

## SECTION XVI.

## SHIPPING.

## § 1. General.

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

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

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

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

On arrival of every vessel at a port in the Commonwealth, whether from an oversea country or from another port within the Commonwealth, the master is required to deliver to the Customs officer a form giving all particulars, necessary for statistical purposes, in regard to the ship, passengers and crew. Similarly, on departure from a port, a form containing corresponding information is lodged. These forms, which provide a complete record of the movements of every vessel in Commonwealth waters, are at the end of each month forwarded by the Customs officer at each port to the Commonwealth Bureau of Statistics, and furnish the material for the compilation of the Shipping and Migration Returns.

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

## § 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 1913 (MULTIPLE RECORD EXCLUDED BY ESTIMATION PRIOR TO 1904).

Year.	Vessels.	Tons.	Year.	Vessels.	Tons.	Year.	Vessels.	Tons.
1822 ...	73	30,683	1853 ...	3,364	1,490,423	1884 ...	4,315	4,064,947
1823 ...	76	30,543	1854 ...	3,781	1,744,251	1885 ...	4,052	3,999,917
1824 ...	71	29,029	1855 ...	3,239	1,449,657	1886 ...	3,793	3,853,246
1825 ...	80	30,786	1856 ...	2,669	1,195,794	1887 ...	3,454	3,764,430
1826 ...	65	23,587	1857 ...	2,842	1,530,203	1888 ...	3,933	4,464,895
1827 ...	95	29,301	1858 ...	2,607	1,378,050	1889 ...	3,897	4,460,426
1828 ...	124	38,367	1859 ...	2,759	1,403,210	1890 ...	3,363	4,150,027
1829 ...	185	56,735	1860 ...	2,464	1,258,518	1891 ...	3,778	4,726,307
1830 ...	195	56,185	1861 ...	2,466	1,149,476	1892 ...	3,432	4,239,500
1831 ...	185	52,414	1862 ...	2,917	1,369,231	1893 ...	3,046	4,150,433
1832 ...	206	59,628	1863 ...	3,378	1,564,369	1894 ...	3,397	4,487,546
1833 ...	241	72,647	1864 ...	3,344	1,537,433	1895 ...	3,331	4,567,833
1834 ...	249	77,068	1865 ...	3,005	1,317,934	1896 ...	3,309	4,631,266
1835 ...	310	96,928	1866 ...	3,378	1,470,728	1897 ...	3,279	4,709,697
1836 ...	310	93,974	1867 ...	2,927	1,277,679	1898 ...	3,222	4,681,398
1837 ...	442	113,432	1868 ...	3,080	1,350,573	1899 ...	3,356	5,244,197
1838 ...	471	132,038	1869 ...	3,107	1,472,837	1900 ...	3,719	5,894,173
1839 ...	652	191,507	1870 ...	2,877	1,361,878	1901 ...	4,028	6,541,921
1840 ...	915	277,335	1871 ...	2,748	1,312,642	1902 ...	3,608	6,234,460
1841 ...	900	278,738	1872 ...	2,788	1,360,466	1903 ...	3,441	6,027,843
1842 ...	862	232,827	1873 ...	3,159	1,609,067	1904 ...	3,700	6,692,011
1843 ...	736	183,427	1874 ...	3,153	1,728,269	1905 ...	4,088	7,444,417
1844 ...	629	155,654	1875 ...	3,437	1,914,462	1906 ...	4,155	7,966,658
1845 ...	735	164,221	1876 ...	3,295	1,863,343	1907 ...	4,394	8,822,866
1846 ...	868	211,193	1877 ...	3,157	1,930,434	1908 ...	4,051	8,581,151
1847 ...	1,083	245,358	1878 ...	3,372	2,127,518	1909 ...	3,910	8,516,751
1848 ...	1,182	305,840	1879 ...	3,344	2,151,398	1910 ...	4,048	9,333,146
1849 ...	1,137	355,886	1880 ...	3,078	2,177,877	1911 ...	4,174	9,984,801
1850 ...	1,300	425,206	1881 ...	3,284	2,549,364	1912 ...	4,052	10,275,314
1851 ...	1,576	515,061	1882 ...	3,652	3,010,944	1913 ...	3,985	10,501,948
1852 ...	1,896	844,243	1883 ...	3,857	3,433,102			

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

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

### OVERSEA SHIPPING OF VARIOUS COUNTRIES.

Country.	Year.	Tonnage Entered and Cleared.		Country.	Year.	Tonnage Entered and Cleared.	
		Total.	Per Inhabitant.			Total.	Per Inhabitant.
Argentina Rep. ...	1912	23,372,714	3.2	Japan ...	1912	43,492,604	0.8
Belgium ...	1912	32,672,989	4.3	New Zealand ...	1913	3,438,792	3.2
Canada ...	1912	26,231,098	3.4	Norway ...	1912	10,806,050	4.4
Commonwealth ...	1913	10,601,948	2.2	S. African Un. ...	1912	10,039,907	1.6
Denmark ...	1912	18,537,064	6.6	Sweden ...	1912	25,511,890	4.6
France ...	1912	62,775,775	1.6	United K'dom ...	1913	164,809,581	3.6
Germany ...	1912	51,065,940	0.8	United States ...	1912	69,365,104*	0.7
Italy ...	1912	56,889,048	1.6				

\* Exclusive of Northern Border and Lake Ports.

3. **Shipping Communication with various Countries.**—Particulars of the number and tonnage of vessels recorded between Australia and various countries, distinguishing British from foreign countries, are given in the following tables—the table below shewing the tonnage of vessels which were recorded as having entered the Commonwealth from the particular countries mentioned; that on page 572 shews the tonnage of vessels which were recorded as having cleared the Commonwealth for the particular countries, while on page 575 is shewn the total tonnage of vessels recorded as entered and cleared from and to the countries named.

**SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM  
AND TO VARIOUS COUNTRIES, 1909 to 1913.**

ENTERED.

