

## SECTION XVI.

### SHIPPING.

#### § 1. General.

NOTE.—Owing to the general disorganisation of shipping in consequence of the war, the figures relating to the war period given in the following tables are of little comparative significance.

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 the mere aggregation of State records hence became correspondingly misleading. Failure to recognise this was at times responsible for erroneous deductions from the statistical records as then compiled.

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 sub-section 1 above, it is obviously impossible to obtain results for Australia for pre-federal years 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 also 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, however, 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.

In all instances the tonnage quoted is the net tonnage.

## § 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 OVERSEA SHIPPING ENTERED AND CLEARED THE COMMONWEALTH, 1822 TO 1917-18 (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	1886	3,793	3,853,246
1823	76	30,543	1855	3,239	1,449,657	1887	3,454	3,764,430
1824	71	29,029	1856	2,669	1,195,794	1888	3,933	4,464,895
1825	80	30,786	1857	2,842	1,530,202	1889	3,897	4,460,428
1826	65	23,587	1858	2,607	1,378,050	1890	3,363	4,150,027
1827	95	29,301	1859	2,759	1,403,210	1891	3,778	4,726,307
1828	124	38,367	1860	2,464	1,288,518	1892	3,432	4,239,500
1829	185	56,735	1861	2,466	1,149,476	1893	3,046	4,150,433
1830	195	56,135	1862	2,917	1,389,231	1894	3,397	4,487,546
1831	185	52,414	1863	3,378	1,564,369	1895	3,331	4,567,883
1832	206	59,628	1864	3,344	1,537,433	1896	3,309	4,631,266
1833	241	72,647	1865	3,005	1,317,934	1897	3,279	4,709,697
1834	249	77,068	1866	3,378	1,470,728	1898	3,222	4,681,398
1835	310	96,928	1867	2,927	1,277,679	1899	3,356	5,244,197
1836	310	93,974	1868	3,080	1,350,573	1900	3,719	5,894,173
1837	442	113,432	1869	3,107	1,472,837	1901	4,028	6,541,991
1838	471	132,038	1870	2,877	1,351,678	1902	3,608	6,234,460
1839	652	191,507	1871	2,748	1,312,642	1903	3,441	6,027,843
1840	915	277,355	1872	2,788	1,380,466	1904	3,700	6,682,011
1841	900	278,738	1873	3,159	1,609,067	1905	4,088	7,444,417
1842	862	232,827	1874	3,153	1,728,269	1906	4,155	7,866,658
1843	736	183,427	1875	3,437	1,914,462	1907	4,594	8,222,866
1844	629	155,654	1876	3,295	1,863,343	1908	4,051	8,581,151
1845	735	164,221	1877	3,157	1,930,434	1909	3,910	8,518,751
1846	888	211,193	1878	3,372	2,127,518	1910	4,048	9,333,146
1847	1,033	245,358	1879	3,344	2,151,338	1911	4,174	9,984,801
1848	1,182	305,840	1880	3,078	2,177,877	1912	4,052	10,275,314
1849	1,137	355,886	1881	3,284	2,549,364	1913	3,985	10,601,948
1850	1,300	425,206	1882	3,652	3,010,944	1914-15	3,211	8,599,258
1851	1,376	515,061	1883	3,857	3,433,102	1915-16	3,324	8,538,322
1852	1,896	844,243	1884	4,315	4,064,947	1916-17	2,986	7,694,442
1853	3,364	1,490,422	1885	4,052	3,999,917	1917-18	2,197	5,031,750

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, in normal times, 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.	
		Total.	Per Inhabitant.
Argentine Republic .. .. .	1915	19,337,191	2.4
Belgium .. .. .	1912	32,672,989	4.3
Canada .. .. .	1916	29,267,074*	3.5
<b>Commonwealth</b> .. .. .	<b>1917-18</b>	<b>5,031,750</b>	<b>1.0</b>
" .. .. .	<b>1913</b>	<b>10,601,948</b>	<b>2.2</b>
Denmark .. .. .	1912	18,537,064	6.6
France .. .. .	1912	62,775,775	1.6
Germany .. .. .	1912	51,065,940	0.8
Italy .. .. .	1912	56,889,048	1.6
Japan .. .. .	1912	43,492,604	0.8
New Zealand .. .. .	1917	2,787,658	2.5
" .. .. .	1913	3,438,792	3.2
Norway .. .. .	1912	10,806,050	4.4
Sweden .. .. .	1912	25,511,890	4.6
Union of South Africa .. .. .	1914	9,961,583	1.5
United Kingdom .. .. .	1913	164,809,581	3.6
United States .. .. .	1916	76,682,845*	0.7

\* Exclusive of vessels trading on lakes and rivers between Canada and the United States.

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 602 shews the tonnage of vessels which were recorded as having cleared the Commonwealth for the particular countries, while on page 603 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 the last four years, together with its altered distribution among the various countries, was, of course, almost entirely due to the war. 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. Any German ships now entering the Commonwealth are operated under the British or Allied flags, and are classified accordingly.

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, 1913 TO 1917-18.**

ENTERED.

Country.	1913.	1914-15.	1915-16.	1916-17.	1917-18.
United Kingdom ..	1,607,943	1,285,791	1,193,044	1,234,526	456,420
Canada .. ..	118,604	144,229	143,275	114,246	107,923
Fiji .. ..	86,442	85,442	72,612	67,981	67,463
Hong Kong ..	33,156	19,898	16,740	26,879	17,672
India and Ceylon ..	107,721	265,273	232,019	253,157	196,001
Mauritius .. ..	36,092	19,569	17,198	26,585	4,036
New Zealand ..	908,484	771,656	758,622	654,747	471,234
Papua .. ..	74,943	72,837	66,134	76,063	25,031
South Sea Islands ..	58,498	24,279	44,191	27,552	39,321
Straits Settlements ..	100,238	106,534	105,531	78,433	65,326
Union of South Africa ..	198,505	84,365	93,262	86,465	65,678
Other British Countries ..	10,826	134,057	300,958	73,547	152,397
<b>Total British Countries ..</b>	<b>3,341,452</b>	<b>3,013,930</b>	<b>3,043,586</b>	<b>2,720,181</b>	<b>1,668,502</b>
Africa, Portuguese East ..	63,870	14,391	4,812	34,517	8,668
Belgium .. ..	9,563	6,871	..	..	..
Chile .. ..	108,121	38,288	19,165	6,581	5,703
Dutch East Indies ..	87,428	87,245	83,648	107,311	47,126
France .. ..	63,632	34,633	40,652	32,779	87,635
Germany .. ..	414,294	74,208	..	..	..
Hawaiian Islands ..	10,101	..	1,653	..	..
Japan .. ..	160,241	125,789	189,200	164,383	116,438
Mexico .. ..	9,973	..	..	..	..
New Caledonia .. ..	86,702	41,398	30,906	30,782	46,551
Norway .. ..	26,200	47,649	29,530	15,967	7,705
Peru .. ..	21,504	5,973	5,790	3,953	..
Philippine Islands ..	47,220	26,943	8,399	..	..
South Sea Islands (foreign)	66,651	73,762	77,309	73,530	46,469
Sweden .. ..	80,546	37,504	19,576	20,861	6,904
United States .. ..	509,922	426,513	570,918	470,624	332,966
Other Foreign Countries ..	264,111	119,858	144,340	169,823	82,090
<b>Total Foreign Countries ..</b>	<b>2,030,079</b>	<b>1,161,025</b>	<b>1,225,898</b>	<b>1,131,111</b>	<b>788,255</b>
<b>Total all Countries ..</b>	<b>5,371,531</b>	<b>4,174,955</b>	<b>4,269,484</b>	<b>3,851,292</b>	<b>2,456,757</b>

