

## SECTION XVI.

## SHIPPING.

## § 1. General:

1. **Record of Shipping before Federation.**—Prior to Federation it was customary for each State to regard the matter of shipping purely from the State standpoint, and vessels arriving from or departing to countries beyond Australia, via other Australian States, were recorded as if direct from or to the oversea country. Thus, a mail steamer from the United Kingdom, which made Fremantle her first port of call in Australia, would be recorded not only there, but again in Adelaide, Melbourne and Sydney, as an arrival from the United Kingdom. Consequently, any aggregation, especially of the recent shipping records of the different States, would repeatedly include a large proportion of the shipping visiting Australia. In earlier years, when many vessels sailed from the various State ports direct for their destination, the error of repeated inclusion was less serious, but as the commerce of Australia developed, more and more ports of call were included in the voyage of each vessel, and this made the mere aggregation of State records correspondingly misleading. It has, as a matter of fact, led to some erroneous publications of statistical results and deductions.

2. **Shipping since Federation.**—With the inauguration of the Commonwealth, the statistics of its shipping, especially of its oversea shipping, became of greater intrinsic importance. As an index of the position of Australia among the trading countries of the world, such statistics had a constitutional importance commensurate with Commonwealth interests, and correspondingly greater than those of individual States, and the nationality of the shipping trading with Australia became also a matter of greater moment.

3. **Difficulties of Comparisons of Total Shipping.**—From what is said in paragraph 1 above, it is obviously impossible now to obtain results for Australia not subject to the defect of repeated inclusions of the same vessels. Unfortunately, the statistical records of the first three years of Federal history are subject to the same defect, and do not admit of direct comparison with those now kept. A careful estimate of the extent and effect of repeated inclusion has been made and applied to the records of the earlier years, so as to extend the comparative results to those years. The error of such estimation will be negligible for comparative purposes.

4. **Present System of Record.**—The present system of record treats Australia as a unit, and counts, therefore, only one entry and one clearance for each visit to the Commonwealth. Repeated voyages of any vessel are, of course, included.

On arrival of every vessel at a port in the Commonwealth, whether from an oversea country or from another port within the Commonwealth, the master is required to deliver to the Customs officer a form giving all particulars, necessary for statistical purposes, in regard to the ship, passengers and crew. Similarly, on departure from a port, a form

containing corresponding information is lodged. These forms, which provide a complete record of the movements of every vessel in Commonwealth waters, are at the end of each month forwarded by the Customs officer at each port to the Commonwealth Bureau of Statistics, and furnish the material for the compilation of the Shipping and Migration Returns.

Under the system previously in force it was found that the estimates of population in so far as they were based on seaward movement, were very unsatisfactory, and it is believed that the method referred to above gives decidedly better results.

From the 1st July, 1914, the statistical year for the record of Trade and Shipping of the Commonwealth was altered from the calendar year to agree with the fiscal year.

## § 2. Oversea Shipping.

1. **Total Oversea Shipping.**—In order to extend, as indicated, the comparison of the oversea shipping to the earliest years for which any records are available, an estimate of its probable amount has been made. This estimate is based on a comparison of the results obtained by merely aggregating State statistics, with the defect of multiple records, and the results obtained under the present system, which avoids the multiple record. From the nature of the case it is obvious that the ratio of repeated inclusion to the total traffic has been continually advancing, and this fact has been duly taken into account in deducing the results in the following table:—

### TOTAL OVERSEAS SHIPPING ENTERED AND CLEARED THE COMMONWEALTH, 1822 to 1915-16 (MULTIPLE RECORD EXCLUDED BY ESTIMATION PRIOR TO 1904.)

Year.	Vessels.	Tons.	Year.	Vessels.	Tons.	Year.	Vessels.	Tons.
1822	73	30,683	1854	3,781	1,744,251	1885	4,052	3,999,917
1823	76	30,643	1855	3,239	1,449,687	1886	3,793	3,853,246
1824	71	29,029	1856	2,669	1,195,794	1887	3,454	3,764,430
1825	80	30,786	1857	2,842	1,530,292	1888	3,933	4,464,895
1826	65	23,587	1858	2,607	1,375,050	1889	3,897	4,460,426
1827	95	23,301	1859	2,759	1,403,210	1890	3,263	4,150,027
1828	124	38,367	1860	2,464	1,288,518	1891	3,778	4,726,307
1829	185	56,735	1861	2,466	1,149,476	1892	3,432	4,239,500
1830	195	56,185	1862	2,917	1,389,231	1893	3,046	4,150,433
1831	185	52,414	1863	3,378	1,564,369	1894	3,397	4,487,546
1832	206	50,628	1864	3,344	1,537,433	1895	3,331	4,567,883
1833	241	72,647	1865	3,005	1,317,994	1896	3,309	4,631,266
1834	249	77,068	1866	3,378	1,470,738	1897	3,279	4,709,697
1835	310	96,928	1867	2,927	1,277,679	1898	3,222	4,681,368
1836	310	93,974	1868	3,080	1,350,573	1899	3,356	5,244,197
1837	442	113,432	1869	3,107	1,473,837	1900	3,719	5,894,173
1838	471	132,038	1870	2,877	1,381,878	1901	4,028	6,541,991
1839	652	191,507	1871	2,748	1,312,642	1902	3,608	6,234,460
1840	915	277,335	1872	2,788	1,380,466	1903	3,441	6,027,843
1841	900	278,738	1873	3,159	1,609,067	1904	3,700	6,682,011
1842	862	232,927	1874	3,153	1,728,269	1905	4,068	7,444,417
1843	736	183,427	1875	3,437	1,914,462	1906	4,155	7,966,658
1844	629	155,654	1876	3,295	1,863,343	1907	4,394	8,822,866
1845	735	164,221	1877	3,157	1,930,434	1908	4,051	8,581,151
1846	888	211,193	1878	3,372	2,127,518	1909	3,910	8,516,751
1847	1,033	245,358	1879	3,344	2,151,338	1910	4,048	9,333,146
1848	1,182	305,840	1880	3,078	2,177,877	1911	4,172	9,984,801
1849	1,137	355,886	1881	3,284	2,549,364	1912	4,154	10,275,314
1850	1,300	425,206	1882	3,652	3,010,944	1913	3,965	10,601,948
1851	1,576	515,061	1883	3,857	3,433,103	1914-15	3,211	8,599,258
1852	1,896	844,243	1884	4,315	4,064,947	1915-16	3,324	8,538,322
1853	3,364	1,490,422						

It will be borne in mind that while the above figures in themselves have no absolute significance, nevertheless, on the assumption that the element of duplication has been in fairly constant ratio, they furnish the best available indication of the growth of Australian oversea shipping.

**2. Comparison with other Countries.**—The place of Australia among various countries in regard to oversea shipping is indicated in the following table, both absolutely and in respect of tonnage per head of population:—

### OVERSEA SHIPPING OF VARIOUS COUNTRIES.

Country.	Year.	Tonnage Entered and Cleared.		Country.	Year.	Tonnage Entered and Cleared.	
		Total.	Per Inhabitant.			Total.	Per Inhabitant.
Argentine Rep.	1912	23,372,714	3.2	Japan ...	1912	43,492,604	0.8
Belgium ...	1912	32,672,989	4.3	New Zealand	1915	3,277,358	3.0
Canada ...	1914	25,402,586	3.1	Norway ...	1912	10,806,050	4.4
<b>Commonw'lth</b>	<b>1915-16</b>	<b>8,538,322</b>	<b>1.7</b>	S. African Un.	1914	9,961,583	1.5
Denmark ...	1912	18,537,064	6.6	Sweden ...	1912	25,511,890	4.6
France ...	1912	62,775,775	1.6	United K'dom	1913	164,809,581	3.6
Germany ...	1912	51,065,940	0.8	United States	1915	70,489,831*	0.7
Italy ...	1912	56,889,048	1.6				

\* Exclusive of Northern Border and Lake Ports.

