

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 1918-19 (MULTIPLE RECORD EXCLUDED BY ESTIMATION PRIOR TO 1904).

Year.	Vessels.	Tons.	Year.	Vessels.	Tons.	Year.	Vessels.	Tons.
1822 ..	73	30,683	1855 ..	3,239	1,449,657	1887 ..	3,454	3,764,430
1823 ..	76	30,543	1856 ..	2,669	1,195,794	1888 ..	3,933	4,464,895
1824 ..	71	29,029	1857 ..	2,842	1,530,202	1889 ..	3,897	4,460,426
1825 ..	80	30,786	1858 ..	2,607	1,378,050	1890 ..	3,363	4,150,027
1826 ..	65	23,587	1859 ..	2,759	1,403,210	1891 ..	3,778	4,726,307
1827 ..	95	29,301	1860 ..	2,464	1,288,518	1892 ..	3,432	4,239,500
1828 ..	124	38,367	1861 ..	2,466	1,149,476	1893 ..	3,046	4,150,433
1829 ..	185	56,735	1862 ..	2,917	1,389,231	1894 ..	3,397	4,487,546
1830 ..	195	56,185	1863 ..	3,378	1,564,369	1895 ..	3,331	4,567,883
1831 ..	185	52,414	1864 ..	3,344	1,537,453	1896 ..	3,309	4,631,266
1832 ..	206	59,628	1865 ..	3,005	1,317,934	1897 ..	3,279	4,709,697
1833 ..	241	72,647	1866 ..	3,378	1,470,728	1898 ..	3,222	4,681,398
1834 ..	249	77,068	1867 ..	2,927	1,277,679	1899 ..	3,356	5,244,197
1835 ..	310	96,928	1868 ..	3,080	1,350,573	1900 ..	3,719	5,894,173
1836 ..	310	93,974	1869 ..	3,107	1,472,837	1901 ..	4,028	6,541,991
1837 ..	442	113,432	1870 ..	2,877	1,381,878	1902 ..	3,608	6,234,460
1838 ..	471	132,038	1871 ..	2,748	1,312,642	1903 ..	3,441	6,027,843
1839 ..	652	191,507	1872 ..	2,788	1,380,466	1904 ..	3,700	6,632,011
1840 ..	915	277,335	1873 ..	3,159	1,609,067	1905 ..	4,088	7,444,417
1841 ..	900	278,738	1874 ..	3,153	1,728,269	1906 ..	4,155	7,966,658
1842 ..	862	232,827	1875 ..	3,437	1,914,462	1907 ..	4,394	8,822,866
1843 ..	736	183,427	1876 ..	3,295	1,863,343	1908 ..	4,051	8,581,151
1844 ..	629	155,654	1877 ..	3,157	1,930,434	1909 ..	3,910	8,516,751
1845 ..	735	164,221	1878 ..	3,372	2,127,518	1910 ..	4,048	9,333,146
1846 ..	888	211,193	1879 ..	3,344	2,151,338	1911 ..	4,174	9,984,801
1847 ..	1,033	245,358	1880 ..	3,078	2,177,377	1912 ..	4,052	10,275,314
1848 ..	1,182	305,840	1881 ..	3,234	2,549,364	1913 ..	3,985	10,601,948
1849 ..	1,137	355,886	1882 ..	3,652	3,010,944	1914-15	3,211	8,599,258
1850 ..	1,300	425,206	1883 ..	3,857	3,433,102	1915-16	3,324	8,538,322
1851 ..	1,576	515,061	1884 ..	4,315	4,064,947	1916-17	2,986	7,694,442
1852 ..	1,896	844,243	1885 ..	4,052	3,999,917	1917-18	2,197	5,031,750
1853 ..	3,364	1,490,422	1886 ..	3,793	3,853,246	1918-19	2,614	6,180,486
1854 ..	3,781	1,744,251						

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. Figures relating to the shipping of many of the European countries for years subsequent to the war are not available, consequently it is necessary to restrict any comparison to pre-war years.

OVERSEA SHIPPING OF VARIOUS COUNTRIES.

Country.	Year.	Tonnage Entered and Cleared.	
		Total.	Per Inhabitant.
Argentine Republic	1912	23,372,714	3.2
Belgium	1912	32,672,989	4.3
Canada	1914	25,402,568*	3.1
Commonwealth	1913	10,601,948	2.2
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	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	1914	79,795,501*	0.8

* 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 622 shews the tonnage of vessels which were recorded as having cleared the Commonwealth for the particular countries, while on page 623 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 shown 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, 1904 TO 1918-19.

ENTERED.