SHIPPING TONNAGE ENTERED AND CLEARED, ETC.—*continued.*

## CLEARED.

Country.	1913.	1914-15.	1915-16.	1916-17.	1917-18.
United Kingdom .. .. .	1,455,018	1,031,279	894,628	1,862,460	322,344
Canada .. .. .	82,849	90,105	101,485	95,215	84,586
Fiji .. .. .	94,958	91,343	81,731	83,514	78,077
Hong Kong .. .. .	27,959	30,566	17,047	18,742	14,240
India and Ceylon .. .. .	126,656	210,688	112,989	108,928	112,655
Mauritius .. .. .	3,505	7,681	2,817	1,558	1,040
New Zealand .. .. .	1,198,837	916,809	894,618	640,703	438,288
Papua .. .. .	73,923	63,962	58,378	82,816	28,070
South Sea Islands .. .. .	58,267	24,484	74,027	43,828	46,287
Straits Settlements .. .. .	155,364	115,894	114,831	74,538	55,527
Union of South Africa .. .. .	136,986	67,278	90,546	79,054	46,667
Other British Countries .. .. .	2,270	522,870	807,481	30,982	721,726
<b>Total British Countries .. .. .</b>	<b>3,416,592</b>	<b>3,172,959</b>	<b>3,250,578</b>	<b>3,122,338</b>	<b>1,949,507</b>
Africa, Portuguese East .. .. .	5,447	2,691	..	..	..
Belgium .. .. .	151,718	34,245	..	..	..
Chile .. .. .	398,322	255,547	159,797	80,832	24,178
Dutch East Indies .. .. .	189,499	180,649	112,912	95,283	56,917
France .. .. .	81,240	54,642	29,591	35,820	7,828
Germany .. .. .	385,752	38,358	..	..	..
Hawaiian Islands .. .. .	45,634	37,770	16,286	7,014	..
Japan .. .. .	117,472	73,228	135,876	119,198	103,729
Mexico .. .. .	25,735	4,461	..	..	..
New Caledonia .. .. .	86,321	43,581	51,893	52,297	54,747
Peru .. .. .	52,626	24,431	18,584	21,698	8,826
Philippine Islands .. .. .	46,746	72,272	18,385	2,032	9,791
South Sea Islands (foreign) .. .. .	36,826	52,785	55,855	50,615	46,314
United States .. .. .	148,754	266,133	337,179	173,052	242,398
Other Foreign Countries .. .. .	41,733	110,551	81,902	82,971	70,758
<b>Total Foreign Countries .. .. .</b>	<b>1,813,825</b>	<b>1,251,344</b>	<b>1,018,260</b>	<b>720,812</b>	<b>625,486</b>
<b>Total all Countries .. .. .</b>	<b>5,230,417</b>	<b>4,424,303</b>	<b>4,268,838</b>	<b>3,843,150</b>	<b>2,574,993</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 sub-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, 1913 TO 1917-18.**

Country.	1913.	1914-15.	1915-16.	1916-17.	1917-18.
United Kingdom .. .. .	3,062,961	2,317,070	2,087,672	3,096,986	778,764
Canada .. .. .	201,453	234,334	244,760	209,461	192,509
Fiji .. .. .	181,400	176,785	154,343	151,495	145,540
Hong Kong .. .. .	61,115	50,464	33,787	45,621	31,912
India and Ceylon .. .. .	234,377	475,961	345,008	362,085	308,656
Mauritius .. .. .	39,597	27,250	20,015	28,143	5,076
New Zealand .. .. .	2,107,321	1,688,465	1,653,240	1,295,450	909,522
Papua .. .. .	148,866	136,799	124,512	158,879	53,101
South Sea Islands .. .. .	116,765	48,763	118,218	71,380	85,608
Straits Settlements .. .. .	255,602	222,428	202,362	152,971	120,853
Union of South Africa .. .. .	335,491	151,643	183,808	165,519	112,345
Other British Countries .. .. .	13,096	656,927	1,108,439	104,529	874,123
<b>Total British Countries .. .. .</b>	<b>6,758,044</b>	<b>6,186,889</b>	<b>6,294,164</b>	<b>5,842,519</b>	<b>3,618,009</b>
Africa, Portuguese East .. .. .	69,317	17,082	4,812	34,517	8,668
Belgium .. .. .	161,281	41,116	..	..	..
Chile .. .. .	506,443	293,835	178,962	87,413	29,881
Dutch East Indies .. .. .	276,927	267,894	196,560	202,594	104,043
France .. .. .	144,872	89,275	70,243	68,599	95,463
Germany .. .. .	800,046	112,566	..	..	..
Hawaiian Islands .. .. .	55,735	37,770	17,939	7,014	..
Japan .. .. .	277,713	199,017	325,076	283,581	220,167
Mexico .. .. .	35,708	4,461	..	..	..
New Caledonia .. .. .	173,023	84,979	82,799	83,079	101,298
Norway .. .. .	26,289	47,649	32,222	15,967	7,705
Peru .. .. .	74,130	30,404	24,374	25,651	8,826
Philippine Islands .. .. .	93,966	99,215	26,784	2,032	9,791
South Sea Islands (foreign) .. .. .	103,477	126,547	133,164	124,145	92,783
Sweden .. .. .	80,546	37,504	19,576	20,861	6,904
United States .. .. .	658,676	692,646	908,097	643,676	575,364
Other Foreign Countries .. .. .	305,755	230,409	223,550	252,794	152,848
<b>Total Foreign Countries .. .. .</b>	<b>3,843,904</b>	<b>2,412,369</b>	<b>2,244,158</b>	<b>1,851,923</b>	<b>1,413,741</b>
<b>Total all Countries .. .. .</b>	<b>10,601,948</b>	<b>8,599,258</b>	<b>8,538,322</b>	<b>7,694,442</b>	<b>5,031,750</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, &c., 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,  
1913 TO 1917-18.**