**3. Shipping Communication with various Countries.**—Particulars of the number and tonnage of vessels recorded between Australia and various countries, distinguishing British from foreign countries, are given in the following tables—the next table shewing the tonnage of vessels which were recorded as having entered the Commonwealth from the particular countries mentioned; that on page 597 shews the tonnage of vessels which were recorded as having cleared the Commonwealth for the particular countries, while on page 598 is shewn the total tonnage of vessels recorded as entered and cleared from and to the countries named.

The smaller tonnage which entered and cleared Commonwealth ports during 1914-15, together with its altered distribution among the various countries, was, of course, almost entirely due to the war, though the failure of the wheat crop for that season undoubtedly had some effect in this direction. The principal factor in reducing shipping tonnage was the immediate withdrawal of ships of enemy countries. During 1913 German ships to and from the Commonwealth aggregated a tonnage of 1,211,404 tons, whereas the figures for 1914-15 include only 172,679 tons of German shipping. This latter tonnage represents vessels which arrived and departed between the 1st July, 1914, and the outbreak of war, together with a few vessels that arrived later in ignorance of the opening of hostilities.

The control of shipping by the Imperial Government for war purposes materially lessened the number of voyages of mail boats to and from England, and the tonnage of the Messageries Maritimes line was reduced from similar causes, whereas the increase shewn in the tonnage to and from India and Ceylon and "Other British Countries" represents vessels engaged in war transport services.

**SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM AND  
TO VARIOUS COUNTRIES 1911 to 1915-16.**

ENTERED.

Country.	1911.	1912.	1913.	1914-15.	1915-16.
United Kingdom ...	1,464,057	1,625,733	1,607,943	1,285,791	1,193,044
Canada ...	107,932	112,729	118,604	144,229	143,275
Fiji ...	77,745	73,033	86,442	85,442	72,612
Hong Kong ...	17,880	27,440	33,156	19,898	16,740
India and Ceylon ...	99,196	93,787	107,721	265,273	232,019
Mauritius ...	23,443	27,203	36,092	19,569	17,198
New Zealand ...	841,746	926,342	903,484	771,656	753,622
Papua ...	78,468	73,010	74,943	72,837	66,134
South African Union ...	289,229	96,679	198,505	84,365	93,262
South Sea Islands ...	61,983	37,472	58,498	24,279	44,191
Straits Settlements ...	97,735	102,598	100,238	106,534	105,531
Other British Countries ...	324	3,068	10,826	134,057	300,958
<b>Total British Countries ...</b>	<b>3,159,738</b>	<b>3,199,094</b>	<b>3,341,452</b>	<b>3,013,930</b>	<b>3,043,586</b>
Africa, Portuguese East ...	74,033	46,751	63,870	14,391	4,812
Belgium ...	18,734	11,852	9,563	6,871	...
Chile ...	182,460	176,416	108,121	33,288	19,165
Dutch East Indies ...	43,458	67,761	87,428	87,245	83,648
France ...	83,627	47,191	63,632	34,633	40,652
Germany ...	314,167	427,320	414,294	74,208	...
Hawaiian Islands ...	17,167	16,508	10,101	...	1,653
Japan ...	157,533	157,734	160,241	125,789	189,200
Mexico ...	16,481	19,445	9,973	...	...
New Caledonia ...	71,390	77,265	86,702	41,398	30,906
Norway ...	40,204	34,715	26,200	47,649	29,530
Peru ...	32,922	35,482	21,504	5,973	5,790
Philippine Islands ...	56,603	56,216	47,220	26,943	8,399
South Sea Islands (foreign) ...	56,878	67,805	66,651	73,762	77,309
Sweden ...	77,983	48,060	80,546	37,504	19,576
United States ...	389,208	453,354	509,922	426,513	570,918
Other Foreign Countries ...	200,584	220,388	264,111	119,858	144,340
<b>Total Foreign Countries ...</b>	<b>1,833,482</b>	<b>1,964,263</b>	<b>2,030,079</b>	<b>1,161,025</b>	<b>1,225,898</b>
<b>Total all Countries ...</b>	<b>4,993,220</b>	<b>5,163,357</b>	<b>5,371,531</b>	<b>4,174,955</b>	<b>4,269,484</b>

## SHIPPING TONNAGE ENTERED AND CLEARED, ETC.—(Continued.)

## CLEARED.

Country.	1911.	1912.	1913.	1914-15.	1915-16.
United Kingdom ...	1,537,084	1,369,143	1,455,018	1,031,279	894,628
Canada ...	54,732	54,661	82,849	90,105	101,485
Fiji ...	90,574	85,372	94,958	91,343	81,731
Hong Kong ...	19,155	32,121	27,959	30,566	17,047
India and Ceylon ...	143,632	144,487	126,656	210,688	112,989
Mauritius ...	2,953	4,526	3,505	7,681	2,817
New Zealand ...	1,044,013	1,183,741	1,198,837	916,809	894,618
Papua ...	71,811	66,409	73,923	63,962	58,378
South African Union ...	85,346	75,467	136,986	67,278	90,546
South Sea Islands ...	38,133	55,717	58,267	24,484	74,027
Straits Settlements ...	127,725	137,139	155,364	115,894	114,831
Other British Countries ...	...	...	2,270	522,870	807,481
<b>Total British Countries</b>	<b>3,215,158</b>	<b>3,208,783</b>	<b>3,416,592</b>	<b>3,172,959</b>	<b>3,250,578</b>
Africa, Portuguese East ...	6,949	3,836	5,447	2,691	...
Belgium ...	168,397	169,020	151,718	34,245	...
Chile ...	393,642	508,724	398,322	255,547	159,797
Dutch East Indies ...	115,499	155,332	189,499	180,649	112,912
France ...	155,506	94,062	81,240	54,642	29,591
Germany ...	321,502	349,685	385,752	38,358	...
Hawaiian Islands ...	26,200	34,009	45,634	37,770	16,286
Japan ...	103,550	96,108	117,472	73,228	135,876
Mexico ...	13,565	12,757	25,735	4,461	...
New Caledonia ...	62,165	74,063	86,321	43,581	51,893
Peru ...	70,960	64,881	52,626	24,431	18,584
Philippine Islands ...	102,748	95,120	46,746	72,272	18,385
South Sea Islands (foreign) ...	50,022	44,875	36,826	52,785	55,855
Sweden ...	...	...	...	...	...
United States ...	145,926	149,449	148,754	266,133	337,179
Other Foreign Countries ...	39,792	51,253	41,733	110,551	81,902
<b>Total Foreign Countries</b>	<b>1,776,423</b>	<b>1,903,174</b>	<b>1,813,825</b>	<b>1,251,344</b>	<b>1,018,260</b>
<b>Total all Countries</b>	<b>4,991,581</b>	<b>5,111,957</b>	<b>5,230,417</b>	<b>4,424,303</b>	<b>4,268,838</b>

The figures in the above table represent the tonnage of shipping recorded as having cleared the Commonwealth for the particular countries named. In the following section countries have been grouped according to larger geographical divisions with the purpose of depicting more clearly the general trend of Australian shipping.

