	34	552
Hawaii: Honolulu, Hawaii	....	.....	....	.....	2	55	....	.....	....	.....	2	55
Total	8	11,325	300	1,324,680	293	19,924	....	.....	67	7,574	668	1,363,503
NORTHERN LAKES.												
St. Lawrence:												
Ogdensburg, N. Y	....	.....	....	.....	....	.....	3	960	....	.....	3	960
Cape Vincent, N. Y	....	.....	....	.....	1	15	....	.....	1	23	2	38
Rochester:												
Oswego, N. Y	....	.....	....	.....	....	.....	1	138	1	736	2	874
Rochester, N. Y	....	.....	....	.....	1	34	....	.....	....	.....	1	34
Buffalo: Buffalo, N. Y	....	.....	8	16,865	1	14	6	819	14	3,582	29	21,280
Ohio:												
Erie, Pa	....	.....	1	21	....	.....	....	.....	12	3,506	13	3,527
Cleveland, Ohio	....	.....	56	134,616	1	13	....	.....	....	.....	57	134,629
Sandusky, Ohio	....	.....	....	.....	3	103	....	.....	....	.....	3	103
Toledo, Ohio	....	.....	12	25,629	....	.....	....	.....	....	.....	12	25,629
Michigan:												
Detroit, Mich	....	.....	59	144,566	....	.....	1	294	....	.....	60	144,860
Port Huron, Mich	....	.....	9	21,354	3	43	....	.....	1	15	13	21,412
Marquette, Mich	....	.....	....	.....	3	68	....	.....	3	416	6	484
Grand Haven, Mich	....	.....	5	92	18	160	....	.....	....	.....	23	252
Chicago: Chicago, Ill.[b]	....	.....	16	39,368	4	57	....	.....	2	404	22	39,829
Wisconsin: Milwaukee, Wis.[a]	....	.....	19	30,923	9	84	....	.....	3	736	31	31,743
Duluth and Superior: Duluth, Minn.[b]	....	.....	37	81,483	3	35	....	.....	....	.....	40	81,518
Total	....	.....	222	494,917	47	626	11	2,211	37	9,418	317	507,172
WESTERN RIVERS.												
New Orleans:												
New Orleans, La.[c]	....	.....	....	.....	3	80	....	.....	....	.....	3	80
Vicksburg, Miss	....	.....	1	7	....	.....	....	.....	....	.....	1	7
Tennessee:												
Memphis, Tenn	....	.....	2	157	7	100	....	.....	10	96	19	353
Chattanooga, Tenn	....	.....	1	134	3	36	....	.....	....	.....	4	170
Kentucky:												
Paducah, Ky	....	.....	1	143	3	93	....	.....	....	.....	4	236
Louisville, Ky	....	.....	1	54	4	59	....	.....	....	.....	5	113
St. Louis:												
St. Louis, Mo	....	.....	1	82	13	245	....	.....	13	451	27	14,778
Kansas City, Mo	....	.....	1	144	....	.....	....	.....	....	.....	1	144
St. Joseph, Mo	....	.....	....	.....	1	14	....	.....	....	.....	1	14
Dakota: Pembina, N. Dak.	....	.....	....	.....	1	18	....	.....	....	.....	1	18

[a] Seagoing vessels; for vessels in river trade, see below.
[b] Lake vessels; for vessels in river trade, see p. 203.
[c] Vessels in river trade only; for seagoing vessels, see above.

No. 18.—Class, Number, and Gross Tonnage of Vessels Built in the United States and Documented During Year Ended June 30, 1919, by Customs Districts—Continued.

Customs district and port in which built.	Sailing vessels.		Steam vessels.		Gas vessels.		Canal boats.		Barges.		Total.	
WESTERN RIVERS—contd.	*No*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Minnesota: St. Paul, Minn.	....	.....	....	.....	2	27	....	.....	1	35	3	62
Duluth and Superior: Duluth, Minn.[a]	....	.....	....	.....	2	28	....	.....	....	.....	2	28
Wisconsin: Milwaukee, Wis.[a]	....	.....	....	.....	3	47	....	.....	....	.....	3	47
Chicago: Peoria, Ill.	....	.....	1	80	7	141	....	.....	....	.....	8	221
Indiana: Evansville, Ind.	....	.....	1	95	6	109	....	.....	2	24	9	228
Ohio: Cincinnati, Ohio	....	.....	....	.....	2	38	....	.....	1	18	3	56
Pittsburgh: Pittsburgh, Pa.	....	.....	5	747	7	94	....	.....	1	320	13	1,161
Total	....	.....	15	1,643	64	1,129	....	.....	28	944	107	3,716
SUMMARY.												
Atlantic and Gulf coasts	76	67,909	354	1,285,824	229	28,348	4	520	198	69,629	861	1,452,230
Pacific coast	8	11,325	300	1,324,680	293	19,924	....	.....	67	7,574	668	1,363,503
Northern lakes	....	.....	222	494,917	47	626	11	2,211	37	9,418	317	507,172
Western rivers	....	.....	15	1,643	64	1,129	....	.....	28	944	107	3,716
Grand total	84	79,234	891	3,107,064	633	50,027	15	2,731	330	87,565	1,953	3,326,621

[a] Vessels in river trade only; for lake vessels, see p. 202.