Country.	Annual Average.		1915-16.	1916-17.	1917-18.	1918-19.
	1904-8.	1909-13.				
United Kingdom	1,041,195	1,463,600	1,193,044	1,234,526	456,420	830,751
Canada ..	69,100	107,596	143,275	114,246	107,923	68,502
Fiji ..	45,482	68,235	72,612	67,981	67,463	55,010
Hong Kong ..	87,830	28,465	16,740	26,879	17,672	19,483
India and Ceylon ..	79,556	114,053	232,019	253,157	196,001	263,269
Mauritius ..	15,504	33,047	17,198	26,585	4,036	4,839
New Zealand ..	673,204	836,250	758,622	654,747	471,234	492,618
Papua ..	18,540	63,421	66,134	76,063	25,031	9,453
South Sea Islands	36,220	55,892	44,191	27,552	39,321	29,364
Straits Settlements ..	100,977	98,917	105,531	78,433	65,326	92,064
Union of South Africa ..	231,438	200,034	93,262	86,465	65,678	56,838
Other British Countries ..	9,938	6,423	300,958	73,547	152,397	386,202
Total British Countries ..	2,408,984	3,075,933	3,043,586	2,720,181	1,668,502	2,308,393
Africa, Portugese East ..	54,111	74,235	4,812	34,517	8,668	3,698
Belgium ..	7,393	13,394	..	..	..	..
Chile ..	180,098	131,987	19,165	6,581	5,703	1,179
Dutch East Indies	32,816	69,812	83,648	107,311	47,126	84,151
France ..	77,355	81,545	40,652	32,779	87,635	28,464
Germany ..	246,587	344,527	..	..	..	..
Hawaiian Islands	24,609	22,761	1,653	..	..	150
Japan ..	159,761	153,079	189,200	164,383	116,438	148,436
Mexico ..	26,815	21,342	..	..	..	..
New Caledonia ..	62,999	72,230	30,906	30,782	46,551	41,706
Norway ..	36,909	34,883	29,530	15,967	7,705	17,920
Peru ..	35,552	33,450	5,790	3,953	..	..
Philippine Islands	107,163	52,913	8,399	..	..	2,980
South Sea Islands (foreign) ..	23,560	52,002	77,309	73,530	46,469	49,814
Sweden ..	17,775	58,827	19,576	20,861	6,904	11,938
United States of America ..	377,985	396,318	570,918	470,624	332,966	432,430
Other Foreign Countries ..	85,263	210,186	144,340	169,823	82,090	107,801
Total Foreign Countries ..	1,556,751	1,823,491	1,225,898	1,131,111	788,255	930,667
Total all Countries ..	3,965,735	4,899,424	4,269,484	3,851,292	2,456,757	3,239,060

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

CLEARED.

Country.	Annual Average.		1915-16.	1916-17.	1917-18.	1918-19.
	1904-8.	1909-13.				
United Kingdom	1,037,903	1,413,768	894,628	1,862,460	322,344	1,073,433
Canada ..	38,721	59,259	101,485	95,215	84,586	52,060
Fiji ..	88,716	74,901	81,731	83,514	78,077	56,746
Hong Kong ..	141,005	31,826	17,047	18,742	14,240	21,442
India and Ceylon ..	12,721	141,644	112,989	108,928	112,655	136,446
Mauritius ..	30,911	5,086	2,817	1,558	1,040	3,512
New Zealand ..	759,739	1,056,476	894,618	640,703	438,288	398,288
Papua ..	17,254	61,299	58,378	82,816	28,070	3,034
South Sea Islands	31,833	45,473	74,027	43,828	46,287	36,425
Straits Settlements ..	116,290	143,249	114,831	74,538	55,527	78,833
Union of South Africa ..	135,578	87,671	90,546	79,054	46,667	58,578
Other British Countries ..	2,202	1,039	807,481	30,982	721,726	343,700
Total British Countries ..	2,412,873	3,121,691	3,250,578	3,122,338	1,949,507	2,262,497
Africa, Portuguese East ..	19,190	10,929	..	..	..	..
Belgium ..	52,896	146,585	..	..	..	..
Chile ..	399,824	388,723	159,797	80,832	24,178	25,784
Dutch East Indies ..	32,191	125,475	112,912	95,283	56,917	108,589
France ..	78,336	101,505	29,591	35,820	7,828	10,748
Germany ..	216,244	329,719	..	..	..	..
Hawaiian Islands ..	51,711	32,923	16,286	7,014	..	19,997
Japan ..	61,564	102,009	135,876	119,198	103,729	119,548
Mexico ..	28,891	14,975	..	..	..	..
New Caledonia ..	68,401	68,371	51,893	52,297	54,747	43,062
Peru ..	68,917	55,457	18,584	21,698	8,826	9,255
Philippine Islands	135,581	95,103	18,385	2,032	9,791	8,344
South Sea Islands (foreign) ..	23,185	45,737	55,855	50,615	46,314	52,688
United States of America ..	208,676	154,111	337,179	173,052	242,398	186,292
Other Foreign Countries ..	75,205	49,655	81,902	82,971	70,758	94,622
Total Foreign Countries ..	1,520,812	1,721,277	1,018,260	720,812	625,486	678,929
Total all Countries ..	3,933,685	4,842,968	4,268,838	3,843,150	2,574,993	2,941,426

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.

The unusual excess of tonnage entered over that cleared during the year 1918-19 was due to the strikes of seamen and waterside workers, which caused many ships to be detained in Commonwealth ports over the end of that year.

**SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM
AND TO VARIOUS COUNTRIES, 1904 TO 1918-19.**

Country.	Annual Average.		1915-16.	1916-17.	1917-18.	1918-19.
	1904-8.	1909-13.				
United Kingdom ..	2,079,098	2,877,368	2,087,672	3,096,986	778,764	1,904,184
Canada ..	107,821	166,855	244,760	209,461	192,509	120,562
Fiji ..	134,198	143,136	154,343	151,495	145,540	111,766
Hong Kong ..	228,835	60,291	33,787	45,621	31,912	40,925
India and Ceylon ..	92,277	255,697	345,008	362,085	308,656	390,715
Mauritius ..	46,415	38,133	20,015	28,143	5,076	8,351
New Zealand ..	1,432,943	1,892,726	1,653,240	1,295,450	909,522	890,906
Papua ..	35,794	124,720	124,512	153,879	53,101	12,487
South Sea Islands ..	68,453	101,365	118,218	71,380	85,608	65,789
Straits Settlements ..	217,267	242,166	220,362	152,971	120,853	170,897
Union of South Africa ..	367,016	287,705	183,808	165,519	112,345	115,416
Other British Countries ..	12,140	7,462	1,108,439	104,529	874,123	729,902
Total British Countries	4,821,857	6,197,624	6,294,164	5,842,519	3,618,009	4,570,890
Africa, Portuguese East ..	73,301	85,164	4,812	34,517	3,668	3,698
Belgium ..	60,289	159,979	..	..	..	..
Chile ..	579,920	520,710	178,962	87,413	29,881	26,963
Dutch East Indies ..	65,007	195,287	196,560	202,594	104,043	192,740
France ..	155,691	183,050	70,243	68,599	95,463	39,212
Germany ..	462,831	674,246	..	..	..	..
Hawaiian Islands ..	76,320	55,685	17,939	7,014	..	20,147
Japan ..	221,325	255,088	325,076	283,581	220,167	267,984
Mexico ..	55,706	36,317	..	..	..	..
New Caledonia ..	131,400	140,601	82,799	83,079	101,298	84,768
Norway ..	36,909	35,383	32,222	15,967	7,705	17,920
Peru ..	104,469	88,907	24,374	25,651	8,826	9,255
Philippine Islands ..	242,744	148,016	26,784	2,032	9,791	11,324
South Sea Islands (foreign)	46,745	97,739	133,164	124,145	92,783	102,502
Sweden ..	18,563	59,644	19,576	20,861	6,904	11,938
United States ..	586,661	550,429	908,097	643,676	575,364	618,722
Other Foreign Countries	159,682	258,523	223,550	252,794	152,848	202,423
Total Foreign Countries	3,077,563	3,544,768	2,244,158	1,851,923	1,413,741	1,609,596
Total all Countries	7,899,420	9,742,392	8,538,322	7,694,442	5,031,750	6,180,486

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,
1904 TO 1918-19.**

Countries.	Annual Average.		1916-17.	1917-18.	1918-19.	
	1904-8.	1909-13.				
TONNAGE ENTERED.						
United Kingdom and European Countries	Cargo	1,343,869	1,939,579	1,004,820	436,867	607,680
	Ballast	92,372	88,072	374,380	188,347	348,719
New Zealand	Cargo	530,683	674,799	559,604	394,986	393,927
	Ballast	142,521	161,450	95,143	76,248	98,691
Asiatic Countries and Islands in the Pacific	Cargo	459,612	727,817	782,563	641,756	619,174
	Ballast	355,196	147,919	206,671	62,419	206,264
Africa	Cargo	31,852	29,233	38,373	80,574	107,607
	Ballast	280,168	289,991	163,096	85,260	254,878
North and Central America	Cargo	378,147	488,737	584,870	440,889	490,592
	Ballast	98,628	36,693	..	..	14,895
South America	Cargo	3,861	17,834	9,294	5,703	1,179
	Ballast	248,826	297,300	32,478	43,708	5,454
	Cargo	2,748,024	3,877,999	2,979,524	2,000,775	2,220,159
	Ballast	1,217,711	1,021,425	871,768	455,982	1,018,901
Total		3,965,735	4,899,424	3,851,292	2,456,757	3,239,060

TONNAGE CLEARED.						
United Kingdom and European Countries	Cargo	1,397,960	2,010,192	1,878,530	884,418	1,122,890
	Ballast	3,223	41	37,211	34,444	33,446
New Zealand	Cargo	701,987	1,004,924	612,509	427,512	373,058
	Ballast	57,751	51,552	28,194	10,776	25,230
Asiatic Countries and Islands in the Pacific	Cargo	808,409	922,035	706,062	606,504	672,306
	Ballast	37,309	51,922	79,535	34,878	43,618
Africa	Cargo	149,462	112,918	126,071	198,806	387,550
	Ballast	2,421	78	156	4,463	7,270
North and Central America	Cargo	243,618	195,497	225,580	332,000	235,228
	Ballast	40,692	32,849	43,306	2,976	5,791
South America	Cargo	482,774	455,136	100,148	38,216	33,709
	Ballast	8,079	5,824	5,848	..	1,330
	Cargo	3,784,210	4,700,702	3,648,900	2,487,456	2,824,741
	Ballast	149,475	142,266	194,250	87,537	116,685
Total		3,933,685	4,842,968	3,843,150	2,574,993	2,941,426

Countries.	Annual Average.		1916-17.	1917-18.	1918-19.
	1904-8.	1909-13.			
United Kingdom and European Countries	2,837,424	4,037,884	3,294,941	1,544,076	2,112,735
New Zealand	1,432,942	1,892,725	1,295,450	909,522	890,906
Asiatic Countries and Islands in the Pacific	1,660,523	1,849,693	1,774,831	1,845,557	1,631,362
Africa	463,903	432,220	327,696	369,103	757,305
North and Central America	761,085	753,776	853,756	775,865	746,506
South America	743,540	776,094	147,768	87,627	41,672
Cargo	6,532,234	8,578,701	6,628,424	4,488,231	5,044,900
Ballast	1,367,186	1,163,691	1,066,018	543,519	1,135,586
Total	7,899,420	9,742,392	7,694,442	5,031,750	6,180,486