Countries.	—	1913.	1914-15.	1915-16.	1916-17.	1917-18.
<b>TONNAGE ENTERED.</b>						
United Kingdom and European Countries	Cargo	2,216,449	1,509,237	1,267,819	1,004,820	436,867
	Ballast	28,087	16,282	81,649	374,380	188,347
New Zealand .. ..	Cargo	681,650	649,252	648,733	559,604	394,986
	Ballast	226,834	122,404	109,889	95,143	76,248
Asiatic Countries and Islands in the Pacific	Cargo	785,031	799,811	817,141	782,563	641,756
	Ballast	163,620	217,666	151,296	206,671	62,419
Africa .. ..	Cargo	38,174	50,315	114,914	38,373	80,574
	Ballast	269,181	154,550	288,216	163,096	85,260
North and Central America	Cargo	624,275	568,329	714,193	584,870	440,889
	Ballast	14,224	4,065	..	..	..
South America .. ..	Cargo	23,876	26,798	61,940	9,294	5,703
	Ballast	300,130	56,246	13,694	32,478	43,708
	Cargo	4,369,455	3,603,742	3,624,740	2,979,524	2,000,775
	Ballast	1,002,076	571,213	644,744	871,768	455,982
<b>Total .. ..</b>	<b>..</b>	<b>5,371,531</b>	<b>4,174,955</b>	<b>4,269,484</b>	<b>3,851,292</b>	<b>2,456,757</b>

<b>TONNAGE CLEARED.</b>						
United Kingdom and European Countries	Cargo	2,102,203	1,169,592	961,961	1,878,530	884,418
	Ballast	162	..	2,699	37,211	34,444
New Zealand .. ..	Cargo	1,166,598	865,780	817,827	612,509	427,512
	Ballast	32,239	51,029	76,791	28,194	10,776
Asiatic Countries and Islands in the Pacific	Cargo	995,644	966,549	767,700	706,062	606,504
	Ballast	66,414	99,715	126,921	79,535	34,878
Africa .. ..	Cargo	148,750	559,540	851,543	126,071	198,806
	Ballast	237	6,130	32,148	156	4,463
North and Central America	Cargo	251,739	305,835	342,332	225,580	332,000
	Ballast	5,599	56,762	100,842	43,306	2,976
South America .. ..	Cargo	460,832	210,292	158,696	100,148	38,216
	Ballast	..	133,079	29,378	5,848	..
	Cargo	5,125,766	4,077,588	3,900,059	3,648,900	2,487,456
	Ballast	104,651	346,715	368,779	194,250	87,537
<b>Total .. ..</b>	<b>..</b>	<b>5,230,417</b>	<b>4,424,303</b>	<b>4,268,838</b>	<b>3,843,150</b>	<b>2,574,993</b>

<b>TONNAGE ENTERED AND CLEARED.</b>						
Countries.	1913.	1914-15.	1915-16.	1916-17.	1917-18.	1917-18 Compared with 1913.
United Kingdom and European Countries .. ..	4,346,901	2,695,111	2,314,128	3,294,941	1,544,076	-2,802,825
New Zealand .. ..	2,107,321	1,688,465	1,653,240	1,295,450	909,522	-1,197,799
Asiatic Countries and Islands in the Pacific .. ..	2,010,709	2,083,741	1,863,058	1,774,831	1,345,557	-665,152
Africa .. ..	456,342	770,535	1,286,821	327,696	369,103	-87,239
North and Central America .. ..	895,837	934,991	1,157,367	853,756	775,865	-119,972
South America .. ..	784,838	426,415	263,708	147,768	87,627	-697,211
Cargo .. ..	9,495,221	7,681,330	7,524,799	6,628,424	4,488,231	-5,006,990
Ballast .. ..	1,106,727	917,928	1,013,523	1,066,018	543,519	-563,208
<b>Total .. ..</b>	<b>10,601,948</b>	<b>8,599,258</b>	<b>8,538,322</b>	<b>7,694,442</b>	<b>5,031,750</b>	<b>-5,570,198</b>

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 its usual occupation to military transport between this country and Egypt.

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, mainly by the withdrawal of German ships, from 72.83 per cent. during 1913 to 82.41 per cent. in 1914-15, but receded to 75.08 per cent. in 1917-18.

The relatively large amount of French tonnage shewn in 1917-18 was engaged in the carriage of wheat.

**NATIONALITY OF ALL VESSELS WHICH ENTERED AND CLEARED THE COMMONWEALTH FROM AND TO OVERSEA COUNTRIES, 1913 TO 1917-18.**