No. 19.—Class, Number, and Gross Tonnage of Sailing Vessels Built in the United States and Documented During Year Ended June 30, 1919.

Geographical distribution.	Barkentines.		Schooners.		Sloops.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Atlantic and Gulf coasts	.....	.....	74	67,893	2	16	76	67,909
Pacific coast	1	1,393	7	9,932	.....	.....	8	11,325
Total	1	1,393	81	77,825	2	16	84	79,234

No. 20.—Class, Number, and Gross Tonnage of Steam and Gas Vessels Built in the United States and Documented During Year Ended June 30, 1919.

Geographical distribution.	River.											
	Side-wheel.				Stern-wheel.				Screw.			
	Steam.		Gas.		Steam.		Gas.		Steam.		Gas.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Atlantic and Gulf coasts	....	.....	....	.....	4	383	10	199	59	15,197	211	11,372
Pacific coast	....	.....	....	.....	1	98	3	103	1	10	284	8,044
Northern lakes	....	.....	1	6	....	.....	....	.....	16	2,448	46	620
Western rivers	1	53	1	15	10	1,251	38	731	4	339	25	383
Total	1	53	2	21	15	1,732	51	1,033	80	17,994	566	20,419

Geographical distribution.	Ocean: Screw—Steam.		Ocean: Screw—Gas.		Total.			
					Steam.		Gas.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Atlantic and Gulf coasts	291	1,270,244	8	16,777	354	1,285,824	229	28,348
Pacific coast	298	1,324,572	6	11,777	300	1,324,680	293	19,924
Northern lakes	206	492,469	.....	.....	222	494,917	47	626
Western rivers	.....	.....	.....	.....	15	1,643	64	1,129
Total	795	3,087,285	14	28,554	891	3,107,064	633	50,027

No. 21.—Class, Number, and Gross Tonnage of Steel Vessels Built in the United States and Documented During Year Ended June 30, 1919.

Port.	Sail.		Steam.		Gas.		Barges.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Bath, Me			7	27,921	2	968			9	28,889
Boston, Mass			5	39,584	1	11			6	39,595
New London, Conn	1	1,547	2	12,483					3	14,030
New York, N. Y			23	109,521			[a]23	6,452	45	115,973
Newark, N. J			75	278,641					75	278,641
Philadelphia, Pa			63	367,399	2	85			65	367,484
Wilmington, Del			11	38,033					11	38,033
Baltimore, Md			24	128,717					24	128,717
Newport News, Va			4	26,809					4	26,809
Savannah, Ga			5	12,198					5	12,198
Jacksonville, Fla	2	738	4	9,896					6	10,634
Tampa, Fla			2	4,724					2	4,724
Mobile, Ala			6	14,896					6	14,896
New Orleans, La			2	2,740					2	2,740
Morgan City, La			1	2,469					1	2,469
Houston, Tex					1	11			1	11
San Juan, P. R					1	490			1	490
Memphis, Tenn					1	13			1	13
St. Louis, Mo					2	28			2	28
Kansas City, Mo			1	144					1	144
Pittsburgh, Pa			3	676			1	320	4	996
Buffalo, N. Y			8	16,865	1	14	12	3,488	21	20,367
Erie, Pa							12	3,506	12	3,506
Cleveland, Ohio			56	134,616	1	13			57	134,629
Toledo, Ohio			11	25,590					11	25,590
Detroit, Mich			59	144,566			[b]1	294	60	144,860
Port Huron, Mich			9	21,354					9	21,354
Chicago, Ill			16	39,368			1	217	17	39,585
Milwaukee, Wis			16	30,523			3	736	19	31,259
Duluth, Minn			37	81,483					37	81,483
Los Angeles, Calif			25	137,663					25	137,663
San Francisco, Calif			37	245,818					37	245,818
Portland, Oreg			47	245,659					47	245,659
Seattle, Wash			57	339,719			[c]2	673	59	440,392
Total	3	2,285	616	2,540,075	12	1,633	54	15,686	685	2,559,679

[a] Includes 2 barges of 588 gross tons, built of reinforced concrete.
[b] Includes 1 canal boat of 294 gross tons, built of reinforced concrete.
[c] Includes 2 barges of 673 gross tons, built of reinforced concrete.