Beyond the immediate military control of shipping, tonnage was further affected by the prohibition by the Government of the export of certain commodities. For instance, the restrictions placed on the export of coal were mainly responsible for the relatively small tonnage between this country and Chile and Peru.

**SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM AND  
TO VARIOUS COUNTRIES 1911 to 1915-16.**

Country.	1911.	1912.	1913.	1914-15.	1915-16.
United Kingdom ... ..	3,001,141	2,994,876	3,062,961	2,317,070	2,087,672
Canada ... ..	162,664	167,390	201,453	234,334	244,760
Fiji ... ..	168,319	158,406	181,400	176,785	154,343
Hong Kong ... ..	37,035	59,561	61,115	50,464	33,787
India and Ceylon ... ..	242,828	238,274	234,377	475,961	345,008
Mauritius ... ..	26,396	31,729	39,597	27,250	20,015
New Zealand ... ..	1,885,759	2,110,083	2,107,321	1,688,465	1,653,240
Papua ... ..	150,279	139,419	148,866	136,799	124,512
South African Union ... ..	374,575	172,146	335,491	151,643	183,808
South Sea Islands ... ..	100,116	93,189	116,765	48,763	118,218
Straits Settlements ... ..	225,460	239,737	255,602	222,428	220,362
Other British Countries ... ..	324	3,068	13,096	656,927	1,108,439
<b>Total British Countries ... ..</b>	<b>6,374,896</b>	<b>6,407,877</b>	<b>6,758,044</b>	<b>6,186,889</b>	<b>6,294,164</b>
Africa, Portuguese East ... ..	81,032	50,587	69,317	17,082	4,812
Belgium ... ..	187,131	180,872	161,221	41,116	...
Chile ... ..	576,102	685,140	506,443	293,835	178,962
Dutch East Indies ... ..	158,957	223,093	276,927	267,894	196,560
France ... ..	239,133	141,253	144,872	89,275	70,243
Germany ... ..	635,669	777,005	800,046	112,566	...
Hawaiian Islands ... ..	43,367	50,517	55,735	37,770	17,939
Japan ... ..	261,083	253,842	277,713	199,017	325,076
Mexico ... ..	30,046	32,202	35,708	4,461	...
New Caledonia ... ..	133,555	151,328	173,023	84,979	82,799
Norway ... ..	40,204	34,715	26,289	47,649	32,222
Peru ... ..	103,882	100,363	74,130	30,404	24,374
Philippine Islands ... ..	159,351	151,336	93,966	99,215	26,784
South Sea Islands (foreign) ... ..	106,900	112,680	103,477	126,547	133,164
Sweden ... ..	77,983	48,060	80,546	37,504	19,576
United States ... ..	535,134	602,303	658,676	692,646	908,097
Other Foreign Countries ... ..	240,376	271,641	305,755	230,409	223,550
<b>Total Foreign Countries ... ..</b>	<b>3,609,905</b>	<b>3,867,437</b>	<b>3,843,904</b>	<b>2,412,369</b>	<b>2,244,158</b>
<b>Total all Countries ... ..</b>	<b>9,984,801</b>	<b>10,275,314</b>	<b>10,601,948</b>	<b>8,599,258</b>	<b>8,538,322</b>

In respect of these tables it may be pointed out that the statistics for any country do not fully disclose the extent of its shipping communication with particular countries. The reason for this is that vessels are recorded as arriving from, or departing to, a particular country, whereas, as a matter of fact, many regular lines of steamers call and transact business at the ports of several countries in the course of a single voyage. The lines of steamers trading between Australia and Japan, for example, often call at New Guinea, the Philippine Islands, China, etc., but, being intermediate ports, these countries are not referred to in the statistical records. Similarly, in the case of the large mail steamers passing through the Suez Canal, a steamer may call at Colombo, Aden, Port Said, Genoa, Marseilles, London, and in ordinary times, Antwerp, and Bremerhaven, yet obviously can only be credited as cleared for one of these ports, to the consequent exclusion of all the other ports from the records.

**4. General Trend of Shipping.**—A grouping of countries into larger geographical divisions, as in the following tables, shews more readily the general direction of Australian shipping, and, to some extent, avoids the limitations of the records in relation to particular countries, by covering more closely the main trade routes.

## GENERAL DIRECTION OF THE SHIPPING OF THE COMMONWEALTH, 1911 to 1915-16.

## TONNAGE ENTERED.

Countries.		1911.	1912.	1913.	1914-15.	1915-16.
United Kingdom & European Countries	Cargo...	1,953,962	2,152,304	2,216,449	1,509,237	1,267,819
	Ballast	68,193	71,746	29,067	16,282	81,649
New Zealand	Cargo...	676,235	751,759	681,650	649,252	648,733
	Ballast	165,511	174,583	226,834	122,404	109,889
Asiatic Countries & Islds. in the Pacific	Cargo...	765,373	761,854	785,031	799,811	817,141
	Ballast	100,500	104,197	163,620	217,666	151,296
Africa	Cargo...	26,718	23,561	38,174	50,315	114,914
	Ballast	368,750	151,459	269,181	154,550	288,316
North and Central America	Cargo...	479,382	560,933	624,275	568,329	714,193
	Ballast	34,239	24,595	14,224	4,065	...
South America	Cargo...	13,114	31,291	23,576	26,798	61,940
	Ballast	341,243	355,075	300,130	56,246	13,694
Total	Cargo...	3,914,784	4,281,702	4,369,455	3,603,742	3,624,740
	Ballast	1,076,436	881,655	1,002,076	571,213	644,744

## TONNAGE CLEARED.

United Kingdom & European Countries	Cargo...	2,190,650	2,006,275	2,102,203	1,169,592	961,961
	Ballast	—	44	162	—	2,699
New Zealand	Cargo...	981,126	1,148,166	1,166,598	865,780	817,827
	Ballast	62,887	35,575	32,239	51,029	76,791
Asiatic Countries & Islds. in the Pacific	Cargo...	932,091	984,875	995,644	966,549	767,700
	Ballast	24,093	42,738	66,414	99,715	126,921
Africa	Cargo...	106,321	83,829	148,750	559,540	851,543
	Ballast	—	—	237	6,130	32,148
North and Central America	Cargo...	182,440	204,116	251,739	305,835	342,332
	Ballast	31,783	12,751	5,599	56,262	100,842
South America	Cargo...	476,385	592,248	460,832	210,292	158,696
	Ballast	3,805	1,340	...	133,079	29,378
Total	Cargo...	4,869,013	5,019,509	5,125,766	4,077,588	3,900,059
	Ballast	122,568	92,448	104,651	346,715	368,779

## TONNAGE ENTERED AND CLEARED.

Countries.	1911.	1912.	1913.	1914-15.	1915-16.	1915-16 Compared with 1911.
United Kingdom & European Countries	4,212,805	4,230,369	4,346,901	2,695,111	2,314,128	- 1,898,677
New Zealand	1,885,759	2,110,083	2,107,321	1,688,465	1,653,240	- 232,519
Asiatic Countries and Islands in the Pacific	1,822,057	1,893,664	2,010,709	2,083,741	1,863,058	+ 41,001
Africa	501,789	258,849	456,342	770,535	1,286,821	+ 785,032
North and Central America	727,844	802,395	895,837	934,991	1,157,367	+ 429,523
South America	834,547	979,954	784,838	426,415	263,708	- 570,839
Cargo	8,783,797	9,301,211	9,495,221	7,681,330	7,524,799	- 1,258,998
Ballast	1,201,004	974,103	1,106,727	917,928	1,013,523	- 187,481
Total	9,984,801	10,275,314	10,601,948	8,599,258	8,538,322	- 1,446,479

From these tables it would appear that the tonnage between Australia and Africa was greater during 1915-16 than in 1913. This, however, is merely the effect of the diversion of shipping from the usual occupation to military transport between this country and Egypt. The outward tonnage to North America both with cargo and in ballast has been very much greater since the war than before. The increased

tonnage with cargo was engaged in carrying the largely increased trade between the Commonwealth and the United States of America. The tonnage in ballast consisted of vessels which, owing to the abnormal circumstances previously alluded to, were unable to procure cargoes in Australian ports.