Nationality.	Tonnage.				
	1913.	1914-15.	1915-16.	1916-17.	1917-18.
<b>BRITISH—</b>					
Australian ..	851,931	1,107,402	1,118,470	887,577	967,178
United Kingdom ..	5,590,966	4,897,452	5,304,683	4,980,205	2,501,028
New Zealand ..	1,247,742	1,017,721	515,187	335,467	229,271
Other British ..	30,459	64,040	42,808	69,701	80,342
Cargo ..	6,915,261	6,406,393	6,189,524	5,448,832	3,386,991
Ballast ..	805,837	680,222	791,624	824,118	390,828
Total British ..	7,721,098	7,086,615	6,981,148	6,272,950	3,777,819
Per cent. on total ..	72.83	82.41	81.76	81.53	75.08
<b>FOREIGN—</b>					
Austro-Hungarian ..	32,940	..	..	..	..
Danish ..	10,138	..	47,259	18,950	40,137
Dutch ..	193,880	198,223	279,291	285,508	150,448
French ..	366,730	199,619	180,144	120,269	305,123
German ..	1,211,404	172,679	..	..	..
Italian ..	55,898	39,147	8,886	79,925	17,176
Japanese ..	224,293	257,709	362,266	272,460	252,614
Norwegian ..	471,914	302,767	173,343	100,394	106,865
Russian ..	75,303	56,528	9,199	26,352	15,893
Swedish ..	59,484	60,600	56,234	43,866	41,641
United States ..	154,486	178,620	397,017	424,628	311,753
Other Foreign ..	24,380	46,751	43,535	49,140	12,281
Cargo ..	2,579,960	1,274,937	1,335,275	1,179,592	1,101,240
Ballast ..	300,890	237,706	221,899	241,900	152,691
Total Foreign ..	2,880,850	1,512,643	1,557,174	1,421,492	1,253,931
Per cent. on total ..	27.17	17.59	18.24	18.47	24.92
Cargo ..	9,495,221	7,681,330	7,524,799	6,628,424	4,488,231
Per cent. on total ..	89.56	89.33	88.13	86.15	89.20
Ballast ..	1,106,727	917,928	1,013,523	1,066,018	543,519
Per cent. on total ..	10.44	10.67	11.87	13.85	10.80
<b>Grand Total ..</b>	<b>10,601,948</b>	<b>8,599,258</b>	<b>8,538,322</b>	<b>7,694,442</b>	<b>5,031,750</b>



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 during the years 1914-15 and 1915-16 was a consequence of the diversion of vessels from the interstate trade to military purposes in transporting troops, &c., abroad. Several of these vessels have since been lost by enemy operations, and others have been further diverted from the Australian trade.

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 subsequent years are the result of abnormal conditions, and are, therefore, of little comparative significance.

**PROPORTION OF TONNAGE OF BRITISH AND FOREIGN NATIONALITY ENTERED AND CLEARED THE COMMONWEALTH WITH CARGO, 1913 TO 1917-18.**

Nationality.	1913.	1914-15.	1915-16.	1916-17.	1917-18.
British .. .. .	72.83	83.40	82.26	82.20	75.46
Foreign .. .. .	27.17	16.60	17.74	17.80	24.54
Total .. .. .	100.00	100.00	100.00	100.00	100.00

The principal increases in foreign tonnage in the Australian trade prior to the war, were 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, whereas, the trade development between this country and the United States accounts for the large increase of American shipping during the later 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, &c. 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 ships will be found in previous issues.

## SHIPPING OF PRINCIPAL FOREIGN NATIONS BETWEEN AUSTRALIA AND OTHER COUNTRIES DURING 1917-18.

Countries.	Nationality.					
	French.		Japanese.		United States.	
	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<b>EUROPEAN COUNTRIES--</b>						
United Kingdom ..	7,842	..	..	..	..	..
France ..	85,311	..	..	..	..	..
Other European Countries..	1,976	..	..	..	..	..
<b>NEW ZEALAND ..</b>	762	..	..	..	1,139	..
<b>ASIATIC COUNTRIES AND ISLANDS IN THE PACIFIC--</b>						
Dutch East Indies ..	..	..	..	2,666	..	..
Japan ..	..	..	116,438	103,729	..	..
New Caledonia ..	28,000	28,201	..	3,268	..	4,964
Pacific Islands ..	900	932	..	1,885	..	8,404
Straits Settlements ..	..	..	..	1,659	..	..
Other Asiatic Countries ..	2,316	..	7,643	7,771	..	6,292
<b>AFRICAN COUNTRIES ..</b>	12,102	28,745	..	..	861	..
<b>NORTH AMERICAN COUNTRIES--</b>						
United States ..	..	28,379	..	..	151,365	124,911
Other N. American Countries	..	..	..	..	1,194	2,079
<b>SOUTH AMERICAN COUNTRIES--</b>						
Argentine Republic ..	7,809	..	..	..	..	..
Chile ..	1,779	..	2,666	2,666	..	502
Peru ..	..	..	..	..	..	6,964
<b>OVERSEA COUNTRY UNSPECIFIED ..</b>	1,991	68,078	..	2,223	..	3,078
With Cargo ..	43,510	154,335	123,127	120,664	152,559	142,881
In Ballast ..	107,278	..	3,620	5,203	2,000	14,313
<b>Total ..</b>	<b>150,788</b>	<b>154,335</b>	<b>126,747</b>	<b>125,867</b>	<b>154,559</b>	<b>157,194</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 1913 to 1917-18.

## STEAM AND SAILING VESSELS ENTERED AND CLEARED, 1913 TO 1917-18.

Description and Nationality of Vessels.	1913.		1914-15.		1915-16.		1916-17.		1917-18.	
	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.
<b>Steam--</b>										
British ..	7,375,109	77	6,939,087	86	6,760,751	86	6,154,313	85	3,600,197	82
Foreign ..	2,173,491	23	1,103,092	14	1,106,465	14	1,068,404	15	771,304	18
<b>Total Steam</b>	<b>9,548,600</b>	<b>100</b>	<b>8,042,179</b>	<b>100</b>	<b>7,867,216</b>	<b>100</b>	<b>7,222,717</b>	<b>100</b>	<b>4,371,501</b>	<b>100</b>
		(90)		(94)		(92)		(94)		(87)
<b>Sailing--</b>										
British ..	345,989	33	147,528	26	220,397	33	118,637	25	177,622	27
Foreign ..	707,359	67	409,551	74	450,709	67	353,088	75	482,627	73
<b>Total Sailing</b>	<b>1,053,348</b>	<b>100</b>	<b>557,079</b>	<b>100</b>	<b>671,106</b>	<b>100</b>	<b>471,725</b>	<b>100</b>	<b>660,249</b>	<b>100</b>
		(10)		(6)		(8)		(6)		(13)
<b>Steam and Sailing--</b>										
British ..	7,721,098	73	7,086,615	82	6,981,148	82	6,272,950	82	3,777,819	75
Foreign ..	2,880,850	27	1,512,643	18	1,557,174	18	1,421,492	18	1,253,931	25
<b>Total ..</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>	<b>7,694,442</b>	<b>100</b>	<b>5,031,750</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 1917-18 :—

**TONNAGE ENTERED AND CLEARED IN BALLAST, 1911 TO 1917-18.**

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	108,401	346,715
1915-16 ..	595,591	49,153	644,744	196,033	172,746	368,779
1916-17 ..	720,040	151,728	871,768	104,078	90,172	194,250
1917-18 ..	322,807	133,175	455,982	68,021	19,516	87,537