No. 22.—Class, Number, and Gross Tonnage of Metal Vessels Built in the United States and Documented, 1838–1919.

[These vessels are included in statement No. 23.]

Year ended June 30—	Sailing vessels.		Steam vessels.		Gas vessels.		Barges.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
1838			1	198					1	198
1839			1	196					1	196
1840			1	199					1	199
1841			1	303					1	303
1842			2	274					2	274
1843			3	396					3	396
1844			1	65					1	65
1845			4	808			5	575	9	1,383
1846			5	1,592			1	230	6	1,822
1847			2	910					2	910
1848										
1849										
1850			2	586					2	586
1851			1	176					1	176
1852										
1853			4	1,548			3	523	7	2,071
1854			8	2,569					8	2,569
1855	1	216	5	1,393			1	282	7	1,891
1856			2	473					2	473
1857			12	3,062					12	3,062
1858	1	34	10	3,132			2	200	13	3,366
1859	1	252	7	2,208			1	162	9	2,622
1860			18	9,637					18	9,637
1861			11	4,079					11	4,079

No. 22.—Class, Number, and Gross Tonnage of Metal Vessels Built in the United States and Documented, 1838–1919—Continued.

Year ended June 30—	Sailing vessels.		Steam vessels.		Gas vessels.		Barges.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1862	...	...	15	8,761	...	...	...	...	15	8,761
1863	...	...	14	6,197	...	...	...	...	14	6,197
1864	...	...	5	2,282	...	...	...	...	5	2,282
1865	...	...	9	4,007	...	...	...	...	9	4,007
1866	...	...	17	8,343	...	...	...	...	17	8,343
1867	1	2	14	7,172	...	...	1	286	15	7,174
1868	...	...	14	5,660	...	...	1	286	15	5,946
1869	1	358	16	6,425	...	...	...	...	17	6,783
1870	1	679	15	6,547	...	...	...	...	16	7,226
1871	1	36	23	14,139	...	...	1	27	25	14,202
1872	...	...	26	15,751	...	...	...	...	26	16,751
1873	...	...	25	22,219	...	...	1	437	26	22,656
1874	1	1,470	24	31,044	...	...	1	527	26	33,041
1875	...	...	20	21,629	...	...	...	...	20	21,629
1876	...	...	25	20,984	...	...	...	...	25	20,984
1877	...	...	7	5,985	...	...	...	...	7	5,985
1878	...	...	31	25,837	...	...	...	...	31	25,837
1879	...	...	28	22,749	...	...	...	...	28	22,749
1880	2	408	30	25,525	...	...	...	...	32	25,933
1881	1	36	40	25,999	...	...	...	...	41	26,035
1882	1	143	50	46,480	...	...	...	...	51	46,623
1883	1	2,032	40	49,110	...	...	...	...	41	51,142
1884	3	4,431	36	32,939	...	...	...	...	39	37,370
1885	2	756	48	43,415	...	...	...	...	50	44,171
1886	2	118	24	14,505	...	...	...	...	26	14,623
1887	1	92	34	36,226	...	...	...	...	35	36,318
1888	3	317	43	37,921	...	...	1	428	47	38,666
1889	2	95	52	62,261	...	...	...	...	54	62,356
1890	2	184	61	79,342	...	...	5	5,133	68	84,659
1891	4	211	81	102,630	...	...	6	6,305	91	109,146
1892	5	415	52	45,896	...	...	4	4,958	61	51,269
1893	8	2,012	61	82,933	...	...	9	11,717	78	96,662
1894	2	4,647	38	46,889	...	...	...	...	40	51,536
1895	3	5,267	37	43,335	...	...	5	704	45	49,306
1896	6	15,800	47	82,311	...	...	7	3,487	60	101,598
1897	10	31,424	48	83,140	...	...	13	11,521	71	126,085
1898	2	6,724	52	48,560	...	...	10	7,041	64	62,325
1899	5	16,152	83	112,781	...	...	4	2,823	92	131,756
1900	11	29,168	81	167,957	...	...	...	...	92	197,125
1901	12	21,746	101	236,149	1	10	7	4,825	121	262,730
1902	3	8,406	102	270,932	...	...	2	1,024	107	280,362
1903	4	12,184	100	240,107	...	...	4	5,928	108	258,219
1904	4	15,290	88	222,307	...	...	6	3,483	98	241,080
1905	5	3,225	67	170,204	1	200	16	9,111	89	182,640
1906	4	3,077	99	288,647	1	347	11	5,199	115	297,370
1907	4	5,655	104	333,217	4	299	17	9,384	129	348,555
1908	...	...	129	441,768	3	857	17	7,392	149	450,017
1909	9	7,985	63	122,869	4	273	13	5,796	89	136,923
1910	6	3,699	89	234,875	5	113	19	11,937	119	250,624
1911	1	1,290	100	195,355	12	609	13	4,719	126	201,973
1912	5	6,097	74	118,722	7	459	18	10,603	104	135,881
1913	6	13,000	93	204,772	11	903	22	12,987	132	231,662
1914	...	...	97	195,576	4	35	21	9,820	122	205,431
1915	...	...	52	127,015	11	2,009	8	1,858	71	130,882
1916	...	...	69	232,524	9	2,473	17	3,775	95	238,772
1917	4	4,884	114	431,304	21	25,388	14	5,939	153	467,515
1918	3	4,735	229	962,547	8	4,746	15	8,173	255	980,201
1919	3	2,285	616	2,540,075	12	1,633	[a] 54	15,686	685	2,559,679