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 has risen, mainly by reason of the withdrawal of German ships, from 73.53 per cent. during the years 1909-13 to 78.90 per cent. in 1918-19 though the actual amount of British tonnage engaged fell by 31.94 per cent. during the same period. On the other hand Japanese tonnage increased from 160,580 tons to 331,872 tons (106.6 per cent.), and United States tonnage from 83,892 tons to 344,795 (311 per cent.). From the table given on page 627 it will be seen that the Japanese and American tonnage was, during 1918-9 engaged almost entirely between the Commonwealth and its home ports.

NATIONALITY OF ALL VESSELS WHICH ENTERED AND CLEARED THE COMMONWEALTH FROM AND TO OVERSEA COUNTRIES, 1904 TO 1918-19.

Nationality.	Tonnage.				
	Annual Average.		1916-17.	1917-18.	1918-19.
	1904-8.	1909-13.			
BRITISH—					
Australian	608,432	810,482	887,577	967,178	855,941
United Kingdom	4,406,092	5,224,923	4,980,205	2,501,028	3,725,351
New Zealand	788,614	1,097,384	335,467	229,271	254,575
Other British	17,330	31,476	69,701	80,342	40,775
Cargo	4,952,083	6,448,777	5,448,832	3,386,991	3,896,477
Ballast	868,385	715,488	824,118	390,828	980,165
Total British	5,820,468	7,164,265	6,272,950	3,777,819	4,876,642
Per cent. on total	73.68	73.53	81.53	75.08	78.90
FOREIGN—					
Austro-Hungarian	5,909	18,337	..	..	..
Danish	14,135	7,816	18,950	40,137	15,497
Dutch	28,149	148,112	285,508	150,448	131,627
French	474,312	432,891	120,269	305,123	138,064
German	745,862	1,028,630	..	..	..
Italian	106,944	70,582	79,925	17,176	30,459
Japanese	47,280	160,580	272,460	252,614	331,872
Norwegian	359,622	500,950	100,394	106,865	174,825
Russian	46,295	51,248	26,352	15,893	43,973
Swedish	29,731	49,642	43,866	41,641	64,158
United States	207,438	83,892	424,628	311,753	344,795
Other Foreign	13,275	25,447	49,140	12,281	28,574
Cargo	1,580,151	2,129,923	1,179,592	1,101,240	1,148,423
Ballast	498,801	448,204	241,900	152,691	155,421
Total Foreign	2,078,952	2,578,127	1,421,492	1,253,931	1,303,844
Per cent. on total	26.32	26.47	18.47	24.92	21.10
Cargo	6,532,234	8,578,700	6,628,424	4,488,231	5,044,900
Per cent. on total	82.68	88.04	86.15	89.20	81.63
Ballast	1,367,186	1,163,692	1,066,018	543,519	1,135,586
Per cent. on total	17.32	11.96	13.85	10.80	18.37
Grand Total	7,899,420	9,742,392	7,694,442	5,031,750	6,180,486

It is satisfactory to note the increased tonnage of Australian-owned ships engaged in the oversea carrying trade. During the years 1904-8 the Australian tonnage so engaged represented 7.70 per cent. of the total tonnage which entered and cleared the Commonwealth. In the following quinquennial period the proportion of Australian tonnage was 8.32 per cent. and in 1918-19 it rose to 13.85 per cent. The tonnage for the latter year was, certainly, increased by the diversion to the oversea trade of Australian ships usually engaged in the coastal trade. The growing operations of the Commonwealth Government Shipping line will, however, tend to increase the Australian tonnage in the oversea trade in future.

The diversion of New Zealand ships to meet the exigencies of the war necessitated a reduction of the services between the Commonwealth and the Dominion with the result that the tonnage of New Zealand ships entered and cleared the Commonwealth has been much reduced as compared with pre-war years.

The relative proportion of British and foreign tonnage which entered and cleared the Commonwealth during the last fifteen 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 foreign tonnage declined materially in the earlier years of the war owing to the complete withdrawal of ships under the German and Austrian flags and to the greatly reduced tonnage of French and Norwegian ships which were precluded from following their usual employment. This position, however, was not long maintained, and during the years 1917-18 and 1918-19 the proportion of foreign shipping had, in consequence of the activities of Japanese and United States ship-owners almost attained its pre-war dimensions. While the tonnage of British ships carrying cargo to and from the Commonwealth fell from 6,406,393 tons in 1914-15 to 3,896,477 tons in 1918-19, or by 39.7 per cent., foreign tonnage was but slightly reduced from 1,274,937 tons to 1,148,423 tons, or by 10 per cent.

PROPORTION OF TONNAGE OF BRITISH AND FOREIGN NATIONALITY ENTERED AND CLEARED THE COMMONWEALTH WITH CARGO, 1904 TO 1918-19.