Country.	1909.	1910.	1911.	1912.	1913.
United Kingdom ... ..	1,243,115	1,377,151	1,464,057	1,625,733	1,607,943
Canada ... ..	89,990	108,727	107,932	112,729	118,604
Fiji ... ..	54,462	49,493	77,745	73,033	86,442
Hong Kong ... ..	41,521	22,327	17,880	27,440	33,156
India and Ceylon ... ..	99,762	169,800	99,196	93,787	107,721
Mauritius ... ..	35,366	43,133	23,443	27,203	36,092
New Zealand ... ..	737,899	766,777	841,746	926,342	908,484
Papua ... ..	42,803	47,881	78,468	73,010	74,943
South African Union ... ..	207,619	208,140	289,229	96,679	193,505
South Sea Islands ... ..	57,341	64,164	61,983	37,472	58,498
Straits Settlements ... ..	104,284	89,731	97,735	102,598	100,238
Other British Countries ... ..	4,310	13,588	324	3,068	10,826
<b>Total British Countries ... ..</b>	<b>2,718,472</b>	<b>2,960,912</b>	<b>3,159,738</b>	<b>3,199,094</b>	<b>3,341,452</b>
Africa, Portuguese East ... ..	89,506	96,966	74,083	46,751	53,870
Belgium ... ..	11,548	15,273	18,734	11,852	9,563
Chile ... ..	81,433	111,504	182,460	176,416	103,121
Dutch East Indies ... ..	78,203	72,212	43,458	67,761	87,428
France ... ..	113,964	99,308	83,627	47,191	63,632
Germany ... ..	276,021	290,834	314,167	427,320	414,294
Hawaiian Islands ... ..	38,011	32,020	17,167	16,508	10,101
Japan ... ..	136,340	153,547	157,533	157,734	160,241
Mexico ... ..	36,443	24,366	16,481	19,445	9,973
New Caledonia ... ..	63,250	62,542	71,390	77,265	86,702
Norway ... ..	36,094	37,201	40,204	34,715	26,200
Peru ... ..	50,291	27,051	32,922	35,482	21,504
Philippine Islands ... ..	75,977	28,550	56,603	56,216	47,220
South Sea Islands (foreign) ... ..	30,990	37,684	56,878	67,805	66,651
Sweden ... ..	46,317	41,231	77,983	48,060	80,546
United States ... ..	290,520	338,587	389,208	453,354	509,922
Other Foreign Countries ... ..	187,814	178,032	200,584	220,388	264,111
<b>Total Foreign Countries ... ..</b>	<b>1,642,722</b>	<b>1,646,908</b>	<b>1,833,482</b>	<b>1,964,263</b>	<b>2,030,079</b>
<b>Total all Countries ... ..</b>	<b>4,361,194</b>	<b>4,607,820</b>	<b>4,993,220</b>	<b>5,163,357</b>	<b>5,371,531</b>

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

## CLEARED.

Country.	1909.	1910.	1911.	1912.	1913.
United Kingdom ...	1,239,669	1,467,925	1,537,084	1,369,143	1,455,018
Canada ...	53,541	50,510	54,732	54,661	82,849
Fiji ...	49,890	53,713	90,574	85,372	94,958
Hong Kong ...	48,751	31,145	19,155	32,121	27,959
India and Ceylon ...	153,863	139,584	143,632	144,487	126,656
Mauritius ...	5,048	9,396	2,953	4,526	3,505
New Zealand ...	880,668	975,121	1,044,013	1,183,741	1,198,837
Papua ...	43,802	50,552	71,811	66,409	73,923
South African Union ...	48,485	92,070	85,346	75,467	136,986
South Sea Islands ...	31,707	43,539	38,133	55,717	58,267
Straits Settlements ...	139,313	156,704	127,725	137,139	155,364
Other British Countries ...	...	2,924	...	...	2,270
<b>Total British Countries</b>	<b>2,694,737</b>	<b>3,073,183</b>	<b>3,215,158</b>	<b>3,208,783</b>	<b>3,416,592</b>
Africa, Portuguese East ...	19,697	18,716	6,949	3,836	5,447
Belgium ...	128,670	115,121	168,397	169,020	151,718
Chile ...	300,451	342,478	393,642	508,724	393,322
Dutch East Indies ...	61,753	105,293	115,499	155,332	189,499
France ...	63,490	113,226	155,506	94,062	81,240
Germany ...	279,526	312,128	321,502	349,685	385,752
Hawaiian Islands ...	26,253	32,520	26,200	34,009	45,634
Japan ...	90,732	102,183	103,550	96,108	117,472
Mexico ...	9,675	13,146	13,565	12,757	25,735
New Caledonia ...	72,234	47,071	62,165	74,063	86,321
Peru ...	36,568	52,243	70,960	64,881	52,626
Philippine Islands ...	124,816	106,087	102,748	95,120	46,746
South Sea Islands (foreign)	39,175	57,790	50,022	44,875	36,826
Sweden ...	4,084	...	...	...	...
United States ...	142,274	184,153	145,926	149,449	148,754
Other Foreign Countries	61,422	49,988	39,792	51,253	41,733
<b>Total Foreign Countries</b>	<b>1,460,820</b>	<b>1,652,143</b>	<b>1,776,423</b>	<b>1,903,174</b>	<b>1,813,825</b>
<b>Total all Countries</b> ...	<b>4,155,557</b>	<b>4,725,326</b>	<b>4,991,581</b>	<b>5,111,957</b>	<b>5,230,417</b>

The figures in the above table represent the tonnage of shipping recorded as having cleared the Commonwealth for the particular countries named. For the purpose of comment, however, countries have been grouped according to larger geographical divisions in Section 4.

**SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM  
AND TO VARIOUS COUNTRIES, 1909 to 1913.**

Country.	1909.	1910.	1911.	1912.	1913.
United Kingdom ... ..	2,482,784	2,845,076	3,001,141	2,994,876	3,062,961
Canada ... ..	143,531	159,237	162,664	167,390	201,453
Fiji ... ..	104,352	103,206	168,319	158,405	181,400
Hong Kong ... ..	90,272	53,472	37,035	59,561	61,115
India and Ceylon ... ..	243,240	309,384	242,828	238,274	234,377
Mauritius ... ..	40,414	52,529	26,396	31,729	39,597
New Zealand ... ..	1,618,567	1,741,898	1,885,759	2,110,083	2,107,321
Papua ... ..	86,605	98,433	150,279	139,419	148,866
South African Union ... ..	256,104	300,210	374,575	172,146	335,491
South Sea Islands ... ..	89,048	107,703	100,116	93,189	116,765
Straits Settlements ... ..	243,597	246,435	225,460	239,737	255,602
Other British Countries ... ..	14,695	16,512	324	3,068	13,096
<b>Total British Countries ... ..</b>	<b>5,413,209</b>	<b>6,034,095</b>	<b>6,374,896</b>	<b>6,407,877</b>	<b>6,758,044</b>
Africa, Portuguese East ... ..	109,203	115,682	81,032	50,587	69,317
Belgium ... ..	140,218	130,394	187,131	180,872	161,281
Chile ... ..	381,884	453,982	576,102	688,140	506,443
Dutch East Indies ... ..	139,956	177,505	158,957	223,093	276,927
France ... ..	177,454	212,534	239,133	141,253	144,872
Germany ... ..	555,547	602,962	635,669	777,005	800,046
Hawaiian Islands ... ..	64,264	64,540	43,367	50,517	55,735
Japan ... ..	227,072	255,730	261,083	253,842	277,713
Mexico ... ..	46,118	37,512	30,046	32,202	35,708
New Caledonia ... ..	135,484	109,613	133,555	151,328	173,023
Norway ... ..	38,506	37,301	40,204	34,715	26,289
Peru ... ..	86,859	79,294	103,882	100,363	74,130
Philippine Islands ... ..	200,793	134,637	159,351	151,336	33,966
South Sea Islands (foreign) ... ..	70,165	95,474	106,900	112,680	103,477
Sweden ... ..	50,401	41,231	77,983	48,060	80,546
United States ... ..	432,794	522,740	535,134	602,803	658,676
Other Foreign Countries ... ..	246,824	228,020	240,376	271,641	305,755
<b>Total Foreign Countries ... ..</b>	<b>3,103,542</b>	<b>3,299,051</b>	<b>3,609,905</b>	<b>3,867,437</b>	<b>3,843,904</b>
<b>Total all Countries ... ..</b>	<b>8,516,751</b>	<b>9,333,146</b>	<b>9,984,801</b>	<b>10,275,314</b>	<b>10,601,948</b>

In respect of these tables it may be pointed out that the statistics for any country do not fully disclose the extent of its shipping communication with particular countries. The reason for this is that vessels are recorded as arriving from, or departing to, a particular country, whereas, as a matter of fact, many regular lines of steamers call and transact business at the ports of several countries in the course of a single voyage. The lines of steamers trading between Australia and Japan, for example, often call at New Guinea, the Philippine Islands, China, etc., but, being intermediate ports, these countries are not referred to in the statistical records. Similarly, in the case of the large mail steamers passing through the Suez Canal, a steamer may call at Colombo, Aden, Port Said, Genoa, Marseilles, London, 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. Further reference is made in the following paragraphs to the more important of those countries with which the shipping of the Commonwealth is not fully represented in the foregoing tables.