5. **Nationality of Oversea Shipping.**—As will be seen from the following table, the greater part of the shipping visiting the Commonwealth is of British nationality. The proportion which British shipping represented of the total tonnage which entered and cleared the Commonwealth rose from 72.83 per cent. during 1913 to 82.41 per cent. in 1914-15 and in 1915-16 represented 81.76 per cent. This increase was almost entirely due to the withdrawal of German ships.

**NATIONALITY OF ALL VESSELS WHICH ENTERED AND CLEARED THE COMMONWEALTH FROM AND TO OVERSEA COUNTRIES, 1911 to 1915-16.**

Nationality.	Tonnage.				
	1911.	1912.	1913.	1914-15.	1915-16.
<b>BRITISH—</b>					
Australian ... ..	848,240	889,285	851,931	1,107,402	1,118,470
United Kingdom... ..	5,511,504	5,299,157	5,590,966	4,897,452	5,304,683
New Zealand ... ..	1,008,036	1,274,584	1,247,742	1,017,721	515,187
Other British ... ..	38,871	51,199	30,459	64,040	42,808
Cargo ... ..	6,656,932	6,949,115	6,915,261	6,406,393	6,189,524
Ballast ... ..	749,719	565,110	805,837	680,222	791,624
Total British ... ..	7,406,651	7,514,225	7,721,098	7,086,615	6,981,148
Per cent. on total ... ..	74.18	73.13	72.83	82.41	81.76
<b>FOREIGN—</b>					
Austro-Hungarian ... ..	—	28,689	32,940	—	—
Danish ... ..	10,510	5,573	10,138	—	47,259
Dutch ... ..	139,606	120,864	193,880	198,223	279,291
French ... ..	424,461	356,207	366,730	199,619	180,144
German ... ..	1,005,986	1,211,738	1,211,404	172,679	—
Italian ... ..	65,415	51,098	55,898	39,147	8,886
Japanese ... ..	158,047	252,081	224,293	257,709	362,266
Norwegian ... ..	582,352	527,121	471,914	302,767	173,343
Russian ... ..	38,463	63,286	75,303	56,528	9,199
Swedish ... ..	50,207	37,330	59,484	60,600	56,234
United States ... ..	67,745	92,605	154,486	178,620	397,017
Other Foreign ... ..	35,358	14,497	24,380	46,751	43,535
Cargo ... ..	2,126,865	2,352,096	2,579,960	1,274,937	1,335,275
Ballast ... ..	451,285	408,993	300,890	237,706	221,899
Total Foreign ... ..	2,578,150	2,761,089	2,880,350	1,512,643	1,557,174
Per cent. on total ... ..	25.82	26.87	27.17	17.59	18.24
Cargo ... ..	8,783,797	9,301,211	9,495,221	7,681,330	7,524,799
Per cent. on total ... ..	87.97	90.52	89.56	89.33	88.13
Ballast ... ..	1,201,004	974,103	1,106,727	917,928	1,013,523
Per cent. on total ... ..	12.03	9.48	10.44	10.67	11.87
Grand Total ... ..	9,984,801	10,275,314	10,601,948	8,599,258	8,538,322

The tonnage of Australian-owned vessels engaged in the oversea trade represents in normal times about 8 per cent. of the total, and the tonnage of New Zealand vessels about 12 per cent. Both are ordinarily engaged mainly in the trade with New Zealand and eastern countries. The increase shewn above in Australian tonnage is in consequence of the diversion of vessels from the interstate trade to military purposes in transporting troops, etc., abroad.

The relative proportion of British and foreign tonnage which entered and cleared the Commonwealth during the last five years, apart from tonnage in ballast, is given below. From these figures, which may be considered to indicate more closely the proportion of the actual carrying trade done, than does the total tonnage, it will be seen that the proportion of British tonnage was lower during 1913 than in any other year shewn. In fact, since 1904, when the shipping statistics were first compiled in their present form, the proportion of British ships entered and cleared with cargo has never been so low as in 1913. From what has already been said it will be understood that the figures for 1914-15 and 1915-16 are the result of abnormal conditions, and are, therefore, of little economic significance.

**PROPORTION OF TONNAGE OF BRITISH AND FOREIGN NATIONALITY ENTERED  
AND CLEARED THE COMMONWEALTH WITH CARGO, 1911 to 1915-16.**

Nationality.	1911.	1912.	1913.	1914-15.	1915-16.
British ... ..	75.79	74.71	72.83	83.40	82.26
Foreign ... ..	24.21	25.29	27.17	16.60	17.74
Total ... ..	100.00	100.00	100.00	100.00	100.00

The principal increases in foreign tonnage in the Australian trade have been German, Japanese, United States of America, Norwegian, and Dutch. The greater amount of German and Japanese tonnage has been due to the extension of services between those countries and the Commonwealth, while the revival of the service between this country and San Francisco, which was discontinued after the great earthquake in that city in 1906, accounts for the larger American tonnage in 1913, whereas the subsequent trade development between this country and the United States accounts for the large increase of American shipping during the last two years under review. The Norwegian tonnage, which was largely composed of sailing ships, was chiefly engaged under charter in the carriage of coal, wheat, ore, etc. The Norwegian shipping in the Australian trade has been, however, much affected by the war. The apparent increase in Dutch tonnage requires special explanation. During recent years the vessels of the Royal Dutch Packet Company, on their voyages between Java and the eastern Australian ports, have been frequently, but unavoidably, counted twice on what was practically the same voyage, first on arrival from Java and again on arrival from Papua. As in the case of the United States of America, the increase of Japanese shipping tonnage has been the corollary of increased Japanese trade with Australia.

The following table shews the direction of the activities of the principal foreign countries engaged in the oversea carrying trade of the Commonwealth. A similar analysis with regard to German and French ships will be found in previous issues.