Nationality.	Annual Average.		1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	1904-8.	1909-13.					
British	75.80	75.18	83.40	82.26	82.20	75.46	77.24
Foreign	24.20	24.82	16.60	17.74	17.80	24.54	22.76
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It is of interest to observe that, as already pointed out in connexion with American and Japanese shipping, most of the foreign tonnage which enters the Commonwealth is employed between its home ports or the colonies of its own country and the Commonwealth, *e.g.*, French shipping is engaged chiefly between the Commonwealth, France and New Caledonia, while Dutch ships are employed almost entirely between the Commonwealth and the Dutch East Indies. Norwegian shipping is an exception to this rule. The greater part of Norwegian tonnage engaged in trade with Australia is composed of sailing ships operating under charters. Of the 93,980 tons of Norwegian shipping which entered the Commonwealth during 1918-19, 16,227 tons (17.26 per cent.) were in ballast, and 54,910 tons (58.42 per cent.) arrived from the United States of America. These ships cleared the Commonwealth mainly with cargoes of wheat and flour for Europe and the United States.

The following table shows 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 1918-19.

Countries.	Nationality.					
	Japanese.		Norwegian.		United States.	
	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
EUROPEAN COUNTRIES—						
United Kingdom ..	..	1,888	..	24,548	..	..
France ..	2,021	1,954	..	..	..	..
Other European Countries..	..	..	17,920	9,536	..	2,540
NEW ZEALAND ..	..	..	746	..	8,753	..
ASIATIC COUNTRIES AND ISLANDS IN THE PACIFIC—						
Dutch East Indies ..	2,920	23,073	..	8,761	1,769	..
Japan ..	148,436	119,548	..	..	..	..
New Caledonia ..	..	150	1,492	3,545	..	1,140
Pacific Islands ..	..	150	..	1,308	..	28,528
Straits Settlements ..	9,577	15,266	..	..	..	..
Other Asiatic Countries ..	1,620	1,295	3,458	..	2,980	4,863
AFRICAN COUNTRIES ..	..	3,974	8,340	6,277	2,994	..
NORTH AMERICAN COUNTRIES—						
United States ..	..	..	54,910	24,413	157,215	123,451
Other N. American Countries	..	..	3,341	..	1,288	1,105
SOUTH AMERICAN COUNTRIES—						
Argentine Republic ..	..	..	..	..	..	..
Chile ..	..	..	..	..	..	..
Peru ..	..	..	..	..	..	6,205
Other S. American Countries	..	..	3,683	..	..	..
OVERSEA COUNTRY UNSPECIFIED ..	..	..	..	2,547	..	1,964
With Cargo ..	164,574	167,148	77,663	79,627	160,436	152,172
In Ballast ..	150	..	16,227	1,308	14,563	17,624
Total ..	164,724	167,148	93,890	80,935	174,999	169,796

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 1904 to 1918-19.

STEAM AND SAILING VESSELS ENTERED AND CLEARED, 1904 TO 1918-19.

Description and Nationality of Vessels.	Annual Average.									
	1904-8.				1916-17.		1917-18.		1918-19.	
	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.	Ton-nage.	Per-centage.
Steam—										
British ..	4,773,674	82	6,677,412	80	6,154,313	85	3,600,197	82	4,717,362	85
Foreign ..	1,055,015	18	1,690,773	20	1,068,404	15	771,304	18	826,041	15
Total Steam..	5,828,689	100	8,368,185	100	7,222,717	100	4,371,501	100	5,543,403	100
		(74)		(86)		(94)		(87)		(90)
Sailing—										
British ..	1,046,794	51	486,853	35	118,637	25	177,622	27	159,280	25
Foreign ..	1,023,938	49	887,354	65	353,088	75	482,627	73	477,803	75
Total Sailing	2,070,732	100	1,374,207	100	471,725	100	660,249	100	637,083	100
		(28)		(14)		(6)		(13)		(19)
Steam and Sailing—										
British ..	5,820,468	74	7,164,265	74	6,272,950	82	3,777,819	75	4,876,642	79
Foreign ..	2,078,953	26	2,578,127	26	1,421,492	18	1,253,931	25	1,303,844	21
Total ..	7,899,421	100	9,742,392	100	7,694,442	100	5,031,750	100	6,180,486	100

G. Tonnage in Ballast.—The following table shows the tonnage of oversea vessels which entered and cleared the Commonwealth in ballast during the years 1904 to 1918-19:—

TONNAGE ENTERED AND CLEARED IN BALLAST, 1904 TO 1918-19.

Year.	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
1904-8* ..	785,396	432,315	1,217,711	82,990	66,486	149,476
1909-13* ..	632,751	388,675	1,021,426	82,737	59,529	142,266
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
1918-19 ..	886,494	132,407	1,018,901	93,671	23,014	116,685

PROPORTION OF TOTAL BRITISH AND FOREIGN TONNAGE WHICH ENTERED AND CLEARED IN BALLAST, 1904 TO 1918-19.

Year.	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1904-8* ..	26.51	41.08	30.36	2.86	6.05	3.71
1909-13* ..	17.67	30.50	21.06	2.36	4.93	3.03
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
1918-19 ..	34.55	19.68	31.46	4.05	3.65	3.97

The tonnage which entered each State of the Commonwealth, in ballast, during 1918-19, was as follows:—

TONNAGE OF OVERSEA VESSELS IN BALLAST WHICH ENTERED EACH STATE AND THE NORTHERN TERRITORY DURING 1918-19.

