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#### SECTION XVI.

#### SHIPPING.

## § 1. General.

- 1. Record of Shipping before Federation.—Prior to Federation it was customary for each State to regard the matter of shipping purely from the State standpoint, and vessels arriving from or departing to countries beyond Australia, via other Australian States, were recorded as if direct from or to the oversea country. Thus a mail steamer from the United Kingdom, which made Fremantle her first port of call in Australia, would be recorded not only there, but again in Adelaide, Melbourne and Sydney, as an arrival from the United Kingdom. Consequently, any aggregation, especially of the recent shipping records of the different States, would repeatedly include a large proportion of the shipping visiting Australia. In earlier years, when many vessels sailed from the various State ports direct for their destination, the error of repeated inclusion was less serious, but as the commerce of Australia developed, more and more ports of call were included in the voyage of each vessel, and this made the mere aggregation of State records correspondingly misleading. It has, as a matter of fact, led to some erroneous publications of statistical results and deductions.
- 2. Shipping since Federation.—With the inauguration of the Commonwealth, the statistics of its shipping, especially of its oversea shipping, became of greater intrinsic importance. As an index of the position of Australia among the trading countries of the world, such statistics had a constitutional importance commensurate with Commonwealth interests, and correspondingly greater than those of individual States, and the nationality of the shipping trading with Australia became also a matter of greater moment.
- 3. Difficulties of Comparisons of Total Shipping.—From what is said in paragraph 1 above, it is obviously impossible now to obtain results for Australia not subject to the defect of repeated inclusions of the same vessels. Unfortunately, the statistical records of the first three years of Federal history are subject to the same defect, and do not admit of direct comparison with those now kept. A careful estimate of the extent and effect of repeated inclusion has been made and applied to the records of the earlier years, so as to extend the comparative results to those years. The error of such estimation will be negligible for comparative purposes.
- 4. Present System of Record.—The present system of record treats Australia as a unit, and counts, therefore, only one entry and one clearance for each visit to the Commonwealth. Repeated voyages of any vessel are, of course, included.

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

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

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

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

## § 2. Oversea Shipping.

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

TOTAL OVERSEA SHIPPING ENTERED AND CLEARED THE COMMONWEALTH, 1822 to 1914-15 (MULTIPLE RECORD EXCLUDED BY ESTIMATION PRIOR to 1904).

Year.	Vessels.	Tons.	Year.		Vessels.	Tons.	Year.	_	Vessels.	Tons.
1822		30,683	1853			1,490,422			4,315	4,064,947
1823	76	30,543	1854		3,781	1,744,251			4,052	3,999,917
1824		29,029	1855		3,239	1,449,657			3,793	3,853,246
1825	80	30,786	1856		2,669	1,195,794		]	3,454	3,764,430
1826		23,587	1857		2,842	1,530,202		∤	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			3,363	4,150,027
1829	185	56,735	1860		2,464	1,288,518			3,778	4,726,307
1830	195	56,185	1861		2,466	1,149,476			3,432	4,239,500
1831	185	52,414	1862		2,917	1,389,231	1893 .		3,046	4,150,433
1832	206	59,628	1863		3,378	1,564,369			3,397	4,487,546
1833	241	72,647	1864		3,344	1,537,433			3,331	4,567,883
1834	249	77,068	1865	•••	3,005	1,317,934			3,309	4,631,266
1835	310	96,928	1866		3,378	1,470,728			3,279	4,709,697
1836	310	93,974	1867		2,927	1,277,679			3,222	4,681,398
1837	442	113,432	1868	•••	3,080	1,350,573		l	3,356	5,244,197
1838	471	132,038	1869		3,107	1,472,837			3,719	5,894,173
1839	652	191,507	1870		2,877	1,381,878			4,028	6.541.991
1840	915	277,335	1871		2,748	1,312,642			3,608	6,234,460
1841	900	278,738	1872		2,788	1,380,466			3,441	6,027,843
1842	862	232,827	1873		3,159	1,609,067	1904	1	3,700	6,682,011
1843	736	183,427	1874		3,153	1,728,269			4,088	7,444,417
1844	629	155,654	1875		3,437	1,914,462			4,155	7,966,658
1845	735	164,221	1876		3,295	1,863,343			4,394	8,822,866
1846	888	211,193	1877		3,157	1,930,434		l	4,051	8,581,151
1847	1.033	245,358	1878		3,372	2,127,518	1909 .	1	3,910	8,516,751
1848	1,182	305,840	1879		3,344	2,151,338			4,048	9,333,146
1849	1,137	355,886	1880		3,078	2,177,877			4,174	9,984,801
1850	1,300	125,206	1881		3,284	2,549,364			4,052	10,275,314
1851	1,576	515,061	1882		3,652	3.010,944	1010		3,985	10,601,948
1852	1,896	844,243	1883	• • • •	3.857	3,433,102	1914-15	- 1	3,211	8,599,258

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.