**PROPORTION OF TOTAL BRITISH AND FOREIGN TONNAGE WHICH ENTERED AND CLEARED IN BALLAST, 1911 TO 1917-18.**

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	27.34	17.08	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
1916-17 ..	22.95	21.25	22.64	3.32	12.75	5.05
1917-18 ..	17.65	21.23	18.56	3.49	3.11	3.40

The tonnage which entered each State of the Commonwealth, in ballast, during 1917-18, was as follows :—

**TONNAGE OF OVERSEA VESSELS IN BALLAST WHICH ENTERED EACH STATE AND THE NORTHERN TERRITORY DURING 1917-18.**

State.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	C'wealth.
Tonnage ..	106,099	84,878	3,115	85,352	176,130	408	..	455,982
Percentage of total ..	23.27	18.61	.68	18.72	38.63	.09	..	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 Victoria for wheat, into South Australia for wheat and ore, and into Western Australia for timber and wheat. War conditions have, however, completely deranged the shipping of the Commonwealth, and the relatively large tonnage entering Western Australian ports in ballast was largely vessels on military transport service.

### § 3. Shipping of Ports.

1. **Shipping of Ports.**—Appended is an abstract of the total shipping tonnage—oversea and coastwise—which entered the more important ports of Australia during the year 1917–18, together with similar information in regard to some of the ports of New Zealand for the year 1917 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>	
Melbourne .. .. .	5,337,881	London .. .. .	20,088,071
Sydney .. .. .	5,320,400	Liverpool (inc. Birkenhead)	15,574,989
Newcastle .. .. .	2,991,679	Cardiff .. .. .	12,603,349
Brisbane .. .. .	1,424,060	Tyne Ports .. .. .	11,701,605
Adelaide .. .. .	960,759*	Southampton .. .. .	8,268,860
Fremantle .. .. .	892,300	Hull .. .. .	5,904,698
Townsville .. .. .	862,653	Plymouth .. .. .	4,717,738
Mackay .. .. .	495,495	Newport .. .. .	3,630,681
Rockhampton .. .. .	417,565	Middlesbrough .. .. .	3,416,582
Port Pirie .. .. .	389,660	Swansea .. .. .	3,374,439
Cairns .. .. .	384,727	Sunderland .. .. .	3,288,949
Albany .. .. .	370,331	Grimsby .. .. .	3,056,578
Bowen .. .. .	359,527	Bristol .. .. .	2,732,832
Hobart .. .. .	279,058	Manchester .. .. .	2,685,184
Burnie .. .. .	272,762	Dover .. .. .	2,606,277
Geelong .. .. .	229,627	<b>SCOTLAND—</b>	
Wallaroo .. .. .	210,088	Glasgow .. .. .	6,101,819
<b>NEW ZEALAND—</b>		Leith .. .. .	2,344,195
Wellington .. .. .	2,542,412	<b>IRELAND—</b>	
Auckland .. .. .	1,480,477	Cork (inc. Queenstown) ..	4,317,966
Lyttelton .. .. .	1,411,614	Belfast .. .. .	3,345,779
Dunedin .. .. .	593,366	Dublin .. .. .	2,495,854

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

### § 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, 1918.

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 ..	44	1,335	561	92,635	331	22,418	97	1,839	48	11,167	1,081	129,394
Victoria .. .. .	25	2,992	157	123,227	82	5,234	25	1,018	73	23,902	362	161,379
Queensland .. .. .	22	3,369	74	13,705	127	2,265	23	225	38	4,298	284	23,862
South Australia ..	23	983	92	48,722	75	3,926	10	401	64	10,422	264	64,454
Western Australia ..	11	176	37	22,433	336	5,199	11	191	26	6,912	421	34,911
Tasmania .. .. .	5	302	56	13,273	84	2,701	47	1,137	2	563	194	17,976
Northern Territory	..	..	1	53	31	378	1	17	..	..	33	448
<b>Total</b> .. .. .	<b>130</b>	<b>9,157</b>	<b>978</b>	<b>314,048</b>	<b>1,066</b>	<b>42,121</b>	<b>214</b>	<b>4,828</b>	<b>251</b>	<b>62,264</b>	<b>2,639</b>	<b>432,418</b>

2. **Vessels Built.**—The following tables shew the number and tonnage of vessels built in the Commonwealth during each of the years 1901–1918, 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 1918.

## NUMBER.

Year.	Steamers built of—					Oil Motor Vessels.	Sailing.	Pontoons, Dredges, etc.	Total.
	Wood.	Iron.	Steel.	Com- posite.	Total.				
1901 ..	18	..	1	..	19	4	45	..	68
1902 ..	29	..	..	1	30	8	78	1	117
1903 ..	15	1	2	..	18	17	158	2	195
1904 ..	14	..	1	1	16	13	76	..	105
1905 ..	15	..	4	..	19	22	17	2	60
1906 ..	12	1	1	..	14	22	20	3	59
1907 ..	17	..	..	1	18	12	37	1	68
1908 ..	13	..	3	..	16	18	18	2	54
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	2	58
1913 ..	17	..	2	..	19	13	29	..	61
1914 ..	17	..	..	..	17	9	28	2	56
1915 ..	4	..	2	..	6	5	3	..	14
1916 ..	2	..	..	..	2	4	2	..	8
1917 ..	3	..	..	1	4	1	5	..	10
1918 ..	1	..	..	..	1	3	..	..	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	1,169	1,027	..	..	3,480	2,311
1902 ..	3,166	1,849	96	82	2,482	2,148	64	64	5,808	4,143
1903 ..	1,569	956	624	455	3,211	2,758	285	350	5,789	4,519
1904 ..	2,094	1,240	161	125	1,641	1,416	..	..	3,896	2,781
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	840	778	152	145	3,481	2,321
1908 ..	2,492	1,317	265	199	510	428	260	260	3,527	2,204
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	612	287	4,268	2,762
1913 ..	2,227	1,189	322	226	510	484	..	..	3,059	1,899
1914 ..	3,041	1,595	142	119	510	452	148	148	3,841	2,314
1915 ..	914	385	178	115	186	176	..	..	1,278	676
1916 ..	125	63	55	44	39	28	..	..	219	135
1917 ..	619	300	18	12	229	161	..	..	866	473
1918 ..	257	145	448	349	..	..	..	..	705	494

## § 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 cleared from each State to other Commonwealth States. The table gives results since 1891 and for 1917-18. The shipping on the Murray River, between the States of New South Wales, Victoria, and South Australia, is not included :—