**SHIPPING OF PRINCIPAL FOREIGN NATIONS BETWEEN AUSTRALIA AND OTHER COUNTRIES DURING 1915-16.**

Countries.	Nationality.					
	Dutch.		Japanese.		United States.	
	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
UNITED KINGDOM ...	...	...	...	2,666	...	...
NEW ZEALAND ...	...	4,728	14,589	...	545	...
ASIATIC COUNTRIES AND ISLANDS IN THE PACIFIC—						
Dutch East Indies ...	51,810	65,736	3,610	12,647	3,850	...
Japan ...	...	...	114,462	97,376	...	796
New Caledonia ...	...	...	5,292	5,292	...	...
Papua ...	60,968	54,300	...	...	...	...
South Sea Islands ...	...	...	2,692	18,094	...	19,754
Straits Settlements ...	4,586	...	4,113	6,763	...	647
Other Asiatic Countries ...	11,032	2,945	10,690	18,918	10,132	8,176
SOUTH AFRICAN UNION ...	...	...	...	4,305	2,785	...
NTH. AMERICAN COUNTRIES—						
United States ...	11,769	...	16,448	12,172	180,140	155,416
Other Nth. Amer. Countries...	...	...	2,880	...	1,450	2,264
STH. AMERICAN COUNTRIES—						
Chile ...	...	11,417	3,829	...	...	6,772
Peru ...	...	...	...	...	...	4,290
Other South American... Countries	...	...	...	5,428	...	...
With Cargo ...	140,152	129,792	154,529	148,082	192,368	117,636
In Ballast ...	13	9,334	24,076	35,579	6,534	80,479
<b>Total</b> ...	<b>140,165</b>	<b>139,126</b>	<b>178,605</b>	<b>183,661</b>	<b>198,902</b>	<b>198,115</b>

A further analysis is appended, distinguishing between steam and sailing vessels of British and foreign nationality, which entered and cleared the Commonwealth during the years 1911 to 1915-16.

**STEAM AND SAILING VESSELS ENTERED AND CLEARED, 1911 to 1915-16.**

Description and Nationality of Vessels.	1911.		1912.		1913.		1914-15.		1915-16.	
	Ton-nage.	Per-centages.	Ton-nage.	Per-centages.	Ton-nage.	Per-centages.	Ton-nage.	Per-centages.	Ton-nage.	Per-centages.
Steam—										
British ...	6,912,085	81	7,094,126	79	7,375,109	77	6,939,087	86	6,760,751	86
Foreign ...	1,609,048	19	1,908,888	21	2,173,491	23	1,103,092	14	1,106,465	14
<b>Total Steam</b>	<b>8,521,133</b>	<b>100 (86)</b>	<b>8,993,014</b>	<b>100 (88)</b>	<b>9,548,600</b>	<b>100 (90)</b>	<b>8,042,179</b>	<b>100 (94)</b>	<b>7,867,216</b>	<b>100 (92)</b>
Sailing—										
British ...	494,566	34	430,099	34	345,969	33	147,528	26	220,397	33
Foreign ...	969,102	66	652,201	66	707,359	67	409,551	74	450,709	67
<b>Total Sailing</b>	<b>1,463,668</b>	<b>100 (15)</b>	<b>1,282,300</b>	<b>100 (12)</b>	<b>1,053,348</b>	<b>100 (10)</b>	<b>557,079</b>	<b>100 (6)</b>	<b>671,106</b>	<b>100 (8)</b>
Steam and Sailing—										
British ...	7,406,651	74	7,514,225	73	7,721,098	73	7,086,615	82	6,981,148	82
Foreign ...	2,573,150	26	2,761,089	27	2,880,850	27	1,512,643	18	1,557,174	18
<b>Total</b> ...	<b>9,984,801</b>	<b>100</b>	<b>10,275,314</b>	<b>100</b>	<b>10,601,948</b>	<b>100</b>	<b>8,599,258</b>	<b>100</b>	<b>8,538,322</b>	<b>100</b>

6. **Tonnage in Ballast.**—The following table shows the tonnage of oversea vessels which entered and cleared the Commonwealth in ballast during the years 1911 to 1915-16.

**TONNAGE ENTERED AND CLEARED IN BALLAST, 1911 to 1915-16.**

Year.	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
1911 ...	668,599	409,837	1,078,436	81,120	41,448	122,568
1912 ...	503,041	378,614	881,655	62,069	30,379	92,448
1913 ...	721,124	280,952	1,002,076	84,713	19,938	104,651
1914-15 ...	441,908	129,305	571,213	238,314	103,401	346,715
1915-16 ...	595,591	49,153	644,744	196,033	172,746	368,779

**PROPORTION OF TOTAL BRITISH AND FOREIGN TONNAGE WHICH ENTERED AND CLEARED IN BALLAST, 1911 to 1915-16.**

Year.	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1911 ...	18.09	31.61	21.60	2.19	3.23	2.46
1912 ...	13.31	27.24	17.03	1.66	2.21	1.81
1913 ...	18.39	19.37	18.66	2.23	1.39	2.00
1914-15 ...	12.88	17.36	13.68	6.51	14.12	7.84
1915-16 ...	17.02	6.38	15.10	5.63	21.95	8.64

The tonnage which entered each State of the Commonwealth, in ballast, during 1915-16, was as follows:—

**TONNAGE OF OVERSEA VESSELS IN BALLAST WHICH ENTERED EACH STATE AND THE NORTHERN TERRITORY DURING 1915-16.**

State ...	N.S.W.	Victoria.	Q'land.	S. Aust	W. Aust.	Tas.	N. Terr.	C'wealth.
Tonnage ...	190,923	58,357	2,279	46,490	346,695	...	...	644,744
Percentage of total ...	29.61	9.05	0.35	7.22	53.77	...	...	100.00

In normal times the large exports of coal from New South Wales afford special inducements to vessels in search of freights. During 1913, 600,050 tons, or 59.88 per cent. of all ballast tonnage arriving in Australia, entered in New South Wales, 463,134 tons having entered at the coal port of Newcastle. The tonnage in ballast into New South Wales is mainly for coal cargo, into South Australia for wheat and ore, and into Western Australia for timber and cattle. War conditions have, however, completely deranged the shipping of the Commonwealth, and the relatively large tonnage entering Western Australian ports in ballast represented vessels on military transport service.

### § 3. Shipping of Ports.

1. **Shipping of Ports.**—Appended is an abstract of the total shipping tonnage—over-sea and coastwise—which entered the more important ports of Australia during the year 1915-16, together with similar information in regard to some of the ports of New Zealand for the year 1915, and of the United Kingdom for the year 1913:—

#### SHIPPING OF PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.

Port.	Tonnage Entered.	Port.	Tonnage Entered.
<b>AUSTRALIA—</b>		<b>ENGLAND AND WALES—</b>	
Sydney ... ..	7,535,277	London ... ..	20,088,071
Melbourne ... ..	5,479,867	Liverpool (inc. Birkenhead)	15,574,989
Newcastle ... ..	3,952,640	Cardiff ... ..	12,603,349
Port Adelaide ... ..	*2,131,372	Tyne ports ... ..	11,701,605
Brisbane ... ..	2,113,247	Southampton ... ..	8,268,860
Fremantle ... ..	1,929,425	Hull ... ..	5,904,698
Townsville ... ..	1,200,815	Plymouth ... ..	4,717,738
Albany ... ..	1,146,247	Newport ... ..	3,630,681
Rockhampton ... ..	743,739	Middlesbrough ... ..	3,416,582
Mackay ... ..	733,835	Swansea ... ..	3,374,439
Hobart ... ..	647,933	Sunderland ... ..	3,288,949
Cairns ... ..	585,622	Grimsby ... ..	3,056,578
Port Pirie ... ..	518,906	Bristol ... ..	2,732,832
Bowen ... ..	431,198	Manchester ... ..	2,685,184
Geelong ... ..	356,103	Dover ... ..	2,606,277
Burnie ... ..	308,305	<b>SCOTLAND—</b>	
Thursday Island ... ..	301,311	Glasgow ... ..	6,101,819
<b>NEW ZEALAND—</b>		Leith ... ..	2,344,195
Wellington ... ..	3,183,192	<b>IRELAND—</b>	
Lyttelton ... ..	1,954,500	Cork (inc. Queenstown) ... ..	4,317,966
Auckland ... ..	1,746,514	Belfast ... ..	3,345,779
Dunedin ... ..	829,698	Dublin ... ..	2,495,854

\* Exclusive of coastal shipping, particulars of which are not available.