State.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	C'wealth.
Tonnage ..	170,198	103,070	11,031	136,622	591,871	204	5,905	1,018,901
Percentage on total ..	16.70	10.12	1.08	13.41	58.09	0.02	0.58	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 consisted largely of vessels on military transport service.

* Annual average.

§ 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 1918–19, together with similar information in regard to some of the ports of New Zealand for the year 1918 and of the United Kingdom for the year 1917 :—

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

Port.	Tonnage Entered.	Port.	Tonnage Entered.
AUSTRALIA—		ENGLAND AND WALES—	
Melbourne	5,513,968	Liverpool (inc. Birkenhead)	9,587,380
Sydney	5,152,866	London	9,448,092
Newcastle	2,970,687	Tyne Ports	4,970,786
Fremantle	1,526,951	Cardiff	4,950,018
Brisbane	1,263,817	Falmouth	2,310,763
Adelaide*	1,263,419	Newport	2,017,472
Albany	716,003	Hull	1,907,747
Townsville	673,513	Swansea	1,901,432
Pirie	381,715	Beaumaris	1,752,137
Mackay	342,867	Manchester (inc. Runcorn)	1,642,837
Bowen	342,183	Middlesbrough .. .	1,551,011
Cairns	304,477	Bristol	1,380,181
Rockhampton	264,280	Sunderland	1,330,098
Geelong	262,206	Southampton	1,295,729
Hobart	251,375	Cowes	940,916
Thursday Island .. .	201,062	SCOTLAND—	
Burnie	188,591	Glasgow	3,318,253
Wallaroo	180,732	Leith	618,806
NEW ZEALAND—		IRELAND	
Wellington	2,668,699	Dublin	2,701,942
Auckland	1,276,003	Belfast	2,375,100
Lyttelton	1,202,273	Cork (inc. Queenstown) ..	1,009,582
Dunedin	400,220		

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

§ 4. Vessels Built and Registered.

1. **Vessels Registered.**—The following table shows 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, 1919.

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	1,336	552	104,395	102	1,946	302	19,709	46	10,182	1,047	137,568
Victoria	25	2,992	155	126,388	29	1,116	72	5,389	70	27,358	351	163,243
Queensland	21	3,353	69	13,409	22	212	116	1,936	34	4,158	262	23,068
South Australia .. .	19	807	88	33,279	9	341	74	3,684	64	10,620	254	48,731
Western Australia ..	11	176	35	16,371	12	206	337	5,154	26	6,912	421	28,819
Tasmania	5	302	56	10,571	46	1,114	84	3,076	2	563	193	15,626
Northern Territory ..	..	..	1	53	1	17	29	355	..	..	31	425
Total	126	8,966	956	304,466	221	4,952	1,014	30,303	242	59,793	2,559	417,480

2. **Vessels Built.**—The following tables shew the number and tonnage of vessels built in the Commonwealth during each of the years 1901–1919, 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 1919.

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	23	21	3	61
1907 ..	17	..	..	1	18	12	37	1	68
1908 ..	13	..	3	..	16	18	18	2	54
1909 ..	10	..	..	..	10	12	38	1	61
1910 ..	9	3	2	..	14	12	35	4	65
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	6	4	..	16
1916 ..	2	..	..	..	2	5	2	..	9
1917 ..	3	..	..	1	4	2	5	..	11
1918 ..	2	..	..	..	2	3	..	..	5
1919 ..	1	..	2	..	3	2	8	..	13

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	276	196	501	428	546	536	2,749	1,895
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	814	686	98	98	2,447	1,670
1910 ..	1,944	1,105	141	128	807	691	688	646	3,580	2,570
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	194	129	194	183	..	..	1,302	697
1916 ..	125	63	79	66	39	28	..	..	243	157
1917 ..	619	300	30	23	229	161	..	..	878	484
1918 ..	378	201	448	349	..	..	..	..	826	550
1919 ..	7,402	4,644	27	24	1,010	864	..	..	8,439	5,532

§ 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 from 1901 to 1918-19. The shipping on the Murray River, between the States of New South Wales, Victoria, and South Australia, is not included.

INTERSTATE SHIPPING, 1901 TO 1918-19.—NUMBER OF VESSELS.

State.	1901.	1906.	1911.	1915-16.	1916-17.	1917-18.	1918-19.
ENTERED.							
New South Wales ..	1,611	1,575	1,791	1,947	1,607	1,469	1,461
Victoria ..	1,502	1,561	1,648	1,736	1,423	1,335	1,239
Queensland ..	430	478	567	570	525	524	529
South Australia ..	719	752	789	631	539	429	445
Western Australia ..	446	335	415	350	385	144	309
Tasmania ..	713	840	864	864	728	761	727
Northern Territory	*	*	39	39	29	29	28
Total ..	5,421	5,541	6,113	6,137	5,236	4,691	4,738
CLEARED.							
New South Wales ..	1,473	1,417	1,728	1,871	1,572	1,438	1,402
Victoria ..	1,569	1,610	1,765	1,906	1,580	1,430	1,369
Queensland ..	395	431	572	547	479	498	528
South Australia ..	826	802	900	657	579	464	516
Western Australia ..	456	363	394	325	310	168	310
Tasmania ..	694	809	836	845	717	751	725
Northern Territory	*	*	40	42	23	26	27
Total ..	5,413	5,432	6,235	6,193	5,260	4,775	4,877
TOTAL.							
New South Wales ..	3,084	2,992	3,519	3,818	3,179	2,907	2,863
Victoria ..	3,071	3,171	3,413	3,642	3,003	2,765	2,608
Queensland ..	825	909	1,139	1,117	1,004	1,022	1,057
South Australia ..	1,545	1,554	1,689	1,288	1,118	893	961
Western Australia ..	902	698	809	675	695	312	619
Tasmania ..	1,407	1,649	1,700	1,709	1,445	1,512	1,452
Northern Territory	*	*	79	81	52	55	55
Total ..	10,834	10,973	12,348	12,330	10,496	9,466	9,615

* Included with South Australia.