## INTERSTATE SHIPPING, 1891 TO 1917-18.—NUMBER OF VESSELS.

State.	1891.	1906.	1911.	1915-16.	1916-17.	1917-18.
ENTERED.						
New South Wales .. ..	1,692	1,575	1,791	1,947	1,607	1,469
Victoria .. ..	1,525	1,561	1,648	1,736	1,423	1,335
Queensland .. ..	376	478	567	570	525	524
South Australia .. ..	611	752	789	631	539	429
Western Australia .. ..	149	335	415	350	385	144
Tasmania .. ..	680	840	864	864	728	761
Northern Territory .. ..	*	*	39	39	29	29
Total .. ..	5,033	5,541	6,113	6,137	5,236	4,691
CLEARED.						
New South Wales .. ..	1,415	1,417	1,728	1,871	1,572	1,438
Victoria .. ..	1,733	1,610	1,765	1,906	1,580	1,430
Queensland .. ..	389	431	572	547	479	498
South Australia .. ..	716	802	900	657	579	464
Western Australia .. ..	158	363	394	325	310	168
Tasmania .. ..	679	809	836	845	717	751
Northern Territory .. ..	*	*	40	42	23	26
Total .. ..	5,090	5,432	6,235	6,193	5,260	4,775
TOTAL.						
New South Wales .. ..	3,107	2,992	3,519	3,818	3,179	2,907
Victoria .. ..	3,258	3,171	3,413	3,642	3,003	2,765
Queensland .. ..	765	909	1,139	1,117	1,004	1,022
South Australia .. ..	1,327	1,554	1,689	1,288	1,118	893
Western Australia .. ..	307	698	809	675	695	312
Tasmania .. ..	1,359	1,649	1,700	1,709	1,445	1,512
Northern Territory .. ..	*	*	79	81	62	55
Total .. ..	10,123	10,973	12,348	12,330	10,496	9,466

\* Included with South Australia.

## INTERSTATE SHIPPING, 1891 TO 1917-18.—TONNAGE.

State.	1891.	1906.	1911.	1915-16.	1916-17.	1917-18.
ENTERED.						
New South Wales	1,617,559	2,456,269	3,318,605	3,563,812	3,104,717	2,502,174
Victoria ..	1,392,818	2,473,771	2,959,551	2,800,103	2,254,634	1,665,921
Queensland ..	267,753	692,354	840,052	995,373	963,931	768,769
South Australia ..	658,600	1,582,802	1,970,490	1,628,771	1,302,537	796,627
Western Australia ..	237,708	968,664	1,378,800	1,305,537	1,373,625	475,840
Tasmania ..	371,205	721,240	895,546	749,494	525,862	432,208
Northern Territory	*	*	64,518	80,090	52,663	61,464
Total ..	4,545,643	8,895,100	11,427,562	11,123,180	9,577,969	6,703,003

CLEARED.						
New South Wales	1,314,339	2,177,496	3,209,723	3,378,270	2,994,899	2,397,160
Victoria ..	1,692,189	2,617,966	3,233,531	3,285,036	2,755,961	2,031,503
Queensland ..	302,723	578,561	855,776	871,544	779,017	648,207
South Australia ..	829,616	1,772,356	2,343,269	1,751,044	1,490,529	939,485
Western Australia ..	269,256	1,051,629	1,303,359	1,187,222	1,162,325	646,071
Tasmania ..	352,406	636,944	728,170	652,450	479,182	408,497
Northern Territory	*	*	66,357	83,798	43,607	50,961
Total ..	4,760,529	8,834,952	11,740,185	11,209,364	9,705,520	7,121,884

TOTAL.						
New South Wales	2,931,898	4,633,765	6,528,328	6,942,082	6,099,616	4,899,334
Victoria ..	3,085,007	5,091,737	6,193,082	6,085,139	5,010,595	3,697,424
Queensland ..	570,476	1,270,915	1,695,828	1,866,917	1,742,948	1,416,976
South Australia ..	1,488,216	3,355,158	4,313,759	3,379,815	2,793,066	1,736,112
Western Australia ..	506,964	2,020,293	2,682,159	2,492,759	2,535,950	1,121,911
Tasmania ..	723,611	1,358,184	1,623,716	1,401,944	1,005,044	840,705
Northern Territory	*	*	130,875	163,888	96,270	112,425
Total ..	9,306,172	17,730,052	23,167,747	22,332,544	19,283,489	13,824,887

\* 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 chapter 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 1917-18, 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 OVERSEA COUNTRIES VIA OTHER COMMONWEALTH STATES, 1917-18.**

State.	Entered.		Cleared.		Total.		
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales ..	248	984,599	202	724,613	450	1,709,212	
Victoria ..	200	747,736	145	491,891	345	1,239,627	
Queensland ..	55	251,595	68	338,905	123	590,500	
South Australia ..	74	246,085	53	145,595	127	391,680	
Western Australia ..	5	12,730	6	18,896	11	31,626	
Tasmania ..	41	113,182	46	126,352	87	239,534	
Northern Territory ..	..	..	..	..	..	..	
Total	1917-18	623	2,355,927	520	1,846,252	1,143	4,202,179
	1907 ..	1,148	3,681,684	1,176	3,832,405	2,324	7,514,089

2. **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 1917-18 will be found to be as follows:—

**NUMBER AND TONNAGE OF VESSELS ENGAGED SOLELY IN INTERSTATE TRADE, 1911 TO 1917-18.**

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
1916-17 ..	4,303	6,093,634	4,311	6,127,726
1917-18 ..	4,171	4,856,751	4,152	4,765,957

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



3. 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 INWARD INTERSTATE MOVEMENT OF SHIPPING, 1912 TO 1917-18.**

Vessels.	1912.	1913.	1914-15.	1915-16.	1916-17.	1917-18.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Oversea vessels moving inter-state .. ..	10,711,434	11,472,490	8,737,804	8,017,918	7,062,129	4,202,179
Vessels solely interstate .. ..	6,809,428	8,080,267	8,140,155	7,175,175	6,093,634	4,856,751
Total .. ..	17,520,862	19,552,757	16,877,959	15,193,093	13,155,763	9,058,930

The following table shows the number and tonnage of vessels which entered and cleared each State during 1917-18, including the coastal movements of oversea vessels :—

**INTERSTATE SHIPPING OF EACH STATE, 1917-18.**

State.	Entered.		Cleared.		Total.		
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales ..	1,469	2,502,174	1,438	2,397,160	2,907	4,899,334	
Victoria .. ..	1,335	1,665,921	1,430	2,031,503	2,765	3,697,424	
Queensland .. ..	524	768,769	498	648,207	1,022	1,416,976	
South Australia ..	429	796,627	464	939,485	893	1,736,112	
Western Australia ..	144	475,840	168	646,071	312	1,121,911	
Tasmania .. ..	761	432,208	751	408,497	1,512	840,705	
Northern Territory ..	29	61,464	26	50,961	55	112,425	
Total	1917-18	4,691	6,703,003	4,775	7,121,884	..	..
	1907 ..	5,873	9,428,835	5,800	9,276,493	..	..