[a] Includes 1 canal boat of 294 gross tons and 4 barges of 1,261 gross tons built of reenforced concrete.

No. 23.—Class, Number, and Gross Tonnage of Vessels Built in the United States and Documented, 1797–1919.

Year ended—	Sailing vessels.						Steam vessels.					Canal boats.		Barges.		Grand total.		Year.
	Ships, barks, bkns.	Brigs.	Schooners.	Sloops.[a]	Number.[a]	Gross tons.[a]	Side-wheel.	Stern-wheel.	Propeller.	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.	
Dec. 31, 1797						56,679											56,679	1797
1798	34	53	401	147	635	49,435										635	49,435	1798
1799	87	131	382	167	767	77,921										767	77,921	1799
1800	128	176	487	204	995	106,261										995	106,261	1800
1801																	124,755	1801
1802[b]																		1802
1803																	88,448	1803
1804																	103,753	1804
1805																	128,507	1805
1806																	126,093	1806
1807																	99,783	1807
1808																	31,755	1808
1809																	91,397	1909
1810																	127,575	1810
1811																	146,691	1811
1812						84,691				4	457						85,148	1812
1813	3	21	212	128	364	31,153				7	1,430					371	32,583	1813
1814	3	11	312	162	488	29,040				2	711					490	29,751	1814
1815	136	224	680	284	1,324	154,624				5	955					1,329	155,579	1815
1816	76	133	781	424	1,414	131,667				17	3,519					1,431	135,186	1816
1817	34	90	550	394	1,077	86,393				10	1,233					1,087	87,626	1817
1818	53	85	428	332	898	82,421				25	4,925					923	87,346	1818
1819	53	82	473	240	848	79,379				28	7,291					876	86,670	1819
1820	22	60	301	152	535	47,784				22	3,610					557	51,394	1820
1821	43	89	248	127	507	55,856				12	1,410					519	57,275	1821
1822	64	131	260	168	623	75,347				16	2,222					639	77,569	1822
1823	55	127	260	165	607	72,758				23	3,099					630	75,857	1823
1824	56	156	377	166	755	86,852				38	5,946					793	92,798	1824
1825	56	197	538	168	959	109,547				41	6,917					1,000	116,464	1825
1826	71	187	482	227	967	118,094				66	12,279					1,033	130,373	1826
1827	58	135	464	242	899	97,475				52	8,981					951	106,456	1827
1828	73	108	474	197	852	92,879				34	6,085					886	98,964	1828
1829	44	68	484	145	741	68,216				55	11,192					796	79,408	1829
1830	25	56	403	116	600	51,491				48	7,069					648	58,560	1830
1831	72	95	416	94	677	80,231				35	5,325					712	85,556	1831
1832	132	143	568	122	965	129,143				100	15,401					1,065	144,544	1832

	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	145,696	.....	.....	.....	.....	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	4,069	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, 1797–1919—Continued.

Year ended—	Sailing vessels.						Steam vessels.[a]					Canal boats.		Barges.		Grand total.		Year.
	Ships, barks, bkns.	Brigs.	Schooners.	Sloops.	Number.	Gross tons.	Side-wheel.	Stern-wheel.	Propeller.	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.	
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	118,798	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	211,639	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	126,165	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
1917	1	0	58	5	64	43,185	4	111	686	801	513,243	26	3,423	406	104,628	1,297	664,479	1917
1918	0	0	108	7	115	83,629	7	70	852	929	1,090,996	32	4,101	452	122,142	1,528	1,300,868	1918
1919	1	0	81	2	84	79,223	3	66	1,455	1,524	3,157,091	15	2,731	330	87,565	1,953	3,326,621	1919

[a] Includes gasoline vessels since 1897.