From the figures above it may be seen that the shipping business of the port of Sydney is exceeded by that of five ports only in the United Kingdom, viz., London, Liverpool, Cardiff, the Tyne, and Southampton.

### § 4. Vessels Built and Registered.

1. **Vessels Registered.**—The following table shews the number and net tonnage of steam, sailing, and other vessels on the registers of the various States and of the Northern Territory of the Commonwealth of Australia:—

#### VESSELS ON THE REGISTER, 31st DECEMBER, 1916.

State.	Steam.				Sailing.				Barges, Hulks, Dredges, etc., not Self-propelled.		Total.	
	Dredges and Tugs.		Other.		Fitted with Auxiliary Power.		Other.		No.	Net Tons.	No.	Net Tons.
	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.				
New South Wales ...	45	1,542	582	95,422	97	1,718	561	25,836	52	11,361	1,137	135,879
Victoria ... ..	26	2,633	178	131,333	24	817	111	5,068	25	33,115	424	172,586
Queensland ... ..	22	3,434	82	16,744	21	909	123	3,302	36	3,919	289	27,608
South Australia ...	21	858	95	56,741	9	320	91	5,414	67	11,719	283	75,052
Western Australia ...	13	247	42	28,639	12	291	297	4,715	28	7,555	392	41,447
Tasmania ... ..	5	302	56	11,113	41	932	113	4,011	2	563	217	16,921
Northern Territory ...	...	...	3	79	...	...	33	398	...	...	26	477
<b>Total ... ..</b>	<b>133</b>	<b>9,016</b>	<b>1,033</b>	<b>340,071</b>	<b>204</b>	<b>4,287</b>	<b>1,134</b>	<b>48,764</b>	<b>270</b>	<b>68,232</b>	<b>2,778</b>	<b>470,370</b>

2. **Vessels Built.**—The following tables shew the number and tonnage of vessels built in the Commonwealth during each of the years 1901-1916, so far as such information can be ascertained from the Shipping Registers of the various States. The Merchant Shipping Act, under which vessels are registered in Australia, however, does not make it compulsory to register vessels under 15 tons burthen if engaged in river or coastal trade. Larger vessels are also exempt from registration if not engaged in trade. Yachts and small trading vessels may be, and frequently are, registered at the request of the owners. As the Shipping Registers have been, and are, the source of information, it follows that the figures given below will be subject to additions in the future, inasmuch as vessels already built may be added to the register at some future date.

## VESSELS BUILT IN THE COMMONWEALTH, 1901 to 1916.

## NUMBER.

Year.	Steamers Built of—					Oil Motor Vessels.	Sailing.	Pontoons, Dredges, etc.	Total.
	Wood.	Iron.	Steel.	Com- posite.	Total.				
1901 ...	18	...	1	...	19	4	39	...	62
1902 ...	29	...	...	1	30	8	74	1	113
1903 ...	15	1	2	...	18	17	157	2	194
1904 ...	14	...	1	1	16	13	74	...	103
1905 ...	15	...	4	...	19	22	17	2	60
1906 ...	12	1	1	...	14	22	20	3	59
1907 ...	17	...	...	1	18	12	34	1	65
1908 ...	13	...	3	...	16	18	17	2	53
1909 ...	10	...	...	...	10	12	36	1	59
1910 ...	9	3	2	...	14	11	35	4	64
1911 ...	14	1	2	1	18	8	37	4	67
1912 ...	9	...	3	2	14	12	30	1	57
1913 ...	17	...	2	...	19	12	29	...	60
1914 ...	17	...	...	...	17	8	27	2	54
1915 ...	4	...	2	...	6	5	2	...	13
1916 ...	...	...	...	...	...	2	2	...	4

## TONNAGE.

Year.	Steamers.		Oil Motor Vessels.		Sailing.		Pontoons, Dredges, etc.		Total.	
	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.
1901 ...	2,270	1,251	41	33	1,083	958	...	...	3,394	2,242
1902 ...	3,166	1,849	96	82	2,409	2,087	64	64	5,735	4,082
1903 ...	1,569	956	624	455	3,195	2,745	385	350	5,773	4,506
1904 ...	2,094	1,240	161	125	1,607	1,388	...	...	3,862	2,753
1905 ...	2,444	1,462	291	214	338	290	967	896	4,040	2,862
1906 ...	1,426	735	268	189	498	425	546	536	2,738	1,885
1907 ...	2,381	1,305	108	93	791	736	152	145	3,432	2,279
1908 ...	2,492	1,317	265	199	493	418	260	260	3,510	2,194
1909 ...	1,351	735	184	151	805	677	98	98	2,438	1,661
1910 ...	1,944	1,105	137	124	807	691	688	646	3,576	2,566
1911 ...	2,123	1,130	143	115	779	694	762	720	3,807	2,659
1912 ...	2,592	1,592	391	304	673	579	78	78	3,734	2,553
1913 ...	2,227	1,189	300	205	510	484	...	...	3,037	1,878
1914 ...	3,041	1,595	118	97	492	434	148	148	3,799	2,274
1915 ...	914	385	178	115	155	147	...	...	1,247	647
1916 ...	...	...	23	20	39	28	...	...	62	48

### § 5. Interstate Shipping.

1. **Total Vessels and Tonnage.**—In the following tables are shown the number and tonnage of vessels recorded as having entered each State of the Commonwealth from any other State therein, and similarly, the number and tonnage clearing from each State to other Commonwealth States. The table gives results since 1891 and for 1915-16. The shipping on the Murray River, between the States of New South Wales, Victoria and South Australia, is not included:—

#### INTERSTATE SHIPPING, 1891 to 1915-16—NUMBER OF VESSELS.

##### ENTERED.

State.	1891.	1901.	1906.	1911.	1914-15.	1915-16.
New South Wales ... ..	1,692	1,611	1,575	1,791	1,934	1,947
Victoria ... ..	1,525	1,502	1,561	1,648	1,732	1,736
Queensland ... ..	376	430	478	567	584	570
South Australia ... ..	611	650	752	789	662	631
Western Australia ... ..	149	446	335	415	349	350
Tasmania ... ..	680	713	840	864	909	864
Northern Territory ... ..	*	*	*	39	49	39
Total ... ..	5,033	5,352	5,541	6,113	6,219	6,137

##### CLEARED.

New South Wales ... ..	1,415	1,473	1,417	1,728	1,792	1,871
Victoria ... ..	1,738	1,569	1,610	1,765	1,890	1,906
Queensland ... ..	389	395	431	572	554	547
South Australia ... ..	716	756	802	900	766	657
Western Australia ... ..	158	456	363	394	341	325
Tasmania ... ..	679	694	809	836	884	845
Northern Territory ... ..	*	*	*	40	39	42
Total ... ..	5,090	5,343	5,432	6,235	6,266	6,193

##### TOTAL.

New South Wales ... ..	3,107	3,084	2,992	3,519	3,726	3,818
Victoria ... ..	3,258	3,071	3,171	3,413	3,622	3,642
Queensland ... ..	765	825	909	1,139	1,138	1,117
South Australia ... ..	1,327	1,406	1,554	1,689	1,428	1,288
Western Australia ... ..	307	902	698	809	690	675
Tasmania ... ..	1,359	1,407	1,649	1,700	1,793	1,709
Northern Territory ... ..	*	*	*	79	88	81
Total ... ..	10,123	10,695	10,973	12,348	12,485	12,330

\* Included with South Australia.