**4. General Trend of Shipping.**—(i.) *General.* 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.

It has already been shewn in the opening section of this chapter, that direct comparisons of the annual oversea shipping of the Commonwealth are possible only since the beginning of 1904.

A comparison of the total tonnage of shipping which entered and cleared the Commonwealth during 1913 with similar records for 1909 shows an increase of 2,085,197 tons, or 24.48 per cent., vessels with cargo having increased by 2,322,145 tons, or 32.37 per cent., while vessels in ballast decreased by 236,948 tons, or 17.63 per cent.

(ii.) *Shipping with the United Kingdom and European Countries.* The shipping between the Commonwealth and the United Kingdom and European countries during the past five years shows that steady increase which indicates the consistent development of a well-established trade. The shipping in this direction during 1913 amounted to 4,346,901 tons, or 41.0 per cent. of the total oversea shipping of the Commonwealth, and was recorded against the several countries as follows:—United Kingdom, 3,062,961 tons (70.5 per cent.); Germany, 800,046 tons (18.4 per cent.); France, 144,872 tons (3.3 per cent.); Belgium, 161,281 tons (3.7 per cent.); other European countries, 177,741 tons (4.1 per cent.).

The foregoing figures appear to shew that while the tonnage between the Commonwealth and the United Kingdom increased by 580,177 tons, equal to an increase of 23.37 per cent., the tonnage between the Commonwealth and European continental countries has increased by 277,846 tons, or by 27.62 per cent., or, in other words, that 67.62 per cent. of the increase was credited to the United Kingdom and 32.38 to the latter countries. As already explained, however, no real significance can be attached to these figures, for, in many instances, it must be regarded as almost accidental whether tonnage be recorded against the United Kingdom or against Belgium, Germany, or France.

The failure of the statistical records to present, in all cases, the full measure of the shipping communication between particular countries is illustrated by the case of Italy. Although the mail steamers which pass through the Suez Canal call at Naples and Genoa, and during 1913 embarked or landed at those ports 5842 passengers for or from Australia, and also carried a direct trade valued at £1,345,411 between Italy and the Commonwealth, the records for the year shew only four vessels as passing between the two countries.

(iii.) *Shipping with New Zealand.* The tonnage of shipping between the Commonwealth and New Zealand shews a very satisfactory expansion from 1,618,567 tons in 1909 to 2,107,321 tons in 1913, an increase of 488,754 tons, or 30.20 per cent., during the four years. The shipping with New Zealand represented 19.88 per cent. of the total shipping of the Commonwealth during 1913.

(iv.) *Shipping with Asiatic Countries and Islands in the Pacific.* The total tonnage between the Commonwealth and Eastern countries during 1913 amounted to 2,010,709 tons, or 18.97 per cent. of the whole, representing an increase of 283,966 tons, or 16.45 per cent., as compared with 1909. The greater part of this increased tonnage was recorded as between the Commonwealth and (1) Pacific Islands, and (2) Dutch East Indies. The tonnage from the Pacific Islands included a larger amount in ballast than in 1909. The greater tonnage between the Commonwealth and the Dutch East Indies was engaged in the carriage of coal from Newcastle to Java, which has required a steadily increasing tonnage during the past five years. On the other hand, the export of coal to the Philippines has steadily diminished during the same period; consequently the shipping cleared from Newcastle to the Philippines has declined from 102,273 tons in 1909 to 23,342 tons in 1913. This latter figure, however, still represents 49.93 per cent. of the total outward tonnage recorded as from Australia to the Philippines. Of the remainder, 20,994 tons, representing 44.94 per cent. of the whole, cleared with cargoes of cattle from Wyndham in Western Australia. During the years 1912 and 1913 the imports into the Philippines of live cattle for slaughtering have been drawn almost entirely from Western Australia. Owing to the limitation of the records, already alluded to, the figures given in the tables do not represent the full volume of the shipping between the Commonwealth and the Philippines. In addition to the shipping recorded to the Philippine Islands, the

regular steam lines between the Commonwealth and Japan make Manila a regular port of call, and it is by these vessels that the general trade—apart from the coal and cattle trade—is chiefly carried. The whole of the shipping which was recorded as entering the Commonwealth during 1913 from the Philippines (47,220 tons) was in ballast. The tonnage between the Commonwealth and Papua has increased materially during the past four years. In 1909 the tonnage recorded between these two countries was 86,605 tons, and in 1913, 148,866 tons. This increase has been largely due to the fact that many vessels passing between Port Darwin and the eastern ports of Australia call at Papua both ways.

(v.) *Shipping with Africa.* Much of the trade between South Africa and Australia is carried by steamers calling at ports in the former country on their voyages between the Commonwealth and the United Kingdom, and which are not shewn in relation to African ports in the shipping returns. Shipping tonnage with African countries—mainly confined to Cape Colony, Natal, and Portuguese East Africa—has been subject to great fluctuations. From 649,802 tons in 1905 it fell to 225,798 tons in 1908, rose to 501,789 tons in 1911, falling to 258,849 tons in 1912, to rise again in 1913 to 456,342 tons. An inspection of the following tables, however, shews that these figures are of no significance as an index of the transport requirements between the two countries, inasmuch as of the total tonnage passing between the two countries, 307,355 tons were from Africa to Australia, with only 148,987 tons the other way. Moreover, of the 307,355 tons which entered the Commonwealth from Africa, 269,181 tons, or 87.6 per cent., were represented by vessels in ballast seeking freights from Australian ports.

(vi.) *Shipping with North and Central America.* The shipping of the Commonwealth with these countries during 1913 amounted to 895,837 tons (8.4 per cent. of the whole) representing, as compared with 1909, an increase of 273,394 tons. The figures for 1909 were, however, unusually small. The 895,837 tons of shipping with North and Central America during 1913 were recorded against the several countries as follows:—United States, 658,676 tons (73.5 per cent.); Canada, 201,453 tons (22.5 per cent.); and Mexico, 35,708 tons (4.0 per cent.). Of the tonnage from the United States 318,353 tons came from the west coast and 191,569 from the east coast, while of the outward tonnage 145,029 tons cleared for the west coast and only 3735 for the east coast. For Canada the corresponding figures were:—Arrivals, from west coast 76,626 tons and from the east coast 41,978 tons; departures, 82,849 tons were all to the west coast.