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, 1857–1919, 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.*		*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	56,859	1,618	276,953	1870
1871	339	64,366	811	86,559	44	5,324	1,194	156,249	274	43,897	287	73,081	1,755	273,227	1871
1872	243	46,269	926	79,552	26	2,276	1,195	128,097	252	44,611	196	36,344	1,643	209,052	1872
1873	302	76,406	1,233	136,258	52	5,475	1,587	218,139	445	92,448	229	48,659	2,261	359,246	1873
1874	377	136,251	964	129,983	63	10,859	1,404	277,093	417	91,986	326	63,646	2,147	432,725	1874
1875	353	151,497	540	79,549	70	13,428	963	244,474	177	29,871	161	23,294	1,301	297,639	1875
1876	286	95,288	450	51,716	102	16,822	838	163,826	140	16,124	134	23,636	1,112	203,586	1876
1877	237	90,992	363	29,286	88	12,718	708	132,996	89	8,903	232	34,693	1,029	176,592	1877
1878	231	90,386	403	53,419	63	11,333	697	155,138	101	11,438	460	68,928	1,258	235,504	1878
1879	163	55,874	429	48,602	65	11,207	657	115,683	95	15,135	380	62,213	1,132	193,031	1879
1880	184	46,374	405	46,403	41	8,943	630	101,720	137	22,899	135	32,791	902	157,410	1880
1881	187	54,888	466	59,801	58	11,417	711	125,766	215	73,504	182	81,189	1,108	280,459	1881
1882	304	93,965	586	78,342	75	15,777	965	188,084	254	58,369	152	35,817	1,371	282,270	1882
1883	342	110,226	539	83,385	91	16,738	972	210,349	171	28,638	125	26,443	1,268	265,430	1883
1884	250	84,046	627	83,753	85	10,620	962	178,419	135	30,431	93	16,664	1,190	225,514	1884
1885	173	48,128	473	61,844	76	11,038	722	121,010	117	26,826	81	11,220	920	159,056	1885
1886	111	30,624	385	27,920	58	5,914	554	64,458	85	20,400	76	10,595	715	95,453	1886
1887	101	24,035	439	49,886	73	9,140	613	83,061	152	56,488	79	10,901	844	150,450	1887
1888	150	33,813	454	49,356	104	21,956	708	105,125	222	101,103	84	11,859	1,014	218,087	1888
1889	174	39,983	483	53,930	112	17,939	769	111,852	225	107,080	83	12,202	1,707	231,134	1889
1890	208	78,577	455	78,179	93	12,335	756	169,091	191	108,526	104	16,506	1,051	294,123	1890
1891	327	105,491	617	112,901	122	19,070	1,066	237,462	204	111,856	114	19,984	1,384	369,302	1891
1892	366	60,624	622	57,469	139	20,770	1,127	138,863	169	45,909	99	14,801	1,395	199,633	1892
1893	152	37,091	447	52,018	91	13,721	690	102,830	175	99,271	91	9,538	956	211,639	1893
1894	192	28,665	400	46,042	58	5,392	650	80,099	106	41,985	82	9,111	838	131,195	1894
1895	145	26,783	308	33,200	74	7,144	527	67,127	93	36,353	74	8,122	694	111,602	1895
1896	163	39,582	255	52,143	93	10,819	511	102,544	117	108,782	95	15,771	723	227,097	1896
1897	98	21,942	511	74,067	64	7,495	673	103,504	120	116,937	98	11,792	891	232,233	1897
1898	127	23,944	387	39,146	228	49,789	742	112,879	87	54,084	123	13,495	952	180,458	1898
1899	144	68,761	487	85,825	306	41,534	937	196,120	122	80,366	214	23,552	1,273	300,038	1899

No. 24.—Number and Gross Tonnage of Vessels Built in the United States and Documented, 1857–1919, 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.		
	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	169,085	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	9,836	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
1917	84	52,526	483	298,958	426	167,474	993	518,958	147	139,336	157	6,185	1,297	664,479	1917
1918	105	88,302	603	473,608	517	518,437	1,225	1,080,437	168	215,022	135	5,409	1,528	1,300,868	1918
1919	146	177,758	715	1,274,472	668	1,363,503	1,529	2,815,733	317	507,172	107	3,716	1,953	3,326,621	1919

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., 1813–1919.