INTERSTATE SHIPPING, 1901 TO 1918-19.—TONNAGE.

State.	1901.	1906.	1911.	1916-17.	1917-18.	1918-19.
ENTERED.						
New South Wales ..	2,031,089	2,456,269	3,318,605	3,104,717	2,502,174	2,291,462
Victoria ..	1,956,900	2,473,771	2,959,551	2,254,634	1,665,921	1,393,549
Queensland ..	545,469	692,354	840,052	963,931	768,769	700,617
South Australia ..	1,135,714	1,582,802	1,970,490	1,302,537	796,627	707,248
Western Australia ..	973,474	968,664	1,378,800	1,373,625	475,840	944,088
Tasmania ..	485,023	721,240	895,546	525,862	432,208	442,457
Northern Territory ..	*	*	64,518	52,663	61,464	53,607
Total ..	7,127,669	8,895,100	11,427,562	9,577,969	6,703,003	6,533,028

CLEARED.						
New South Wales ..	1,856,501	2,177,496	3,209,723	2,994,899	2,397,160	2,207,435
Victoria ..	2,038,424	2,617,966	3,233,531	2,755,961	2,031,503	1,874,484
Queensland ..	440,659	578,561	855,776	779,017	648,207	690,694
South Australia ..	1,377,399	1,772,356	2,343,269	1,490,529	939,485	1,090,760
Western Australia ..	977,846	1,051,629	1,303,359	1,162,325	646,071	1,081,973
Tasmania ..	433,735	636,944	728,170	479,182	408,497	426,879
Northern Territory ..	*	*	66,357	43,607	50,961	49,043
Total ..	7,124,564	8,834,952	11,740,185	9,705,520	7,121,884	7,421,268

TOTAL.						
New South Wales ..	3,887,590	4,633,765	6,528,328	6,099,616	4,899,334	4,498,897
Victoria ..	3,995,324	5,091,737	6,193,082	5,010,595	3,697,424	3,268,033
Queensland ..	986,128	1,270,915	1,695,828	1,742,948	1,416,976	1,391,311
South Australia ..	2,513,113	3,355,158	4,313,759	2,793,066	1,736,112	1,798,008
Western Australia ..	1,951,320	2,020,293	2,682,159	2,535,950	1,121,911	2,026,061
Tasmania ..	918,758	1,358,184	1,623,716	1,005,044	840,705	869,336
Northern Territory ..	*	*	130,875	96,270	112,425	102,650
Total ..	14,252,233	17,730,052	23,167,747	19,283,489	13,824,887	13,954,296

* Included with South Australia.

The figures presented in the above table include overseas 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 1918-19, including the total interstate movements of oversea vessels, the figures in the following table must be added to those in the table preceding:—

SHIPPING ENTERED AND CLEARED FROM AND TO OVERSEA COUNTRIES VIA OTHER COMMONWEALTH STATES, 1918-19.

State.	Entered.		Cleared.		Total.		
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales ..	282	1,047,000	234	813,835	516	1,860,835	
Victoria ..	292	1,043,836	207	651,136	499	1,694,972	
Queensland ..	60	299,572	63	298,833	123	598,405	
South Australia ..	154	592,885	120	344,728	274	937,613	
Western Australia ..	1	1,888	..	..	1	1,888
Tasmania ..	14	58,421	20	61,476	34	119,897	
Northern Territory ..	..	..	1	5,905	1	5,905
Total	1918-19	803	3,043,602	645	2,175,913	1,448	5,219,515
	1908 ..	1,262	4,142,907	1,250	4,115,111	2,512	8,258,018

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 movement of vessels engaged solely in the interstate trade for the Commonwealth as a whole during the years 1911 to 1918-19 were as follows:—

NUMBER AND TONNAGE OF VESSELS ENGAGED SOLELY IN INTERSTATE TRADE, 1911 TO 1918-19.

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
1918-19	4,093	4,357,115	4,074	4,377,666

Similar information cannot be given for the States singly, as the records do not disclose the relationship of the movements of the vessels to 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 1918-19.

Vessels.	1912.	1913.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	Tons.	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	5,219,515
Vessels solely interstate.	6,809,428	8,080,267	8,140,155	7,175,175	6,093,634	4,856,751	4,357,115
Total ..	17,520,862	19,552,757	16,877,959	15,193,093	13,155,763	9,058,930	9,576,630

The following table shows the number and tonnage of vessels which entered and cleared each State during 1918-19, including the coastal movements of oversea vessels :—

INTERSTATE SHIPPING OF EACH STATE, 1918-19.