(vii.) *Shipping with South America.* The shipping between the Commonwealth and South American countries during 1913—784,838 tons—represented an increase of 17,880 tons as compared with 1909. The outward shipping in this direction has been mainly engaged in the carriage of coal and wheat to Chile and Peru. Of the total shipping tonnage between the Commonwealth and South America during 1913, 669,135 tons, or 85.3 per cent., is credited to the coal port of Newcastle, 166,374 tons having entered and 404,655 tons having cleared at that port, while of the same total 66,908 tons entered and 31,198 tons cleared at the port of Sydney. Of the South American countries, Chile is responsible for 506,443 tons (64.5 per cent.); Brazil, 90,707 tons (11.6 per cent.); Peru, 74,130 tons (9.5 per cent.); Argentine Republic, 60,496 tons (7.7 per cent.); Uruguay, 49,461 tons (6.2 per cent.); and Ecuador, 3601 tons (0.5 per cent.).

An important fact, from its bearing on freight rates and its consequent possible effect on the coal trade of New South Wales with South America, is the absence of return freights from that country. Of the 324,006 tons of shipping which entered the Commonwealth from South America during 1913, only ten vessels, totalling 23,876 tons, carried cargo.

## GENERAL DIRECTION OF THE SHIPPING OF THE COMMONWEALTH, 1909 to 1913.

## TONNAGE ENTERED.

Countries.	—	1909.	1910.	1911.	1912.	1913.
United Kingdom & European Countries	Cargo...	1,604,822	1,770,356	1,953,962	2,152,304	2,216,449
	Ballast	151,792	120,542	68,193	71,746	28,087
New Zealand ... ..	Cargo...	610,135	654,215	676,235	751,759	681,650
	Ballast	127,761	112,562	165,511	174,583	226,834
Asiatic Countries & Islds. in the Pacific	Cargo...	620,599	706,226	765,373	761,854	785,031
	Ballast	215,111	156,165	100,500	104,197	163,620
Africa ... ..	Cargo...	27,676	30,038	26,718	23,561	38,174
	Ballast	336,605	323,360	368,759	151,459	269,181
North and Central America	Cargo...	350,074	429,021	479,332	560,933	624,275
	Ballast	66,879	43,529	34,239	24,595	14,224
South America ... ..	Cargo...	6,189	14,698	13,114	31,291	23,876
	Ballast	243,548	246,508	341,243	355,075	300,150
		Cargo...	3,219,498	3,604,554	3,914,784	4,281,702
		Ballast	1,141,696	1,003,266	1,078,436	881,655
Total ... ..	...	4,361,194	4,607,820	4,993,220	5,163,357	5,371,531

## TONNAGE CLEARED.

United Kingdom & European Countries	Cargo...	1,732,264	2,019,567	2,190,650	2,006,275	2,102,203
	Ballast	—	—	—	44	162
New Zealand ... ..	Cargo...	807,791	920,939	981,126	1,148,166	1,166,598
	Ballast	73,877	54,182	62,887	35,575	32,239
Asiatic Countries & Islds. in the Pacific	Cargo...	841,078	856,486	932,061	984,375	995,644
	Ballast	49,955	76,409	24,093	42,738	66,414
Africa ... ..	Cargo...	89,650	136,042	106,321	83,829	148,750
	Ballast	152	—	—	—	237
North and Central America	Cargo...	144,491	194,697	182,440	204,116	251,739
	Ballast	60,999	53,112	31,783	12,751	5,509
South America ... ..	Cargo...	338,304	407,911	476,355	592,248	460,832
	Ballast	17,996	5,981	3,805	1,340	...
		Cargo...	3,953,578	4,535,642	4,869,013	5,019,509
		Ballast	201,979	189,684	122,568	92,448
Total ... ..	...	4,155,557	4,725,326	4,991,581	5,111,957	5,230,417

## TONNAGE ENTERED AND CLEARED.

Countries.	1909.	1910.	1911.	1912.	1913.	1913 Compared with 1909.
United Kingdom & European Countries ... ..	3,488,878	3,910,465	4,212,905	4,230,369	4,346,901	+ 858,023
New Zealand ... ..	1,618,567	1,741,898	1,885,759	2,110,063	2,107,321	+ 488,754
Asiatic Countries and Islands in the Pacific ... ..	1,726,743	1,795,256	1,822,057	1,893,664	2,010,709	+ 283,966
Africa ... ..	454,083	490,040	501,789	258,549	456,342	+ 2,259
North and Central America ... ..	622,443	720,359	727,844	802,395	895,837	+ 273,394
South America ... ..	606,037	675,038	834,547	979,954	764,838	+ 178,801
Cargo ... ..	7,173,076	8,140,196	8,763,797	9,301,211	9,495,221	+ 2,322,145
Ballast ... ..	1,343,675	1,192,950	1,201,004	974,103	1,106,727	— 236,948
Total ... ..	8,516,751	9,333,146	9,984,801	10,275,314	10,601,948	+ 2,085,197

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. During 1913 British shipping represented 72.83 per cent. of the total tonnage which entered and cleared the Commonwealth.



**NATIONALITY OF ALL VESSELS WHICH ENTERED AND CLEARED THE COMMON-  
WEALTH FROM AND TO OVERSEA COUNTRIES, 1909 to 1913.**

Nationality.	Tonnage.				
	1909.	1910.	1911.	1912.	1913.
<b>BRITISH—</b>					
Australian ... ..	720,183	742,772	848,240	889,285	851,931
United Kingdom... ..	4,470,679	5,252,308	5,511,504	5,299,157	5,590,966
New Zealand ... ..	988,006	968,551	1,008,036	1,274,584	1,247,742
Other British ... ..	10,628	26,223	38,871	51,199	30,459
Cargo ... ..	5,426,643	6,295,935	6,656,932	6,949,115	6,915,261
Ballast ... ..	762,853	693,919	749,719	565,110	805,837
Total British ... ..	6,189,496	6,989,854	7,406,651	7,514,225	7,721,098
Per cent. to total ... ..	72.67	74.89	74.18	73.13	72.83
<b>FOREIGN—</b>					
Austro-Hungarian ... ..	—	30,059	—	28,689	32,940
Danish ... ..	8,848	4,010	10,510	5,573	10,138
Dutch ... ..	132,954	153,255	139,606	120,864	193,880
French ... ..	559,383	457,676	424,461	356,207	366,730
German ... ..	845,758	868,263	1,005,986	1,211,738	1,211,404
Italian ... ..	86,521	93,978	65,415	51,098	55,898
Japanese ... ..	79,120	89,358	158,047	252,081	224,293
Norwegian ... ..	440,727	482,637	582,352	527,121	471,914
Russian ... ..	46,041	33,145	38,463	63,286	75,303
Swedish ... ..	49,587	51,601	50,207	37,330	59,484
United States ... ..	56,148	48,477	67,745	92,605	154,486
Other Foreign ... ..	22,168	30,833	35,358	14,497	24,380
Cargo ... ..	1,746,433	1,844,261	2,126,865	2,352,096	2,579,960
Ballast ... ..	580,822	499,031	451,285	408,993	300,890
Total Foreign ... ..	2,327,255	2,343,292	2,578,150	2,761,089	2,880,850
Per cent. to total ... ..	27.33	25.11	25.82	26.87	27.17
Cargo ... ..	7,173,076	8,140,196	8,783,797	9,301,211	9,495,221
Per cent. to total... ..	84.22	87.22	87.97	90.52	89.56
Ballast ... ..	1,343,675	1,192,950	1,201,004	974,103	1,106,727
Per cent. to total... ..	15.78	12.78	12.03	9.48	10.44
<b>Grand Total ... ..</b>	<b>8,516,751</b>	<b>9,333,146</b>	<b>9,984,801</b>	<b>10,275,314</b>	<b>10,601,948</b>

The tonnage of Australian-owned vessels engaged in the oversea trade represents 8.04 per cent. of the total, and the tonnage of New Zealand vessels 11.77 per cent. Both are engaged mainly in the trade with New Zealand and eastern countries. An examination of the figures in the above table shews that, of the increase in tonnage in 1913 as compared with 1909, viz., 2,085,197 tons, 1,531,602 tons (73.45 per cent.) were British, and 553,595 tons (26.55 per cent.) were foreign, or, in other words, the British tonnage in 1913 shewed an increase of 24.66 per cent. over 1909, while that of foreign countries increased by 23.80 per cent. The proportion of British tonnage in the total shipping which entered and cleared the Commonwealth, though shewing a decline during the last three years, was slightly larger in 1913 than in 1909.