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 or sunk by enemy.	Exempt (act Apr. 18, 1874).	Other causes. (b)	Total decrease.	Annual increase or decrease. (—)	Year.
Dec. 31, 1813	32,583	.....	.....	.....	.....	1,390	.....	33,973	45,273	2,955	56,954	.....	28,556	.....	c1,739	135,477	—103,369	1813
1814	29,751	.....	.....	.....	.....	8,817	.....	38,568	5,976	1,337	15,193	.....	16,146	.....	.....	38,652	— 7,419	1814
1815	155,579	.....	.....	.....	3,887	44,233	.....	203,699	17,503	3,303	9,582	.....	30,774	.....	.....	61,162	208,919	1815
1816	135,186	.....	.....	.....	1,687	3,689	.....	140,562	22,591	6,701	23,379	.....	.....	.....	.....	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	13,020	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	1923
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	— 50,020	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

a Including alien vessels forfeited for violation of United States laws.
b Not fully reported prior to 1901.
c Commissioned as privateers.
d 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., 1813–1919—Continued.

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 or sunk by enemy.	Exempt (act Apr. 18, 1874).	Other causes. (b)	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	268,570	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	.....	.....	c 42,598	177,589	409,099	1855
1856	469,293	1,276	100	.....	.....	.....	.....	470,669	75,062	11,376	42,168	962	.....	.....	c 681,135	810,703	−340,348	1856
1857	378,804	600	1,559	.....	.....	.....	.....	380,936	82,489	11,248	52,649	146	.....	.....	c 164,367	310,899	69,190	1857
1858	244,712	296	126	.....	174	.....	.....	245,308	63,462	16,036	26,305	762	.....	.....	c 57,131	163,696	108,965	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	.....	.....	c 39,412	143,556	185,945	1861
1862	175,075	521	541	.....	.....	4,646	.....	180,783	41,352	14,802	117,756	61,309	.....	.....	d 355,544	590,763	−427,649	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	.....	.....	d 187,878	622,578	−168,656	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	.....	70,075	.....	267,509	104,625	1874
1875	297,638	1,682	1,145	.....	711	.....	.....	301,176	91,740	39,627	25,541	2,069	.....	40,334	.....	199,311	53,080	1875
1876	203,585	.....	930	.....	1,540	.....	.....	206,055	103,415	48,845	33,253	941	.....	843,119	.....	1,029,573	−574,274	1876
1877	176,591	.....	163	.....	1,129	.....	.....	177,883	126,627	38,947	24,724	814	.....	1,647	.....	192,759	− 36,858	1877
1878	235,503	.....	2,452	.....	1,325	161	.....	239,441	165,547	56,194	43,607	201	.....	1,184	.....	266,733	− 29,835	1878
1879	193,030	318	2,746	.....	832	.....	.....	196,926	152,946	63,785	43,312	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	9,483	.....	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	(*e*)	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	(513,306	.....	310	1,417	.....	164,137	904,292	123,590	79,047	18,595	12,273	8,792	45,942	155,312	443,551	469,741	1915
1916	*g* 325,413	*f* 69,697	*h* 11,489	2,294	2,726	.....	492,999	904,618	128,209	56,811	102,479	24,433	8,084	20,027	*i* 484,355	824,398	80,220	1916
1917	664,479	66,993	10,790	8,572	1,620	775,004	409,462	1,236,920	110,264	48,984	197,370	4,637	71,382	19,252	383,643	835,532	401,388	1917
1918	1,300,868	95,698	1,740	5,472	3,670	266,559	274,036	1,948,043	180,497	35,181	63,160	101,121	180,502	24,132	309,969	894,562	1,053,481	1918
1919	3,326,621	91,516	3,042	3,217	5,471	.....	261,693	3,691,560	217,414	31,982	62,587	47,568	93,991	20,262	234,974	708,778	2,982,782	1919

a Including alien vessels forfeited for violation of United States laws.

b Not fully reported prior to 1901.

c 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."

d The Register of the Treasury reports: "This difference arises * * * from no returns of tonnage being received from the rebel districts."

e Act Dec. 23, 1852, repealed Feb. 22, 1906, reenacted Feb. 24, 1915.

f Act Aug. 18, 1914.

g Including 2 vessels of 1,159 gross tons, admitted under R. S. 4132, certificate of record.

h Act Feb. 24, 1915.

i Including 4 vessels of 11,103 gross tons, condemned by foreign governments.

j Joint resolution of Congress, May 12, 1917 (German interned vessels).

No. 26.—Class, Number, and Gross Tonnage of Documented Yachts of the United States, by Ports, June 30, 1919.