		Tonnage Ente Cleared			_	Tonnage Entered and Cleared.		
Country.	Year.	Total.	Per Inhabi- tant.	Country.	Year.	Total.	Per Inhabi- tant.	
Argentine Rep.	1912	23,372,714	3.2	Japan	1912	43,492,604	0.8	
Belgium	1010	32,672,989	4.3	New Zealand	1914	3,506,830	3.2	
	1913	29,568,486	3.7	Norway	1912	10,806,050	4.4	
Commonw'ith	1914-15		.7	S. African Un.		10,631,118	1.7	
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	1914	79,795,501*	0.8	
Italy	1912	56,889,048	1.6					
-								

<sup>\*</sup> Exclusive of Northern Border and Lake Ports.

3. Shipping Communication with various Countries.—Particulars of the number and tonnage of vessels recorded between Australia and various countries, distinguishing British from foreign countries, are given in the following tables—the next table shewing the tonnage of vessels which were recorded as having entered the Commonwealth from the particular countries mentioned; that on page 600 shews the tonnage of vessels which were recorded as having cleared the Commonwealth for the particular countries, while on page 601 is shewn the total tonnage of vessels recorded as entered and cleared from and to the countries named.

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

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

# SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM AND TO VARIOUS COUNTRIES 1910 to 1914-15.

ENTERED.

Country.	1910.	1911.	1912.	1913.	1914-15.
United Kingdom	1,377,151	1,464,057	1,625,733	1,607,943	1,285,791
Canada	108,727	107,932	112,729	118,604	144,229
Fiji	49,493	77,745	73,033	86,442	85,442
Hong Kong	22,327	17,880	27,440	33,156	19,898
India and Ceylon	169,800	99,196	93,787	107,721	265,273
Mauritius	43,133	23,443	27,203	36,092	19,569
New Zealand	766,777	841,746	926,342	908,484	771,656
Papua	47,881	78,468	73,010	74,943	72,837
South African Union	208,140	289,229	96,679	198,505	84,365
South Sea Islands	64,164	61,983	37,472	58,498	24,279
Straits Settlements	89,731	97,735	102,598	100,238	106,534
Other British Countries	13,588	324	3,068	10,826	134,057
Total British Countries	2,960,912	3,159,738	3,199,094	3,341,452	3,013,930
Africa, Portuguese East	96,966	74.083	46,751	63,870	14,391
- · ·	15,273	18,734	11,852	9,563	6,871
Belgium Chile	111,504	182,460	176,416	108,121	38,288
Dutch East Indies	72,212	43,458	67,761	87,428	87,245
Françe	99,308	83,627	47.191	63,632	34,633
Germany	290,834	314,167	427,320	414,294	74,208
Hawaiian Islands	32,020	17,167	16,508	10,101	11,200
Japan	153,547	157,533	157,734	160,241	125,789
Mexico	24,366	16,481	19,445	9,973	1
New Caledonia	62,542	71,390	77,265	86,702	41,398
Norway	37,201	40,204	34,715	26,200	47,649
Peru	27,051	32,922	35,482	21,504	5,973
Philippine Islands	28,550	56,603	56,216	47,220	26,943
South Sea Islands (foreign)	37,684	56,878	67,805	66,651	73,762
Sweden	41,231	77,983	48,060	80,546	37,504
United States	338,587	389,208	453,354	509,922	426,513
Other Foreign Countries	178,032	200,584	220,388	264,111	119,858
Total Foreign Countries	1,646,908	1,833,482	1,964,263	2,030,079	1,161,025
Total all Countries	4,607,820	4,993,220	5,163,357	5,371,531	4,174,955

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

CLEARED.