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.

**PROPORTION OF TONNAGE OF BRITISH AND FOREIGN NATIONALITY ENTERED  
AND CLEARED THE COMMONWEALTH WITH CARGO, 1909 to 1913.**

Nationality.	1909.	1910.	1911.	° 1912.	1913.
British ... ..	75.65	77.94	75.79	74.71	72.83
Foreign ... ..	24.35	22.66	24.21	25.29	27.17
Total ... ..	100.00	100.00	100.00	100.00	100.00

That the proportion of foreign tonnage should increase is to be expected as the natural corollary of the extension of the trade of the Commonwealth with foreign countries. This is particularly patent in regard to Germany and France. Both of these countries desire to increase their mercantile marine, and it is therefore natural that the increased direct trade between themselves and Australia should be carried by their own vessels rather than by the vessels of a third country. The Royal Dutch Packet Company has established a line of steamers between Java and other islands of the East Indies and Australia. The Hungarian Levant Steamship Company also maintains a cargo service between the Commonwealth and Adriatic ports. More recently, the East Asiatic Company of Copenhagen has inaugurated a monthly service between the Scandinavian, English, and Mediterranean ports and the ports of Fremantle, Adelaide, Melbourne, and Sydney. The pioneer ship in this service, the *Annam*, 3325 tons net, which arrived at Fremantle on the 9th December, 1914, was the first ocean-going motor-driven vessel to visit Australia.

The principal increases in foreign tonnage in the Australian trade have been German, Japanese, United States of America, Norwegian, and Dutch. The greater amount of German and Japanese tonnage is due to the extension of services between those countries and the Commonwealth, while the revival of the service between this country and San Francisco, which was discontinued after the great earthquake in that city in 1906, accounts for the larger American tonnage. The Norwegian tonnage, which is largely composed of sailing ships, is chiefly engaged under charter in the carriage of coal, wheat, ore, etc. 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.

The more important competitors for the Australian shipping trade among the foreign nations are France, Germany, and Norway, and it is therefore of interest to consider the general direction of their activity. It is well to bear in mind, when comparing the figures in the table on the next page, that the French shipping from and to France and to New Caledonia is practically identical with the steamers of the Messageries Maritimes, which maintain a regular service between France and New Caledonia via Australian ports, and that the German shipping from and to Germany consists mainly

of the vessels of two lines, the Norddeutscher Lloyd, and the German-Australian Steamship Company, which have had regular and frequent services to Australian ports for many years.

### SHIPPING OF PRINCIPAL FOREIGN NATIONS BETWEEN AUSTRALIA AND OTHER COUNTRIES DURING 1913.

Countries.	Nationality.					
	French.		German.		Norwegian.	
	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
<b>EUROPEAN COUNTRIES—</b>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
United Kingdom ...	17,421	29,957	...	39,284	2,061	66,513
Belgium ...	...	...	6,777	15,537	...	16,895
France ...	52,959	44,078	...	3,715	1,619	...
Germany ...	...	...	414,294	374,298	...	...
Norway ...	5,637	...	2,542	...	14,487	89
Sweden ...	...	...	13,923	...	25,929	...
Other European Countries ...	5,954	3,082	2,778	...	7,168	...
<b>NEW ZEALAND</b> ...	...	6,302	17,651	17,651	16,846	13,956
<b>ASIATIC COUNTRIES AND ISLANDS IN THE PACIFIC—</b>						
Japan ...	...	...	24,639	21,775	...	...
New Caledonia ...	60,264	64,679	3,725	3,725	46	1,393
South Sea Islands ...	12,434	10,247	2,156	2,228	15,808	8,457
Straits Settlements ...	...	1,045	...	38,993	...	2,329
Other Asiatic Countries ...	...	...	11,207	32,111	9,725	15,971
<b>AFRICAN COUNTRIES—</b>						
Africa, Portuguese East ...	...	...	1,991	...	6,426	...
South African Union ...	3,082	...	4,155	1,231	25,560	30,823
Other African Countries ...	...	...	...	...	3,659	110
<b>NTH. AMERICAN COUNTRIES—</b>						
United States ...	9,964	...	62,721	3,725	41,428	5,951
Other Nth. Amer. Countries... ..	...	...	...	...	1,738	...
<b>STH. AMERICAN COUNTRIES—</b>						
Chile ...	1,702	22,215	5,142	41,362	7,213	52,716
Peru ...	...	2,025	3,507	2,912	3,464	6,750
Other South American Countries ...	10,105	3,578	35,649	...	53,377	13,407
With Cargo ...	163,596	184,126	533,841	594,816	117,833	233,595
In Ballast ...	15,926	3,082	79,016	3,731	118,721	1,765
<b>Total</b> ...	<b>179,522</b>	<b>187,208</b>	<b>612,857</b>	<b>598,547</b>	<b>236,554</b>	<b>235,360</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 1909-13. Steam tonnage during 1913 was 2,639,629 tons greater than in 1909, 1,791,661 tons (*i.e.*, 67.88 per cent.) of the increase being British, and 847,968 tons (*i.e.*, 32.12 per cent.) being foreign. The tonnage of sailing vessels shews a decrease during the same period of 554,432 tons, British tonnage having fallen by 260,059 tons, and that of foreign nations by 294,373 tons.

As might be expected, the proportion of sailing vessels engaged in carrying the trade of the Commonwealth is shewn to be rapidly decreasing, having fallen during the period under review from 19 per cent. to 10 per cent. of the total tonnage. In this branch of shipping the foreign element is stronger than the British.