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	2	35	1	20	5	118	8	173
Southwest Harbor, Me			1	21	2	71	3	92
Castine, Me	1	18			2	53	3	71
Bangor, Me			1	192			1	192
Belfast, Me					2	50	2	50
Rockland, Me	4	77	2	55	7	276	13	408
Boothbay, Me					2	89	2	89
Bath, Me			1	28			1	28
Portland, Me	4	263			3	65	7	328
Gloucester, Mass					1	157	1	157
Salem, Mass	2	190	1	30	5	222	8	442
Marblehead, Mass	6	182	1	174	17	467	24	823
Boston, Mass	33	1,682	9	1,337	56	2,050	98	5,069
Plymouth, Mass			1	41			1	41
Vineyard Haven, Mass	1	16			1	19	2	35
New Bedford, Mass	6	141			8	220	14	361
Fall River, Mass					3	69	3	69
Providence, R. I	4	105	3	483	16	608	23	1,196
Newport, R. I			1	173	5	277	6	450
New London, Conn	[a] 5	351	2	49	4	96	11	496
Hartford, Conn			1	25	8	272	9	297
New Haven, Conn	3	52	1	92	8	212	12	356
Bridgeport, Conn	2	39	3	245	13	482	18	766
New York, N. Y	[b] 55	2,405	67	15,512	305	13,226	427	31,143
Albany, N. Y	1	41			4	171	5	212
Patchogue, N. Y	1	33			13	521	14	554
Greenport, N. Y			1	200	9	279	10	479
Newark, N. J					5	286	5	286
Perth Amboy, N. J	1	32	1	67	4	109	6	208
Tuckerton, N. J	1	31			1	22	2	53
Philadelphia, Pa	[c] 6	556	3	234	110	4,123	119	4,913
Wilmington, Del			3	580	9	310	12	890
Baltimore, Md	[d] 2	91	3	439	23	778	28	1,308
Annapolis, Md					3	72	3	72
Crisfield, Md					3	51	3	51
Washington, D. C			4	302	10	551	14	853
Reedville, Va					1	27	1	27
Richmond, Va	1	31			1	30	2	61
Newport News, Va					1	28	1	28
Norfolk, Va					1	18	1	18
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	115	4	115
Savannah, Ga			1	49	7	186	8	235
Brunswick, Ga					2	73	2	73
Jacksonville, Fla					13	364	13	364
St. Augustine, Fla					19	809	19	809
Miami, Fla					27	1,099	27	1,099
Key West, Fla			2	105	12	367	14	472
Tampa, Fla					16	586	16	586
Mobile, Ala					3	90	3	90
Gulfport, Miss					1	27	1	27
New Orleans, La			3	160	27	1,094	30	1,254
Port Arthur, Tex			1	233	1	27	2	260
Galveston, Tex			1	2,058	2	74	3	2,132
Houston, Tex					7	254	7	254
Port Lavaca, Tex					1	157	1	157
San Juan, P. R					2	58	2	58
Memphis, Tenn					2	68	2	68
Nashville, Tenn					1	32	1	32
Chattanooga, Tenn			1	66			1	66
Louisville, Ky					1	26	1	26
St. Louis, Mo			1	30	7	188	8	218
Kansas City, Mo			1	33	1	19	2	52
Des Moines, Iowa	[e] 1	207	1	98			2	305
Dubuque, Iowa					1	18	1	18
St. Paul, Minn			1	211	3	100	4	311
Milwaukee, Wis					1	23	1	23
Chicago, Ill			1	195	3	82	4	277
Evansville, Ind					1	19	1	19
Cincinnati, Ohio					2	109	2	109
Pittsburgh, Pa			2	197			2	197
Burlington, Vt			1	146	7	203	8	349
Rouses Point, N. Y			2	82	1	201	3	283

[a] Includes 1 house boat, 30 tons.
[b] Includes 1 house boat, 58 tons.
[c] Includes 1 house boat, 104 tons.
[d] Includes 1 house boat, 46 tons.
[e] House boat.

No. 26.—Class, Number, and Gross Tonnage of Documented Yachts of the United States, by Ports, June 30, 1919—Continued.

Port at which documented.	Sailing yachts.		Steam yachts.		Gas yachts.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Ogdensburg, N. Y.			1	31	1	79	2	110
Cape Vincent, N. Y.	[a] 9	1,103	16	768	4	95	29	1,966
Oswego, N. Y.	1	15	3	124			4	139
Rochester, N. Y.	1	6			4	101	5	107
Buffalo, N. Y.	2	40	2	114	7	298	11	452
Erie, Pa.	1	160			1	17	2	177
Cleveland, Ohio.					6	180	6	180
Sandusky, Ohio.					1	26	1	26
Toledo, Ohio.					3	148	3	148
Detroit, Mich.	[b] 6	309	6	841	41	1,488	53	2,638
Port Huron, Mich.			2	266	4	129	6	395
Marquette, Mich.	1	7	4	173	2	92	7	272
Grand Haven, Mich.					8	195	8	195
Chicago, Ill.	4	91	4	769	42	1,598	50	2,458
Milwaukee, Wis.	1	19	5	201	27	808	33	1,028
Duluth, Minn.					2	130	2	130
San Diego, Calif.					2	35	2	35
Los Angeles, Calif.	1	19	1	129	14	444	16	592
San Francisco, Calif.	7	206			9	273	16	479
Portland, Oreg.					1	21	1	21
Seattle, Wash.	3	61	3	310	45	1,437	51	1,808
Honolulu, Hawaii.					2	47	2	47
Total.	179	8,614	178	27,731	1,080	40,777	1,437	77,122

[a] House boats. [b] Includes 3 house boats, 141 tons.