## INTERSTATE SHIPPING, 1891 to 1915-16.—TONNAGE.

## ENTERED.

State.	1891.	1901.	1906.	1911.	1914-15.	1915-16.
New South Wales	1,617,559	2,081,089	2,456,269	3,318,605	4,033,368	3,563,812
Victoria ...	1,392,818	1,956,900	2,473,771	2,959,551	3,246,141	2,800,103
Queensland ...	267,753	545,469	692,354	840,052	1,169,991	995,373
South Australia ...	658,600	1,124,499	1,582,802	1,970,490	1,801,181	1,628,771
Western Australia	237,708	973,474	968,664	1,378,800	1,363,190	1,305,537
Tasmania ...	371,205	485,023	721,240	895,546	818,124	749,494
North'n Territory	*	*	*	64,518	106,433	80,090
Total ...	4,545,643	7,116,454	8,895,100	11,427,562	12,538,428	11,123,180

## CLEARED.

New South Wales	1,314,339	1,856,501	2,177,496	3,209,723	3,612,502	3,378,270
Victoria ...	1,692,189	2,038,424	2,617,966	3,233,531	3,658,856	3,285,036
Queensland ...	302,723	440,659	578,561	855,776	1,002,809	871,544
South Australia ...	829,616	1,365,668	1,772,356	2,343,269	2,169,611	1,751,044
Western Australia	269,256	977,846	1,051,629	1,303,359	1,210,138	1,187,222
Tasmania ...	352,406	433,735	636,944	728,170	721,144	652,450
North'n Territory	*	*	*	66,357	76,476	83,798
Total ...	4,760,529	7,112,833	8,834,952	11,740,185	12,451,536	11,209,364

## TOTAL.

New South Wales	2,931,898	3,887,590	4,633,765	6,528,328	7,645,870	6,942,082
Victoria ...	3,085,007	3,995,324	5,091,737	6,193,082	6,904,997	6,085,139
Queensland ...	570,476	986,128	1,270,915	1,695,828	2,172,800	1,866,917
South Australia ...	1,488,216	2,490,167	3,355,158	4,313,759	3,970,792	3,379,815
Western Australia	506,964	1,951,320	2,020,293	2,682,159	2,573,328	2,492,759
Tasmania ...	723,611	918,758	1,358,184	1,623,716	1,539,268	1,401,944
North'n Territory	*	*	*	130,875	182,909	163,888
Total ...	9,306,172	14,229,287	17,730,052	23,167,747	24,989,964	22,332,544

\* Included with South Australia.

The figures presented in the above table include oversea vessels—largely mail boats—passing from one State to another. This renders the results somewhat unsatisfactory.

In the earlier part of this section attention was drawn to the custom in vogue prior to Federation of recording vessels from or to "oversea countries via other Commonwealth States" as *direct* from or to the oversea country. At each port in Australia these vessels were, on the inward voyage (to Australia), entered as from the oversea country, and

cleared to the next Australian port as "interstate"; on the return journey—the outward voyage—they were entered as "interstate," and cleared as for the oversea country. In order to preserve the continuity of the records of the shipping communication of the several States with oversea countries this method has been followed in continuation of the pre-existing practice, excepting that vessels arriving or departing via other Commonwealth States are now so recorded instead of as "direct."

From the above it will be seen that while certain movements of the vessels referred to are included in the interstate shipping, other movements of the same vessels, between the same ports, are not so included.

To ascertain the aggregate movement of shipping between the States during the year 1915-16, including the total interstate movements of oversea vessels, the figures in the following table must be added to those of the preceding one:—

**SHIPPING ENTERED AND CLEARED FROM AND TO OVERSEAS COUNTRIES VIA  
OTHER COMMONWEALTH STATES, 1915-16.**

State.	Entered.		Cleared.		Total.		
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales ...	433	1,653,434	360	1,409,010	793	3,062,444	
Victoria ...	371	1,414,079	324	1,233,798	695	2,647,877	
Queensland ...	115	413,900	128	498,012	243	911,912	
South Australia ...	121	460,788	155	614,408	276	1,075,196	
Western Australia ...	9	33,443	3	8,813	12	42,256	
Tasmania ...	31	90,440	46	183,964	77	274,404	
Northern Territory ...	1	3,829	...	...	1	3,829	
Total ...	1915-16	1,081	4,069,913	1,016	3,948,005	2,097	8,017,918
	1906 ...	1,045	3,349,036	1,107	3,442,747	2,152	6,791,783

2. **Total Interstate Movement of Shipping.**—From the foregoing it is apparent that the interstate movement of shipping includes two very different elements, viz.:—(i.) Oversea ships moving from State to State, and (ii.) the movement of ships engaged solely in the interstate carrying trade. These two elements are approximately as follows:—

**TOTAL INTERSTATE MOVEMENT OF SHIPPING, 1911 to 1915-16.**

	1911.	1912.	1913.	1914-15.	1915-16.
	Tons.	Tons.	Tons.	Tons.	Tons.
Oversea vessels moving interstate ...	10,049,659	10,711,434	11,472,490	8,737,804	8,017,918
Vessels solely interstate ...	6,548,069	6,809,428	8,080,267	8,140,155	7,175,175
Total ...	16,597,728	17,520,862	19,552,757	16,877,959	15,193,093

The following table shows the number and tonnage of vessels which entered and cleared each State during 1915-16, including the coastal movements of oversea vessels:—

INTERSTATE SHIPPING OF EACH STATE, 1915-16.

State.	Entered.		Cleared.		Total.		
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales ...	2,380	5,217,246	2,231	4,787,280	4,611	10,004,526	
Victoria ...	2,107	4,214,182	2,230	4,518,834	4,337	8,733,016	
Queensland ...	685	1,409,273	675	1,369,556	1,360	2,778,829	
South Australia ...	752	2,089,559	812	2,365,452	1,564	4,455,011	
Western Australia ...	359	1,338,980	328	1,196,035	687	2,535,015	
Tasmania ...	895	839,934	891	836,414	1,786	1,676,348	
Northern Territory ...	40	83,919	42	83,798	82	167,717	
Total... ..	1915-16	7,218	15,193,093	7,209	15,157,869	...	...
	1906 ...	6,586	12,244,136	6,539	12,277,699	...	...

3. **Vessels Engaged Solely in Interstate Trade.**—The elimination of the element of oversea vessels, included in the interstate shipping returns, cannot be accurately effected; nevertheless, a close approximation is furnished if it be assumed that vessels entered in the several States as from "oversea countries via other Commonwealth States" have really been cleared from other States as "interstate," and further, that the vessels cleared to "oversea countries via other Commonwealth States" have likewise been entered as "interstate." Applying this suggestion, and so eliminating all interstate movements of oversea vessels, the number and tonnage of vessels engaged solely in the interstate trade during the years 1911 to 1915-16 will be found to be as follows:—

NUMBER AND TONNAGE OF VESSELS ENGAGED SOLELY IN INTERSTATE TRADE.  
1911 to 1915-16.