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 faster vessels, until at the end of the year 1915 the total net tonnage owned by the 23 companies from whom returns have been received amounted to over 205,000 tons. Owing to the war this tonnage has been temporarily reduced by the withdrawal of vessels from the coastal trade for transport and other deep-sea services. A summary of the various mail services carried on during the year 1919 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 1914 to 1918. The figures for 1914 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 1914 TO 1918.**

Particulars.	1901.	1914.	1915.	1916.	1917.	1918.
Number of companies making returns	11	23	23	23	23	23
Number of steamships .. ..	113	174	174	169	148	142
Tonnage { Gross .. .. .	184,574	340,852	340,443	337,068	241,611	208,700
{ Net .. .. .	114,080	206,424	205,795	204,357	145,424	126,444
Horse-power { Nominal .. .. .	18,237	35,723	35,787	34,038	26,430	25,073
{ Indicated .. .. .	122,519	288,856	289,488	283,471	207,150	182,404
Number of passengers for which licensed to carry { 1st class .. .. .	4,617	8,068	9,557	9,077	5,459	4,674
{ 2nd class and steerage .. .. .	4,490	8,666	6,808	6,578	5,029	4,325
Complement of Crew { Masters and officers .. .. .	403	622	623	606	510	480
{ Engineers .. .. .	332	527	532	519	415	378
{ Crew .. .. .	2,875	5,493	5,508	5,385	3,910	3,365

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.

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### § 6. Shipwrecks.

The following statement shows 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 1910 to 1918 :—

#### NUMBER AND TONNAGE OF VESSELS WRECKED,\* 1901 AND 1910 TO 1918.

Year.	Class of Vessel.	Number and Tonnage of Vessels.										Passengers and Crew.	Lives Lost.
		Under 50 tons.		50 to 500 tons.		500 to 2,000 tons.		Over 2,000 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
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
1917	Steam ..	4	72	4	551	1	1,015	2	8,763	11	10,401	415	18
	Sailing ..	14	293	4	378	2	1,296	..	..	20	1,967	88	8
	Total ..	18	365	8	929	3	2,311	2	8,763	31	12,368	503	26
1918	Steam ..	2	68	6	867	1	648	..	..	9	1,583	130	12
	Sailing ..	13	239	4	548	..	..	..	..	17	787	109	25
	Total ..	15	307	10	1,415	1	648	..	..	26	2,370	239	37

\* In some cases the vessels included in the above return were subsequently recovered.

† Not including two dredges, particulars of tonnage of which are not available.

### § 7. Control of Commonwealth Shipping.

A brief statement relating to the control of Commonwealth shipping will be found in Year Book No. 11, page 637.

### § 8. Commonwealth Government Shipping Activities.

1. **Local Building Programme.**—The original programme of the Commonwealth Government for building ships in Australia provided for the construction of 48 vessels as follows:—

#### STEEL VESSELS.

Locality.	Number.	Builders.	Type.
Williamstown ..	6	Commonwealth Ship Construction Branch	Steel Cargo Steamers
Walsh Island ..	6	New South Wales Government ..	" "
Cockatoo Island	2	Commonwealth Navy Department	" "
Maryborough (Q.)	4	Walkers Limited .. ..	" "
Adelaide ..	4	Poole and Steel .. ..	" "
Tasmania ..	2	Mersey Shipbuilding Company Ltd.	" "

#### WOODEN VESSELS.

Sydney ..	6	Hughes, Martin and Washington Ltd.	Auxiliary Schooner
Fremantle ..	6	W.A. Shipbuilding Company ..	" "
Sydney ..	6	Wallace Power Boat Company ..	Auxiliary Barquentine
" ..	6	Kidman and Mayoh .. ..	" "

The contracts for the construction of the wooden vessels, with the exception of two five-masted auxiliary schooners (originally intended to be barquentines), which are under construction by Messrs. Kidman and Mayoh, have been cancelled. These two vessels will be built of Australian hardwoods, and their dimensions will be:—Length, 250 feet; beam, 45 feet; and moulded depth, 24 ft. 5 in. Their dead-weight capacity will be about 2,600 tons on a load draught of about 19 ft. 10 in. The propelling machinery will consist of two sets of semi-Diesel Bolinder engines, developing about 240 h.p. at about 240 revolutions per minute, which it is estimated will drive the vessels between 7 and 8 knots per hour.

With regard to the steel steam vessels, the first part of the programme to be put into execution consisted of six vessels, of the three island or well deck type, 331 feet long by 48 feet by 26 ft. 1 in. deep, moulded to the upper deck, with a dead-weight capacity of about 5,500 tons on a 21 ft. 9½ in. draught and a cubic capacity of about 282,000 feet. These vessels are fitted with single-screw engine and Babcock and Wilcox boilers, with an indicated horse-power of about 2,200, which will give a speed of 10½ knots at sea. The names of these ships and the places of construction are:—*Dromana* and *Dumosa*, Commonwealth Dockyard, Williamstown; *Delungra*, *Divioga*, and *Dilga*, Government Dockyard, Walsh Island, Newcastle; *Dundula*, Commonwealth Dockyard, Cockatoo Island, Sydney.

The *Delungra* was launched on 25th March, 1919, the *Dromana* on 11th April, and the *Dundula* on 9th July.

The second part of the programme, consisting of fourteen steel steamships, has been commenced. These will be built in the following yards:—

- 2 at Commonwealth Dockyard, Williamstown;
- 3 at Government Dockyard, Walsh Island;
- 1 at Commonwealth Dockyard, Cockatoo Island;
- 4 at Walkers Limited, Maryborough, Queensland; and
- 4 at Poole and Steel's, Adelaide, South Australia.