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	110	6,024	160	27,278	663	32,424	17	1,689	950	67,415
Licensed	52	901	18	453	417	8,353			487	9,707
Total.	162	6,925	178	27,731	1,080	40,777	17	1,689	1,437	77,122

No. 27.—Class, Number, and Gross Tonnage of Documented Metal Yachts of the United States, by Ports, June 30, 1919.

[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					1	62
Marblehead, Mass.					2	110	2	110
Boston, Mass.	4	631	2	1,043	4	456	10	2,130
New Bedford, Mass.	1	27					1	27
Providence, R. I.			1	426	1	55	2	481
Newport, R. I.			1	173	1	125	2	298
New London, Conn.	1	206					1	206
New York, N. Y.	10	1,143	43	14,289	19	2,703	72	18,135
Philadelphia, Pa.	3	393	1	98	4	433	8	924
Wilmington, Del.			3	580			3	580
Baltimore, Md.			3	439			3	439
Washington, D. C.			2	197	1	20	3	217
New Orleans, La.					2	189	2	189
Port Arthur, Tex.			1	233			1	233
Galveston, Tex.			1	2,058			1	2,058
St. Louis, Mo.					1	39	1	39
Kansas City, Mo.			1	33			1	33
St. Paul, Minn.			1	211	1	62	2	273
Burlington, Vt.			1	146			1	146
Buffalo, N. Y.			1	79	1	149	2	228
Detroit, Mich.	1	75	3	704	2	322	6	1,101
Port Huron, Mich.			2	266			2	266
Marquette, Mich.			1	32			1	32
Chicago, Ill.			3	710	3	133	6	843
San Francisco, Calif.	1	75			1	53	2	128
Seattle, Wash.			2	278			2	278
Total.	22	2,612	74	22,187	43	4,849	139	29,648

NO. 28.—CLASS, NUMBER, AND GROSS TONNAGE OF YACHTS BUILT IN THE UNITED STATES AND DOCUMENTED DURING YEAR ENDED JUNE 30, 1919, BY CUSTOMS DISTRICTS.

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

Ports at which built.	Sailing yachts.		Gas yachts.		Total.	
	No.	*Tons.*	*No.*	*Tons.*	*No.*	*Tons.*
Boston, Mass.	.....	.....	3	90	3	90
Vineyard Haven, Mass.	.....	.....	1	19	1	19
Providence, R. I.	.....	.....	2	64	2	64
New London, Conn.	.....	.....	1	22	1	22
New York, N. Y.	3	48	[a] 6	314	9	362
Perth Amboy, N. J.	.....	.....	2	55	2	55
Wilmington, Del.	.....	.....	1	17	1	17
St. Augustine, Fla.	.....	.....	1	52	1	52
Miami, Fla.	.....	.....	1	41	1	41
Key West, Fla.	.....	.....	1	70	1	70
Tampa, Fla.	.....	.....	1	23	1	23
New Orleans, La.	.....	.....	5	118	5	118
Louisville, Ky.	.....	.....	1	26	1	26
St. Louis, Mo.	.....	.....	1	16	1	16
Sandusky, Ohio.	.....	.....	2	44	2	44
Detroit, Mich.	.....	.....	1	44	1	44
Port Huron, Mich.	.....	.....	2	60	2	60
Chicago, Ill.	.....	.....	4	139	4	139
San Francisco, Calif.	3	75	2	33	5	108
Seattle, Wash.	.....	.....	3	81	3	81
Total.	6	123	41	1,328	47	1,451

[a] Including 1 yacht of 148 gross tons built of steel.

NO. 29.—CLASS, NUMBER, AND GROSS TONNAGE OF DOCUMENTED YACHTS LOST, ABANDONED, SOLD TO ALIENS, ETC., YEAR ENDED JUNE 30, 1919.

[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	38	6	323	.....	.....	7	361
Abandoned.	3	164	4	302	6	236	2	62	15	764
Sold to aliens.	1	17	1	166	10	434	1	73	13	690
Sold to United States.	.....	.....	4	691	8	250	.....	.....	12	941
Exempt, under 16 tons.	.....	.....	.....	.....	1	14	.....	.....	1	14
Total.	4	181	10	1,197	31	1,257	3	135	48	2,770