	<del></del>				:
Country.	1910.	1911.	1912.	1913.	1914-15.
United Kingdom	1,467,925	1,537,084	1,369,143	1,455,018	1,031,279
Canada	50,510	54,732	54,661	82,849	90,105
Fiji	53,713	90,574	85,372	94,958	91,343
Hong Kong	31,145	19,155	32,121	27,959	30,566
India and Ceylon	139,584	143,632	144,487	126,656	210,688
Mauritius	9,396	2,953	4,526	3,505	7,681
New Zealand	975,121	1,044,013	1,183,741	1,198,837	916,809
Papua	50,552	71,811	66,409	73,923	63,962
South African Union	92,070	85,346	75,467	136,986	67,278
South Sea Islands	43,539	38,133	55,717	58,267	24,484
Straits Settlements	156,704	127,725	137,139	155,364	115,894
Other British Countries	2,924	•••		2,270	522,870
Total British Countries	3,073,183	3,215,158	3,208,783	3,416,592	3,172,959
Africa, Portuguese East	18,716	6,949	3,836	5,447	2,691
TO 1 2 2 2 2	115,121	168,397	169,020	151,718	34,245
01.17	342,478	393,642	508,724	398,322	255,547
D ( ) D ( 7 1)	105,293	115,499	155,332	189,499	180,649
France	113,226	155,506	94.062	81,240	54,642
0 - 1 - 1	312,128	321,502	349,685	385,752	38,358
Transition Talenda	32,520	26,200	34,009	45,634	37,770
- · · · · ·	102,183	103,550	96,108	117,472	73,228
Maria.	13,146	13,565	12,757	25,735	4,461
NT (1.3.3	47,071	62.165	74.063	86,321	43.581
D .	52,243	70,960	64,881	52,626	24,431
Philippine Islands	106.087	102,748	95,120	46,746	72,272
South Sea Islands (foreign)	57,790	50,022	44,875	36,826	52,785
Sweden	•	,	, , , , , , , , , , , , , , , , , , ,		•
United States	184,153	145,926	149,449	148,754	266,133
Other Foreign Countries	49,988	39,792	51,253.	41,733	110,551
Total Foreign Countries	1,652,143	1,776,423	1,903,174	1,813,825	1,251,344
Total all Countries	4,725,326	4,991,581	5,111,957	5,230,417	4,424,303

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

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

SHIPPING TONNAGE ENTERED AND CLEARED THE COMMONWEALTH FROM AND TO VARIOUS COUNTRIES, 1910 to 1914-15.

Country.		1910.	1911.	1912.	1913.	1914-15.
United Kingdom		2.845.076	3.001.141	2.994.876	3.062.961	2.317.070
Canada		159,237	162,664	167,390	201,453	234,334
D111		103,206	168,319	158,405	181,400	176,785
		53,472	37.035	59,561	61,115	50,464
v at a declar		309.384	242,828	238.274	234,377	475.961
		52,529	26,396	31,729	39,597	
Mauritius		1,741,898				27,250
New Zealand			1,885,759	2,110,083	2,107,321	1,688,465
Papua		98,433	150,279	139,419	148,866	136,799
South African Union		300,210	374,575	172,146	335,491	151,643
South Sea Islands		107,703	100,116	93,189	116,765	48,763
Straits Settlements		246,435	225,460	239,737	255,602	222,428
Other British Countries		16,512	324	3,068	13,096	656,927
Total British Countries		6,034,095	6,374,896	6,407,877	6,758,044	6,186,889
Africa, Portuguese East		115,682	81,032	50,587	69.317	17.082
Belgium		130,394	187,131	180.872	161,281	41.116
Chile		453,982	576,102	685,140	506,443	293,835
Dutch East Indies		177,505	158,957	223,093	276,927	267.894
France		212,534	239 133	141.253	144.872	89,275
Germany		602,962	635,669	777.005	800.046	112.566
Hawaiian Islands		64,540	43,367	50,517	55.735	37,770
Japan		255,730	261.083	253.842	277,713	199.017
Mexico		37.512	30.046	32,202	35,708	4.461
New Caledonia		109,613	133,555	151.328	173.023	84.979
NT		37.201	40,204	34,715	26,289	47.649
Down		79,294	103,882	100.363	74.130	30,404
Philippine Islands		134.637	159,351	151.336	93,966	
South Sea Islands (foreign)	***					99,215
	•••	95,474	106,900	112,680	103,477	126,547
Sweden		41,231	77,983	48,060	80,546	37,504
United States	•••	522,740	535,134	602,803	658,676	692,646
Other Foreign Countries		228,020	240,376	271,641	305,755	230,409
Total Foreign Countries		3,299,051	3,609,905	3,867,437	3,843,904	2,412,369
Total all Countries		9,333,146	9,984,801	10,275,314	10,601,948	8,599,258

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 reasen 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, 1910 to 1914-15.