These vessels will be of the shelter-deck type and will be 331 feet long B.P., by 48 feet, by 33 ft. 7 in. in depth, moulded to the shelter deck. They will carry about 6,000 tons dead-weight on 23 ft. 8½ in. draught, and the total cubic capacity of each will be about 338,000 feet. The driving machinery will be the same as for the vessels referred to under the first part of the programme. Provision will be made for the carriage of oil fuel, and the boilers will be suitable for burning either oil or coal. Steel plate material for these vessels has been ordered from England, and about 2,500 to 3,000 tons have already been delivered into the building yards. A portion of steel sectional material also has been delivered from the Broken Hill Company. Work has actually commenced on three of these ships, and it is anticipated that six will be completed in eighteen months, six others in two years, and the balance in two and a-half years. These vessels will cost approximately £155,000 each. All the above-mentioned steel vessels will be built on the Isherwood system of longitudinal framing.

Negotiations have been completed for the construction, at the Cockatoo Island and Walsh Island yards, of four larger vessels, with the option of two more, the dimensions being:—Length over all, 520 feet; breadth, 62 ft. 3 in.; moulded depth, 45 feet. These vessels will be of the shelter-deck type, with a long bridge and fore-castle above the shelter deck and three complete decks laid. It is estimated that they will carry about 12,800 tons dead-weight on a load draught of 30 feet. Twin-screw quadruple engines, with cylinders 23½ inches, 34 inches, 48 inches, and 73 inches, and stroke 51 inches will be fitted, and steam will be generated by an ample installation of water-tube or Scotch boilers. The machinery will develop 7,300 horse-power, with a speed of 15 knots under trial conditions, and a speed at sea, fully loaded over a long voyage, of 13 knots. The total cubic capacity will be about 700,000 tons, which will include about 250,000 cubic feet of insulated space for the carriage of frozen meat or chilled produce. Liberal accommodation will be provided for officers and crew. The cargo arrangements will be of the most modern description to facilitate rapid loading and discharge. Provision will also be made in these vessels for the carriage of oil fuel, and the boilers will be suitable for burning either oil or coal. It is anticipated that two of these vessels will be in commission in two years, to be followed by two more at intervals of six months. The cost of these larger vessels will be about £423,000 each.

**2. Steel Vessels to be Built in Great Britain.**—In addition to the foregoing, a contract has been signed with Vickers, in Great Britain, for the building of three vessels of 12,000 tons dead-weight capacity, and 900,000 cubic feet, of which 370,000 cubic feet is to be insulated. The length of these vessels will be 520 feet by 68 feet beam. They are to be built to burn oil or coal as required. The speed is to be 15 knots. These vessels are due for delivery in January, June, and October, 1921, respectively.

A similar contract has been entered into with Beardmore's for two steamers alike in all respects to those referred to above as being built by Vickers.

**3. Wooden Vessels Built and being Built in America.**—A contract was arranged with the Sloan Shipyards Corporation at Seattle for the construction of four wooden, full-powered motor vessels. These vessels were completed and delivered as follows:—*Cethana*, 18th July, 1918; *Culburra*, 26th August, 1918; *Challamba*, 2nd October, 1918; *Coolcha*, 26th October, 1918.

A further contract was arranged with the Patterson McDonald Shipbuilding Company for the construction of ten wooden steamers. Of these, the *Bellata* was delivered on 8th October, 1918; the *Bundarra* on 11th December, 1918; and the *Bethanga* on 5th May, 1919. The *Birriwa* was to be delivered about the end of July, and the *Berringa* about the beginning of September. With regard to the remaining vessels, an alteration in the motive power was decided upon, Diesel engines being substituted for steam engines originally provided for. Of these vessels, the *Benowa* was delivered on 15th June, 1919; the *Babinda* was to be delivered about the middle of August; and the *Balcatta* in September; whereas the dates of the delivery of the *Boobyalla* and *Borrika* are indefinite.

4. **Vessels Purchased.**—In July, 1916, the Right Honourable W. M. Hughes, P.C., K.C., Prime Minister, purchased the following vessels for the Commonwealth of Australia :—

## VESSELS PURCHASED.

Class.	Old Name.	New Name.	D.W. Capacity.
100 *A1 .. ..	<i>Strathendrick</i> ..	<i>Australdale</i> ‡ ..	7180
.. ..	<i>Strathspey</i> ..	<i>Australpeak</i> ..	7180
.. ..	<i>Strathdee</i> ..	<i>Australrange</i> ..	7180
†B.C. .. ..	<i>Strathbeg</i> ..	<i>Australmount</i> ..	7180
100 *A1 .. ..	<i>Strathleven</i> ..	<i>Australcrag</i> ..	7180
†B.C. .. ..	<i>Strathesk</i> ..	<i>Australbrook</i> ..	7180
100 *A1 .. ..	<i>Strathavon</i> ..	<i>Australford</i> ..	7180
.. ..	<i>Strathgarry</i> ..	<i>Australbush</i> ‡ ..	7180
.. ..	<i>Strathairly</i> ..	<i>Australpool</i> ..	7180
.. ..	<i>Strathora</i> ..	<i>Australglen</i> ..	7180
.. ..	<i>Daltonhall</i> ..	<i>Australstream</i> § ..	5723
.. ..	<i>Kirkoswald</i> ..	<i>Australmead</i> ..	7740
†B.C. .. ..	<i>Ardangorm</i> ..	<i>Australport</i> ..	6650
.. ..	<i>Ardammhor</i> ..	<i>Australplain</i> ..	7180
.. ..	<i>Vermont</i> ..	<i>Australfield</i> § ..	6800

\* Classed at Lloyd's. † British Corporation. ‡ Lost through enemy action. § Sold.

The sailing vessels *John Murray* (1,600 tons), *Shandon* (2,200 tons) and *Speedway* (1,100 tons) were also acquired by the Commonwealth Government, but the former was totally wrecked on Malden Island on the 22nd May, 1918, her crew being saved.

5. **Control of Enemy Vessels.**—In addition to the above, the management of the Commonwealth Government line of steamers controls eighteen ex-enemy vessels of a dead-weight capacity of approximately 133,545 tons, and one ex-enemy sailing vessel of 2,300 tons capacity.

6. **Managing Staff.**—The principal officers on the managing staff operating the line are as follows :—General manager, Mr. H. B. G. Larkin ; assistant manager, Mr. G. H. Kneen ; head office, Australia House, Strand, London, W.C. 2. Manager for Australia, Mr. E. A. Eva ; traffic superintendent, Mr. S. A. Hosgood, 447 Collins Street, Melbourne.