## STEAM AND SAILING VESSELS ENTERED AND CLEARED, 1909 to 1913.

Description and Nationality of Vessels.	1909.		1910.		1911.		1912.		1913.	
	Ton-nage.	Percen-tages.	Ton-nage.	Percen-tages.	Ton-nage.	Percen-tages.	Ton-nage.	Percen-tages.	Ton-nage.	Percen-tages.
Steam—										
British ...	5,583,448	81	6,432,290	82	6,912,085	81	7,084,126	79	7,375,109	77
Foreign ...	1,325,523	19	1,436,917	18	1,609,048	19	1,908,888	21	2,173,491	23
Total steam	6,908,971	100 (81)	7,869,207	100 (84)	8,521,133	100 (85)	8,993,014	100 (88)	9,548,600	100 (90)
Sailing—										
British ...	606,048	38	557,564	38	494,566	34	430,099	34	345,989	33
Foreign ...	1,001,732	62	906,375	62	969,102	66	852,201	66	707,359	67
Total sailing	1,607,780	100 (19)	1,463,939	100 (16)	1,463,668	100 (15)	1,282,300	100 (12)	1,053,348	100 (10)
Steam and Sailing—										
British ...	6,189,496	73	6,989,854	75	7,406,651	74	7,514,225	73	7,721,098	73
Foreign ...	2,327,255	27	2,343,292	25	2,578,150	26	2,761,089	27	2,880,850	27
Total ...	8,516,751	100	9,333,146	100	9,984,801	100	10,275,314	100	10,601,948	100

**6. Tonnage in Ballast.**—The following table shews the tonnage of oversea vessels which entered and cleared the Commonwealth in ballast during the years 1909-13. Of the total British tonnage which entered during 1913, 18.39 per cent. was in ballast, and of foreign tonnage 19.37 per cent. was in similar condition. Of the total tonnage which entered the Commonwealth during 1913, 18.66 per cent. was in ballast, while of the tonnage cleared, 2.00 per cent. only was without cargo.

## TONNAGE ENTERED AND CLEARED IN BALLAST, 1909 to 1913.

Year.	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
1909 ...	667,478	474,218	1,141,696	95,375	106,604	201,979
1910 ...	603,511	399,755	1,003,266	90,408	99,276	189,684
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

## PROPORTION OF TOTAL BRITISH AND FOREIGN TONNAGE WHICH ENTERED AND CLEARED IN BALLAST, 1909 to 1913.

Year.	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1909 ...	21.06	39.80	26.18	3.16	9.39	4.86
1910 ...	17.52	34.38	21.77	2.55	8.41	4.01
1911 ...	18.09	31.61	21.60	2.19	3.23	2.46
1912 ...	13.31	27.24	17.08	1.66	2.21	1.81
1913 ...	18.39	19.37	18.66	2.23	1.39	2.00

Vessels in search of freights arrive in Australia from all parts of the world. The tonnage which entered each State of the Commonwealth, in ballast, during 1913, was as follows:—

**TONNAGE OF OVERSEA VESSELS IN BALLAST WHICH ENTERED EACH STATE AND THE  
NORTHERN TERRITORY DURING THE YEAR 1913.**

State ...	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	C'wealth.
Tonnage ...	600,050	14,382	19,758	135,323	227,601	4,863	99	1,002,076
Percentage of total ...	59.88	1.44	1.97	13.50	22.71	0.49	0.01	100.00

The large exports of coal from New South Wales afford special inducements to vessels in search of freights. During 1913, 600,050 tons, or 59.88 per cent. of all ballast tonnage arriving in Australia, entered in New South Wales, 463,134 tons having entered at the coal port of Newcastle. The tonnage in ballast into New South Wales is mainly for coal cargo, into South Australia for wheat and ore, and into Western Australia for timber and cattle.

### § 3. Shipping of Ports.

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

**SHIPPING OF PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM, 1913.**

Port.	Tonnage Entered.	Port.	Tonnage Entered.
<b>AUSTRALIA—</b>		<b>ENGLAND AND WALES—</b>	
Sydney ...	9,018,785	London ...	20,088,071
Melbourne ...	6,128,266	Liverpool (inc. Birkenhead) ...	15,574,989
Newcastle ...	4,661,703	Cardiff ...	12,603,349
Port Adelaide ...	3,505,443*	Tyne ports ...	11,701,605
Brisbane ...	2,832,819	Southampton ...	8,268,860
Fremantle ...	2,899,275	Hull ...	5,904,698
Townsville ...	1,597,173	Plymouth ...	4,717,738
Albany ...	1,403,135	Newport ...	3,630,681
Mackay ...	1,067,835	Middlesbrough ...	3,416,582
Rockhampton ...	1,000,302	Swansea ...	3,374,439
Hobart ...	850,424	Sunderland ...	3,288,949
Cairns ...	763,694	Grimsby ...	3,056,578
Bowen ...	725,116	Bristol ...	2,732,832
Port Pirie ...	724,126	Manchester ...	2,685,184
Geelong ...	582,578	Dover ...	2,606,277
Thursday Island ...	421,925	<b>SCOTLAND—</b>	
Walleroo ...	378,031	Glasgow ...	6,101,819
<b>NEW ZEALAND—</b>		Leith ...	2,344,195
Wellington ...	3,006,439	<b>IRELAND—</b>	
Lyttelton ...	2,068,038	Cork (inc. Queenstown) ...	4,317,966
Auckland ...	1,865,037	Belfast ...	3,345,779
Dunedin ...	982,180	Dublin ...	2,495,854

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

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

### § 4. Vessels Built and Registered.

1. **Vessels Registered.**—The following table shews the number and net tonnage of steam, sailing, and other vessels not self-propelled, on the registers of the various States and of the Northern Territory of the Commonwealth of Australia:—

#### VESSELS ON THE REGISTER, 31st DECEMBER, 1913.

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 ...	47	1,701	591	99,981	87	1,492	365	32,137	51	8,397	1,141	143,708
Victoria ...	37	5,032	159	113,239	16	605	112	3,887	86	27,946	410	150,769
Queensland ...	23	2,563	82	11,601	18	182	131	2,554	44	6,212	298	23,112
South Australia ...	23	736	94	57,206	4	97	97	4,920	72	13,246	290	76,205
Western Australia ...	13	247	34	20,079	3	135	295	4,834	26	3,683	371	28,978
Tasmania ...	4	295	61	7,072	25	744	127	4,099	2	563	219	12,773
Northern Territory	...	...	4	66	...	...	38	525	...	...	42	591
Total ...	147	10,574	1,025	309,304	153	3,255	1,165	52,956	281	60,047	2,771	436,136

2. **Vessels Built.**—The following tables shew the number and tonnage of vessels built in the Commonwealth during each of the years 1901-1913, 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 1913.

##### NUMBER.

Year.	Steamers Built of—					Oil Motor Vessels.	Sailing.	Pontoon, Dredges, etc.	Total.
	Wood.	Iron.	Steel.	Composite.	Total.				
1901 ...	18	...	1	...	19	4	39	...	62
1902 ...	29	...	...	1	30	8	74	1	113
1903 ...	15	1	2	...	18	17	156	2	193
1904 ...	14	...	1	1	16	12	74	...	102
1905 ...	15	...	4	...	19	22	16	2	59
1906 ...	12	1	1	...	14	22	19	3	58
1907 ...	17	...	...	1	18	12	94	1	65
1908 ...	13	...	3	...	16	18	17	2	53
1909 ...	10	...	...	...	10	12	34	1	57
1910 ...	9	3	2	...	14	11	35	2	62
1911 ...	13	1	2	1	17	7	36	4	64
1912 ...	9	...	3	2	14	10	27	1	52
1913 ...	9	...	2	...	11	10	11	...	32