TONNAGE ENTERED.

Countries.			1910.	1911.	1912.	1913.	1914-15.
United Kingdom & European New Zealand Asiatic Countries & Islds. in a Africa North and Central America South America	{ the Pacific { { {	Cargo Ballast Cargo Ballast Cargo Ballast Cargo Ballast Cargo Ballast Cargo Ballast	1,770,356 120,542 654,215 112,562 706,226 156,165 30,038 323,960 429,021 43,529 14,698 246,508	1,953,962 68,193 676,235 165,511 765,373 100,500 26,718 368,759 479,382 34,239 13,114 341,243	2,152,304 71,746 751,759 174,583 761,854 104,197 23,561 151,459 560,933 24,595 31,291 355,075	28,087 681,650 226,834 785,031 163,620 38,174 269,181 624,275 14,224 23,876	16,282 649,252 122,404 799,811 217,666 50,315 154,550 568,329 4,065 26,798
		Cargo Ballast	3,604,554 1,003,266	3,914,784 1,078,436	4,281,702 881,655		
Total			4,607,820	4,993,220	5,163,357	5,371,531	4,174,955
	То	NNAGE	CLEARE	D.			
United Kingdom & European New Zealand Asiatic Countries & Islds. in t Africa North and Central America South America	{   he Pacific {	Cargo Ballast Cargo Ballast Cargo Ballast Cargo Ballast Cargo Ballast Cargo Ballast	2,019,567 920,939 54,182 856,486 76,409 136,042 — 194,697 53,112 407,911 5,981	2,190,650 981,126 62,887 932,091 24,093 106,321 182,440 31,783 476,385 3,805	2,006,275 44 1,148,166 35,575 984,875 42,738 83,829 204,116 12,751 592,248 1,340	162 1,166,598 32,239 995,644 66,414 148,750 237 251,739 460,832	1,169,592 865,780 51,029 966,549 99,715 559,540 6,130 305,835 56,762 210,292 133,079
		Cargo Ballast	4,535,642 189,684	4,869,013 122,568	5,019,509 92,448		4,077,588 346,715
Total			4,725,326	4,991,581	5,111,957	5,230,417	4,424,303
T	ONNAGE ]	ENTERE	ED AND	CLEARE	D.		
Countries.	1910.	1911.	1912	. 19	13.	1914-15.	1914-15 Compared with 1910.
United Kingdom & European Countries New Zealand Asiatic Countries and Islands in the Pacific Africa North and Central America South America	3,910,465 1,741,898 1,795,286 490,040 720,359 675,098	4,212,805 1,885,759 1,822,057 501,789 727,844 834,547	2,110,0 7 1,893,6 258,8 802,3	083   2,1 664   2,0 849   4 895   8	07,321 1	770,535	- 1,215,354 - 53,433 + 288,455 + 280,495 + 214,632 - 248,683
Cargo Ballast	8,140,196 1,192,950	8,783,797 1,201,004		211 9,4 103 1,1	95,221 7 96,727	,681,330 917,928	- 458,866 - 275,022
Total	9,333,146	9,984,801	10,275,3	10,6	01,948 8	,599,258	- 733,888

From these tables it would appear that the tonnage between Australia and Asia and Africa was greater during 1914-15 than in 1913. This, however, is merely the effect of the diversion of shipping from the usual occupation to military transport between this country and India and Egypt. The outward tonnage to North America both with cargo and in ballast was actually much greater than during the previous year. The increased

tonnage with cargo was engaged in carrying the unusually large exports of wool to the United States and Canada, while the tonnage in ballast consisted of vessels which, owing to the abnormal circumstances previously alluded to, were unable to procure cargoes in Australian ports.

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

NATIONALITY OF ALL VESSELS WHICH ENTERED AND CLEARED THE COMMON-WEALTH FROM AND TO OVERSEA COUNTRIES, 1910 to 1914-15.