Year.	Entered.		Cleared.	
	No.	Tons.	No.	Tons.
1911 ... ..	4,794	6,548,069	4,811	6,570,019
1912 ... ..	5,000	6,809,428	4,990	6,809,426
1913 ... ..	5,174	8,080,267	5,187	8,105,988
1914-15... ..	5,143	8,140,155	5,142	8,112,005
1915-16... ..	5,121	7,175,175	5,112	7,139,451

This treatment cannot be extended to the individual States, as the records do not disclose the particular relationship of the States concerned.

4. **Interstate and Coastal Services.**—The foundation of the coastal steamship services in Australia dates back to the year 1851, when a regular trade was established between Melbourne and Geelong by the small screw steamer *Express*. Early in the fifties a company was formed in Tasmania with a capital of £40,000 for the purpose of purchasing steamboats, and employing them in the carriage of passengers and goods between Hobart

and Melbourne. This service was commenced in 1852, and was thus the first regular interstate service in Australia. About this time the great influx of population and the increase in commerce, caused chiefly by the gold discoveries, emphasised the desirability of establishing more regular and quicker means of communication between the principal ports of Australia, and in 1862 the regular interstate service between New South Wales and Victoria was inaugurated by the s.s. *You Yangs*, which was put into commission in regular service between Melbourne, Sydney, and Newcastle. In 1875 a company was formed in Adelaide for the purpose of supplying suitable steamers for the requirements of the trade between Adelaide and Melbourne. The first two steamers of the company were named the *South Australian* and the *Victorian*, and were small vessels of only 400 tons burthen. From the start, success attended these enterprises, and the services thus initiated were rapidly extended and their operations broadened. Numerous other companies were formed to cope with the increasing trade between ports in the Commonwealth, and the companies engaged from time to time added to their fleets of steamers by the acquisition of more modern and rapid vessels, until at the end of the year 1916 the total net tonnage owned by the twenty-three companies from whom returns have been received amounted to over 204,000 tons. A summary of the various mail services carried on during the year 1916 is given in Section XVIII. of this work.

The subjoined table gives particulars, so far as they are available, of all steamships engaged in regular interstate or coastal services at the end of each of the years 1901 and 1912 to 1916. The figures for 1912 and subsequent years include particulars relating to a number of smaller companies which did not supply returns for 1901, though they were, for the most part, carrying on business in that year.

**PARTICULARS OF STEAMSHIPS ENGAGED IN REGULAR INTERSTATE AND COASTAL SERVICES IN THE COMMONWEALTH, 1901 and 1912 to 1916.**

Particulars.	1901.	1912.	1913.	1914.	1915.	1916.
Number of companies making returns ...	11	24	23	23	23	23
Number of steamships ... ..	113	180	190	174	174	169
Tonnage { Gross ... ..	184,574	311,144	364,937	340,852	340,443	337,068
{ Net ... ..	114,080	179,996	206,340	206,424	205,795	204,357
Horse-power { Nominal ... ..	18,237	32,520	37,865	35,723	35,787	34,038
{ Indicated ... ..	122,519	276,703	321,794	288,856	289,488	283,471
Number of passengers { 1st class ... ..	4,617	9,084	9,826	8,069	9,557	9,077
for which licensed to { 2nd class and						
{ steerage ... ..	4,490	6,376	7,635	8,666	6,808	6,578
Complement { Masters and officers ... ..	403	604	649	622	623	606
of Crew { Engineers ... ..	332	509	559	527	532	519
{ Crew ... ..	2,875	4,609	5,509	5,493	5,508	5,385

5. Lighthouses and Lights on the Coast of the Commonwealth.—See Year Book No. 2.

6. Ports of the Commonwealth.—See Year Book No. 3.

### § 6. Shipwrecks.

The following statement shews the number and tonnage of vessels wrecked, or otherwise lost, on the coast or elsewhere under the jurisdiction of the several States, during the years 1901 and 1908 to 1916:—

## NUMBER AND TONNAGE OF VESSELS WRECKED,\* 1901 and 1908 to 1916.

Year.	Class of Vessel.	Number and Tonnage of Vessels.										Passengers and Crew.	Lives Lost.
		Under 50 tons.		50 to 500 tons.		500 to 2000 tons.		Over 2000 tons.		Total.			
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.		
1901	Steam ...	7	189	5	949	2	2,811	...	...	14	3,949	250	40
	Sailing ...	11	217	6	785	5	5,800	...	...	22	6,802	172	10
	Total ...	18	406	11	1,734	7	8,611	...	...	36	10,751	422	50
1908	Steam ...	6	137	7	816	2	2,930	2	5,585	17	9,468	299	37
	Sailing ...	56	775	3	276	3	4,074	1	2,062	63	7,187	348	219
	Total ...	62	912	10	1,092	5	7,004	3	7,647	80†	16,655	647	256
1909	Steam ...	1	48	3	359	1	1,382	1	2,286	6	4,075	131	40
	Sailing ...	6	163	3	362	2	2,681	...	...	11	3,206	88	6
	Total ...	7	211	6	721	3	4,063	1	2,286	17	7,281	219	46
1910	Steam ...	1	34	5	941	1	958	2	9,307	9	11,240	624	2
	Sailing ...	5	115	2	205	2	3,095	...	...	9	3,415	94	20
	Total ...	6	149	7	1,146	3	4,053	2	9,307	18	14,655	718	22
1911	Steam ...	4	109	5	681	3	5,194	...	...	12	5,984	275	161
	Sailing ...	7	103	4	642	4	5,100	...	...	15	5,845	128	25
	Total ...	11	212	9	1,323	7	10,294	...	...	27	11,829	403	186
1912	Steam ...	1	11	6	866	...	...	1	2,182	8	3,059	227	151
	Sailing ...	4	44	3	407	5	7,836	...	...	12	8,287	111	19
	Total ...	5	55	9	1,273	5	7,836	1	2,182	20	11,346	338	170
1913	Steam ...	1	25	2	237	...	...	...	...	3	262	23	...
	Sailing ...	10	175	5	359	...	...	...	...	15	534	51	7
	Total ...	11	200	7	596	...	...	...	...	18	796	74	7
1914	Steam ...	3	130	4	926	2	2,721	1	3,558	10	7,335	205	18
	Sailing ...	10	184	11	1,124	2	2,297	...	...	23	3,605	160	34
	Total ...	13	314	15	2,050	4	5,018	1	3,558	33†	10,940	365	52
1915	Steam ...	1	38	3	792	1	1,057	...	...	5	1,887	90	1
	Sailing ...	12	245	4	600	...	...	...	...	16	845	82	13
	Total ...	13	283	7	1,392	1	1,057	...	...	21	2,732	172	14
1916	Steam ...	3	107	6	582	...	...	1	2,529	10	3,218	87	6
	Sailing ...	10	240	1	114	...	...	1	3,087	12	3,441	78	19
	Total ...	13	347	7	696	...	...	2	5,616	22	6,659	165	25

\* In some cases the vessels included in the above return were subsequently recovered. † The large number of wrecks during 1908 was due to cyclones on the north-west coast of Western Australia destroying a large number of the pearling vessels. ‡ Not including two dredges, particulars of whose tonnage are not available.