## VESSELS BUILT IN THE COMMONWEALTH, 1901 TO 1913—continued.

## TONNAGE.

Year.	Steamers.		Oil Motor Vessels.		Sailing.		Pontoons, Dredges, etc.		Total.	
	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.
1901 ...	2,270	1,251	41	33	1,083	958	...	...	3,394	2,242
1902 ...	3,166	1,849	96	82	2,409	2,087	64	64	5,735	4,082
1903 ...	1,569	956	624	455	3,179	2,731	385	350	5,757	4,492
1904 ...	2,094	1,240	140	105	1,607	1,388	...	...	3,841	2,733
1905 ...	2,444	1,462	291	214	335	287	967	896	4,037	2,859
1906 ...	1,426	735	268	189	489	418	546	536	2,729	1,878
1907 ...	2,381	1,305	108	93	791	736	152	145	3,432	2,279
1908 ...	2,492	1,317	265	199	493	418	260	260	3,510	2,194
1909 ...	1,351	735	184	151	772	649	98	98	2,405	1,633
1910 ...	1,944	1,105	137	124	807	691	405	363	3,293	2,283
1911 ...	2,092	1,116	139	111	774	689	762	720	3,767	2,636
1912 ...	2,592	1,592	375	293	624	541	78	78	3,669	2,504
1913 ...	1,554	776	246	172	199	184	...	...	1,999	1,132

## § 5. Interstate Shipping.

1. **Total Vessels and Tonnage.**—In the following tables are shewn the number and tonnage of vessels recorded as having entered each State of the Commonwealth from any other State therein, and similarly, the number and tonnage clearing from each State to other Commonwealth States. The table gives results for the quinquennial intervals since 1891 and for 1913. The shipping on the Murray River, between the States of New South Wales, Victoria and South Australia, is not included:—

## INTERSTATE SHIPPING, 1891 to 1913.—NUMBER OF VESSELS.

## ENTERED.

State.	1891.	1896.	1901.	1906.	1911.	1913.
New South Wales ...	1,692	1,470	1,611	1,575	1,791	2,000
Victoria ...	1,525	1,280	1,502	1,561	1,648	1,783
Queensland ...	376	439	430	478	567	566
South Australia ...	611	823	650	752	789	849
Western Australia ...	149	520	446	335	415	452
Tasmania ...	680	567	713	840	864	897
Northern Territory ...	*	*	*	*	39	47
Total ...	5,033	5,099	5,352	5,541	6,113	6,594

## CLEARED.

	1891.	1896.	1901.	1906.	1911.	1913.
New South Wales ...	1,415	1,275	1,473	1,417	1,728	1,931
Victoria ...	1,733	1,380	1,569	1,610	1,765	1,934
Queensland ...	389	455	395	431	572	576
South Australia ...	716	918	756	802	900	912
Western Australia ...	158	496	456	363	394	432
Tasmania ...	679	573	694	809	836	867
Northern Territory ...	*	*	*	*	40	44
Total ...	5,090	5,097	5,343	5,432	6,235	6,696

## INTERSTATE SHIPPING, 1891 TO 1913.—NUMBER OF VESSELS—contd.

## TOTAL.

State.	1891.	1896.	1901.	1906.	1911.	1913.
New South Wales ...	3,107	2,745	3,084	2,992	3,519	3,931
Victoria ...	3,258	2,660	3,071	3,171	3,413	3,717
Queensland ...	765	894	825	909	1,139	1,142
South Australia ...	1,327	1,741	1,406	1,554	1,689	1,761
Western Australia ...	307	1,016	902	698	809	884
Tasmania ...	1,359	1,140	1,407	1,649	1,700	1,764
Northern Territory ...	*	*	*	*	79	91
Total ...	10,123	10,196	10,695	10,973	12,348	13,290

\* Included with South Australia.

## INTERSTATE SHIPPING, 1891 to 1913.—TONNAGE.

## ENTERED.

State.	1891.	1896.	1901.	1906.	1911.	1913.
New South Wales	1,617,559	1,589,753	2,031,089	2,456,269	3,318,605	4,132,887
Victoria ...	1,392,818	1,486,624	1,956,900	2,473,771	2,959,551	3,509,138
Queensland ...	267,753	343,026	545,469	692,354	840,052	1,020,516
South Australia ...	658,600	1,051,893	1,124,499	1,582,802	1,970,490	2,407,362
Western Australia	237,708	683,918	973,474	968,664	1,378,800	1,666,709
Tasmania ...	371,205	281,029	485,023	721,240	895,546	917,216
North'n Territory	*	*	*	*	64,518	95,357
Total ...	4,545,643	5,436,243	7,116,454	8,895,100	11,427,562	13,749,185

## CLEARED.

State.	1891.	1896.	1901.	1906.	1911.	1913.
New South Wales	1,314,339	1,341,635	1,856,501	2,177,496	3,209,723	3,955,012
Victoria ...	1,692,189	1,599,065	2,038,424	2,617,966	3,233,531	3,897,363
Queensland ...	302,723	359,046	440,659	578,561	855,776	1,022,753
South Australia ...	829,616	1,203,830	1,365,668	1,772,356	2,343,269	2,627,858
Western Australia	269,256	687,632	977,846	1,051,629	1,303,359	1,532,037
Tasmania ...	352,406	250,557	433,735	636,944	728,170	788,500
North'n Territory	*	*	*	*	66,357	86,037
Total ...	4,760,529	5,441,765	7,112,833	8,834,952	11,740,185	13,909,560

## TOTAL.

State.	1891.	1896.	1901.	1906.	1911.	1913.
New South Wales	2,931,898	2,931,388	3,887,590	4,633,765	6,528,328	8,087,899
Victoria ...	3,085,007	3,085,689	3,995,324	5,091,737	6,193,082	7,406,501
Queensland ...	570,476	702,072	986,128	1,270,915	1,695,828	2,043,269
South Australia ...	1,488,216	2,255,723	2,490,167	3,355,158	4,313,759	5,035,220
Western Australia	506,964	1,371,550	1,951,320	2,020,293	2,682,159	3,198,746
Tasmania ...	723,611	531,586	918,758	1,358,184	1,623,716	1,705,716
North'n Territory	*	*	*	*	130,875	181,394
Total ...	9,306,172	10,878,008	14,229,287	17,730,052	23,167,747	27,658,745

\* 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 section attention was drawn to the custom in vogue prior to Federation of recording vessels from or to "oversea countries via other Commonwealth States" as *direct* from or to the oversea country. At each port in Australia these vessels were, on the inward voyage (to Australia), entered as from the oversea country, and cleared to the next Australian port as "interstate"; on the return journey—the outward voyage—they were entered as "interstate," and cleared as for the oversea country. In order to preserve the continuity of the records of the shipping communication of the several States with oversea countries this method has been followed in continuation of the pre-existing practice, excepting that vessels arriving or departing via other Commonwealth States are now so recorded instead of as "direct."