			Tonnage.		
Nationality.	1910.	1911.	1912.	1913.	1914-15.
New Zealand	5,252,308	848,240 5,511,504 1,008,036 38,871	889,285 5,299,157 1,274,584 51,199	851,931 5,590,966 1,247,742 30,459	1,107,402 4,897,452 1,017,721 64,040
Cargo Ballast	6,295,935 693,919	6,656,932 749,719	6,949,115 565,110	6,915,261 805,837	6,406,393 680,222
Total British Per cent. on total .	1 7 7 00	7,406,651 74.18	7,514,225 73.13	7,721,098 72.83	7,086,615 82.41
Dutch French German Italian Japanese Norwegian Russian Swedish United States	30,059 4,010 153,255 457,676 868,263 93,978 89,358 482,637 33,145 51,601 48,477 30,833	10,510 139,606 424,461 1,005,986 65,415 158,047 582,352 38,463 50,207 67,745 35,358	28,689 5,573 120,864 356,207 1,211,738 51,098 252,081 527,121 63,286 37,330 92,605 14,497	32,940 10,138 193,880 366,730 1,211,404 55,898 224,293 471,914 75,303 59,484 154,486 24,380	198,223 199,619 172,679 39,147 257,709 302,767 56,528 60,600 178,620 46,751
Cargo Ballast	1,844,261 499,031	2,126,865 451,285	2,352,096 408,993	2,579,960 300,890	1,274,937 237,706
T	2,343,292 25.11	2,578,150 25.82	2,761,089 26.87	2,880,950 27.17	1,512,643 17.59
Cargo Per cent. on tot: Ballast Per cent. on tot:	1,192,950	8,783,797 87.97 1,201,004 12.03	9,301,211 90.52 974,103 9.48	9,495,221 89.56 1,106,727 10.44	7,681,330 89.33 917,928 10.67
Grand Total	9,333,146	9,984,801	10,275,314	10,601,948	8,599,258

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

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

PROPORTION OF TONNAGE OF BRITISH AND FOREIGN NATIONALITY ENTERED AND CLEARED THE COMMONWEALTH WITH CARGO, 1910 to 1914-15.

Nationality.				1910.	1911.	1912.	1913.	1914-15.	
British Foreign		•••		77.34 22.66	75.79 24.21	74.71 25.29	72.83 27.17	82.41 17.59	
Total	•••			100.00	100.00	100.00	100.00	100.00	

The principal increases in foreign tonnage in the Australian trade have been German, Japanese, United States of America, Norwegian, and Dutch. The greater amount of German and Japanese tonnage 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 in 1913. 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 following table shews the direction of the activities of the principal foreign countries engaged in the oversea carrying trade of the Commonwealth. It is well to bear in mind that the French shipping to and from France and to and from New Caledonia is practically identical with the steamers of the Messageries Maritimes, which

maintains a regular service between France and New Caledonia via Australian ports. 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 1914-15.

			Natio	nality.		
Countries	Fre	nch.	Јара	nese.	Norw	egian.
•	Entered.	Cleared.	Entered.	Cleared.	Entered.	Cleared.
EUROPEAN COUNTRIES— United Kingdom Belgium	Tons. 7,539 3,712	Tons. 3,924	Tons.	Tons.	Tons. 1,474	Tons. 2,635
France	22,870	17,682			907 30,226	6,659
Norway Sweden					9,274	
Other European Countries NEW ZEALAND ASIATIC COUNTRIES AND IS-	5,919	•••	3,308	3,308	16,882	 12,177
LANDS IN THE PACIFIC— Japan New Caledonia	28,572	 35,398	92,637	41,644		
South Sea Islands		9,900	5,529	7,257	4,770	6,072
Straits Settlements		•••		8,015		
Other Asiatic Countries AFRICAN COUNTRIES—	10,233	•••	23,473	*51,168	13,194	13,542
South African Union	4,250	•••	•••		9,067	11,944
Other African Countries		•••	•••	•••	2,793	1,670
NTH. AMERICAN COUNTRIES— United States	12,661	27,125	2,601		23,663	21,900
Other Nth. Amer. Countries		•••	•••	•••	2,413	•••
STH. AMERICAN COUNTRIES— Chile	l	9,834	8,706	10,063	7,100	64,896
Peru			0,100	10,000	4,163	7,343
Other South American	,				, -,	,
Countries		•••		•••	12,293	15,710
With Cargo In Ballast	76,268 19,488	103,530 333	102,466 33,788	111,357 10,098	89,701 48,518	115,547 49,001
Total	95,756	103,863	136,254	121,455	138,219	164,548

<sup>\*</sup> Of this tonnage, 41,644 tons cleared for the Philippine Islands.