State.	Entered.		Cleared.		Total.		
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales ..	1,743	3,338,462	1,636	3,021,270	3,379	6,359,732	
Victoria	1,531	2,437,385	1,576	2,525,620	3,107	4,963,005	
Queensland	589	1,000,189	591	989,527	1,180	1,989,716	
South Australia ..	599	1,300,133	636	1,435,488	1,235	2,735,621	
Western Australia ..	310	945,976	310	1,081,973	620	2,027,949	
Tasmania	741	500,878	745	488,355	1,486	989,233	
Northern Territory ..	28	53,607	28	54,948	56	108,555	
Total	1918-19	5,541	9,576,630	5,522	9,597,181
	1908 ..	7,218	14,219,635	7,166	14,174,357

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 1919. 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 1919.

Particulars.	1901.	1914.	1915.	1916.	1917.	1918.	1919.
Number of companies making returns	11	23	23	23	23	23	23
Number of steamships ..	113	174	174	169	148	142	143
Tonnage .. { Gross ..	184,574	340,852	340,443	337,068	241,611	208,700	250,610
.. { Net ..	114,080	206,424	205,795	204,357	145,424	126,444	143,143
Horse-power { Nominal ..	18,237	35,723	35,787	34,038	26,430	25,073	27,841
.. { Indicated ..	122,519	288,856	289,488	283,471	207,150	182,404	211,361
Number of passengers for which licensed { 1st class ..	4,617	8,068	9,557	9,077	5,459	4,674	5,220
.. { 2nd class and steerage ..	4,490	8,666	6,808	6,578	5,029	4,325	5,524
Complement of Crew { Masters and officers ..	403	622	623	606	510	460	493
.. { Engineers ..	332	527	532	519	415	378	409
.. { Crew ..	2,875	5,493	5,508	5,385	3,910	3,365	3,971

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 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 1919 :—

NUMBER AND TONNAGE OF VESSELS WRECKED,* 1901 AND 1910 TO 1919.

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	278	161
	Sailing ..	7	103	4	642	4	5,100	..	..	15	5,845	125	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
1919	Steam ..	2	46	7	1,792	..	..	..	..	9	1,838	189	21
	Sailing ..	7	142	2	138	..	..	..	..	9	280	38	1
	Total ..	9	188	9	1,930	..	..	..	..	18	2,118	227	22

* 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 schooners (originally intended to be barquentines), which are under construction by Messrs. Kidman and Mayoh, have been cancelled. It was originally intended that these two vessels should be fitted with auxiliary propelling machinery, but arrangements have since been made for its omission. They 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.

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*, *Dinoga*, and *Dilga*, Government Dockyard, Walsh Island, Newcastle ; *Dundula*, Commonwealth Dockyard, Cockatoo Island, Sydney.

These vessels have been completed and handed over to the Commonwealth Line of Steamers.

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

3 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.

Four of these vessels have been launched as follows :—*Eurelia* and *Enoggera*, Government Dockyard, Walsh Island ; *Eudunda*, Commonwealth Dockyard, Cockatoo Island ; and *Emita*, Commonwealth Dockyard, Williamstown.

The vessels of this programme 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. One of these vessels is on the point of completion, and it is anticipated that three others will be completed by January, 1921; two by March, 1921; six more by August, 1921; and the balance by March, 1922. These vessels will cost approximately £155,000 each. All the above-mentioned steel vessels will be built on the Isherwood system of longitudinal framing.

Arrangements have been completed for the construction, at the Cockatoo Island Dockyard, of two larger vessels, the dimensions being:—Length over all, 520 feet; breadth, 63 feet; moulded depth, 44 feet. Negotiations are proceeding for the building of two other similar vessels at Walsh Island. 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 12,700 tons dead-weight on a load draught of 29 feet 9 inches. 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 these vessels will be in commission in two years.

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 are 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 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; the *Bethanga* on 5th May, 1919; and the *Birriwa* on the 6th August, 1919. 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, and the *Babinda* in August.

The motor vessels—*Cethana*, *Culburra*, *Challamba*, *Coolcha*, *Benowa*, and *Babinda* and the uncompleted vessels *Balcatta*, *Boobyalla*, and *Borrika* were sold to American buyers on the 2nd September, 1919. On the 3rd October, 1919, the wooden steamers *Bundarra*, *Bellata*, *Bethanga*, *Birriwa*, and *Berringa* were also sold to American buyers, but, owing to the default of the latter, reverted to the Commonwealth Government and are being operated on the Australian coast.

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> †	Tons. 7180
..	<i>Strathspey</i>	<i>Australpeak</i>	7180
..	<i>Strathlee</i>	<i>Australrange</i>	7180
†B.C.	<i>Strathbeg</i>	<i>Australmount</i>	7180
100 *A1	<i>Strathleven</i>	<i>Australcrug</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>Strathord</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>Ardanmhor</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. The *Speedway* has since been sold.

The following steel steamers, all class 100 A1, have been added to the fleet :—

Name of Vessel.	Dead Weight Capacity.	When Delivered by the Builders.
	Tons.	
<i>Dromana</i>	5,600	27th August, 1919
<i>Delungra</i>	5,604	30th October, 1919
<i>Dumosa</i>	5,608	8th March, 1920
<i>Dundula</i>	5,600	28th April, 1920
<i>Dilga</i>	5,604	4th May, 1920
<i>Dinoga</i>	5,647	12th December, 1920

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.