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

To ascertain the aggregate movement of shipping between the States during the year 1913, including the total interstate movements of oversea vessels, the figures in the following table must be added to those of the preceding one :—

#### SHIPPING ENTERED AND CLEARED FROM AND TO OVERSEAS COUNTRIES VIA OTHER COMMONWEALTH STATES, 1913.

State.	Entered.		Cleared.		Total.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales ...	604	2,212,820	503	1,918,660	1,107	4,131,480
Victoria ...	434	1,698,048	436	1,744,717	870	3,442,765
Queensland ...	219	890,842	215	904,467	434	1,795,309
South Australia ...	230	951,213	228	926,197	458	1,877,410
Western Australia ...	14	27,698	13	42,171	27	69,869
Tasmania ...	8	22,951	25	132,706	33	155,657
Total ...	1913 1,509	5,803,572	1,420	5,668,918	2,929	11,472,490
	1906 1,045	3,349,036	1,107	3,442,747	2,152	6,791,783

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

#### TOTAL INTERSTATE MOVEMENT OF SHIPPING, 1909 to 1913.

	1909.	1910.	1911.	1912.	1913.
	Tons.	Tons.	Tons.	Tons.	Tons.
Oversea vessels moving interstate ...	8,204,858	9,223,166	10,049,659	10,711,434	11,472,490
Vessels solely interstate ...	5,850,749	6,384,108	6,548,069	6,809,428	8,080,267
Total ...	14,055,607	15,607,274	16,597,728	17,520,862	19,552,757

The following table shews the number and tonnage of vessels which entered and cleared each State during 1913, including the coastal movements of oversea vessels :—

## INTERSTATE SHIPPING OF EACH STATE, 1913.

State.	Entered.		Cleared.		Total.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales	2,604	6,345,707	2,434	5,873,672	5,038	12,219,379
Victoria	2,217	5,207,186	2,370	5,642,080	4,587	10,849,266
Queensland	785	1,911,358	791	1,927,220	1,576	3,838,578
South Australia	1,079	3,358,575	1,140	3,554,055	2,219	6,912,630
Western Australia	466	1,694,407	445	1,574,208	911	3,268,615
Tasmania	905	940,167	892	921,206	1,797	1,861,373
Northern Territory	47	95,357	44	86,037	91	181,394
Total...	1913 8,103	19,552,757	8,116	19,578,478	...	...
	1906 6,586	12,244,136	6,539	12,277,699	...	...

3. **Vessels Engaged Solely in Interstate Trade.**—The elimination of the element of oversea vessels, included in the interstate shipping returns, cannot be accurately effected; nevertheless, a close approximation is furnished if it be assumed that vessels *entered* in the several States as from “oversea countries via other Commonwealth States” have really been *cleared* from other States as “interstate,” and further, that the vessels *cleared* to “oversea countries via other Commonwealth States” have likewise been *entered* as “interstate.” Applying this suggestion, and so eliminating all interstate movements of oversea vessels, the number and tonnage of vessels engaged solely in the interstate trade during the years 1909 to 1913 will be found to be as follows:—

## NUMBER AND TONNAGE OF VESSELS ENGAGED SOLELY IN INTERSTATE TRADE, 1909 to 1913.

Year.	Entered.		Cleared.	
	No.	Tons.	No.	Tons.
1909	4,375	5,850,749	4,353	5,854,313
1910	4,645	6,384,108	4,674	6,471,566
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

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

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

and Melbourne. This service was commenced in 1852, and was thus the first regular interstate service in Australia. About this time the great influx of population and the increase in commerce, caused chiefly by the gold discoveries, emphasised the desirability of establishing more regular and quicker means of communication between the principal ports of Australia, and in 1862 the regular interstate service between New South Wales and Victoria was inaugurated by the s.s. *You Yangs*, which was put into commission in regular service between Melbourne, Sydney, and Newcastle. In 1875 a company was formed in Adelaide for the purpose of supplying suitable steamers for the requirements of the trade between Adelaide and Melbourne. The first two steamers of the company were named the *South Australian* and the *Victorian*, and were small vessels of only 400 tons burthen. From the start, success attended these enterprises, and the services thus initiated were rapidly extended and their operations broadened. Numerous other companies were formed to cope with the increasing trade between ports in the Commonwealth, and the companies engaged from time to time added to their fleets of steamers by the acquisition of more modern and rapid vessels, until at the end of the year 1913 the total net tonnage owned by the twenty-three companies from whom returns have been received amounted to 206,340 tons. A summary of the various mail services carried on during the year 1913 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 1909 to 1913. The figures for 1909 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 1909 to 1913.**

Particulars.	1901.	1909.	1910.	1911.	1912.	1913.
Number of companies making returns ...	11	23	24	24	24	*23
Number of steamships ...	113	181	180	178	180	190
Tonnage { Gross ...	184,574	283,276	291,470	288,181	311,144	364,937
Net ...	114,080	168,206	172,410	170,062	179,996	206,340
Horse-power { Nominal ...	18,237	28,477	29,128	29,456	32,520	37,865
Indicated ...	123,519	238,610	245,698	249,388	276,703	321,794
Number of passengers { 1st class ...	4,617	7,087	7,041	8,616	9,084	9,826
for which licensed to { 2nd class and ...	4,490	6,460	6,395	6,256	6,376	7,635
carry { Masters and officers ...	403	598	600	590	604	649
Complement { Engineers ...	332	495	499	491	509	559
of Crew { Crew ...	2,875	4,347	4,440	4,369	4,609	5,509

\* See letterpress above.

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

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

## § 6. Shipwrecks.

The following statement shews the number and tonnage of vessels wrecked, or otherwise lost, on the coast of the Commonwealth, or under the jurisdiction of the several States, during the years 1901 and 1905 to 1913 :—

## NUMBER AND TONNAGE OF VESSELS WRECKED,\* 1901 and 1905 to 1913.

Year.	Class of Vessel.	Number and Tonnage of Vessels.										Passengers and Crew.	Lives Lost.
		Under 50 tons.		50 to 500 tons.		500 to 2000 tons.		Over 2000 tons.		Total.			
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.		
1901	Steam ...	7	189	5	949	2	2,811	...	...	14	3,949	250	40
	Sailing...	11	217	6	785	5	5,800	...	...	22	6,802	172	10
	Total ...	18	406	11	1,734	7	8,611	...	...	36	10,751	422	50
1905	Steam ...	3	49	2	594	...	...	1	3,325	6	3,968	417	...
	Sailing ...	10	160	5	775	3	3,678	1	2,176	19	6,789	160	57
	Total ...	13	209	7	1,369	3	3,678	2	5,501	25	10,757	577	57
1906	Steam ...	4	89	2	154	...	...	1	2,415	7	2,658	60	12
	Sailing ...	5	77	3	276	1	1,725	2	5,022	11	7,100	105	1
	Total ...	9	166	5	430	1	1,725	3	7,437	18	9,758	165	13
1907	Steam ...	3	71	4	916	3	3,572	...	...	10	4,559	204	16
	Sailing ...	8	162	6	421	5	6,895	...	...	19	7,478	170	29
	Total ...	11	233	10	1,337	8	10,467	...	...	29	12,037	374	45
1908	Steam ...	6	137	7	816	2	2,930	2	5,585	17	9,468	299	37
	Sailing...	56	775	3	276	3	4,074	1	2,062	63	7,187	348	219
	Total ...	62	912	10	1,092	5	7,004	3	7,647	80†	16,655	647	256
1909	Steam ...	1	48	3	359	1	1,382	1	2,286	6	4,075	131	40
	Sailing ...	6	163	3	362	2	2,681	...	...	11	3,206	88	6
	Total ...	7	211	6	721	3	4,063	1	2,286	17	7,281	219	46
1910	Steam ...	1	34	5	941	1	958	2	9,307	0	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

\* In some cases the vessels included in the above return were subsequently recovered. † The large number of wrecks during 1908 was due to cyclones on the north-west coast of Western Australia destroying a large number of the pearling vessels.