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 1910 to 1914-15.

STEAM	AND S	SALLING	VESSELS	ENTERED	AND	CLEADED	1910 to 1914-15.

Description and	19	10.	19	11.	19	12.	191	3.	1914	-15.
Nationality of Vessels.	Ton- nage.	Percen- tages.								
	6,432,290 1,436,917	82 18	6,912,085 1,609,048	81 19	7,084,126 1,908,888	79 21	7,375,109 2,173,491	77 23,	6,939,087 1,103,092	86 14
Total Steam	7,869,207	100 (84)	8,521,133	100 (85)	8,993,014	100 (88)	9,548,600	100 (90)	8,042,179	100 (94)
Sailing— British Foreign	557,564 906,375	38 62	494,566 969,102	34 66	430,099 852,201	34 66	345,989 707,359	33 67	147,528 409,551	26 74
Total Sailing		100 (16)	1,463,668	100 (15)	1,282,300	100 (12)	1,053,348	100 (10)	557,079	100 (6)
	6,989,854 2,343,292		7,406,651 2,578,150		7,514,225 2,761,089		7,721,098 2,880,850	73 27	7,086,615 1,512,643	82 18
Total	9,333,146	100	9,984,801	100	10,275,314	100	10,601,948	100	8,599,258	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 1910 to 1914-15. The decline in tonnage which entered in ballast during 1914-15 was due to the failure of the wheat crop, and the increase in tonnage which cleared in ballast was owing to many vessels being unable to procure cargoes of coal owing to the restriction of exports.

TONNAGE ENTERED AND CLEARED IN BALLAST, 1910 to 1914-15.

Year.			Entered.		Cleared.				
		British.	Foreign.	Total.	British.	Foreign.	Total.		
1910		603,511	399,755	1,003,266	90,408	99,276	189,684		
911		668,599	409,837	1,078,436	81,120	41,448	122,568		
912	(	503,041	378,614	881,655	62,069	30,379	92,448		
913		721,124	280,952	1,002,076	84,713	19,938	104,651		
1914-15		441,908	129,305	571,213	238,314	108,401	346,715		
			ŕ	'	·	·			

# PROPORTION OF TOTAL BRITISH AND FOREIGN TONNAGE WHICH ENTERED AND CLEARED IN BALLAST, 1910 to 1914-15.

Year.			Entered.		Cleared.				
		British.	Foreign.	Total.	British.	Foreign.	Total.		
		per cent.							
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	27.34	17.08	1.66	2.21	1.81		
1913		18.39	19.37	18.66	2.23	1.39	2.00		
1914-15		12.88	17.36	13.68	6.51	14.12	7.84		

The tonnage which entered each State of the Commonwealth, in ballast, during 1914-15, was as follows:—

TONNAGE OF	OVERSEA	VESSELS	IN	BALLAST	WHICH	<b>ENTERED</b>	EACH	STATE	AND
	THĖ	NORTHER	N T	TERRITOR'	y DURIN	iG 1914-15.			

State	n.s.w.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	C'wealth.
		140,107	24,591	18,667	102,755	5,473	16	571,213
Percentage of total	40.05	24.53	4.30	3.27	17.99	0.96	0.00	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—oversea and coastwise—which entered the more important ports of Australia during the year 1914-15, together with similar information in regard to some of the ports of New Zealand for the year 1914, and of the United Kingdom for the year 1913:—

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

Port.		_	Tonnage Entered.	Port.	Tonnage Entered.
AUSTRALIA-				ENGLAND AND WALES-	
Sydney		]	8,164,333	London	20,088,071
Melbourne			5,658,930	Liverpool (inc. Birkenhead)	15,574,989
Newcastle			4,097,060	Cardiff	10 609 940
Brisbane			2,686,917	Tyne ports	11,701,605
Port Adelaide			*2,603,156	Southampton	8,268,860
Fremantle			1,659,679	Hull	5,904,698
Albany			1,485,850	Plymouth	1 4 7 17 700
Townsville			1,463,303	Newport	2 090 001
Mackay			1,006,073	Middlesbrough	9 416 500
Rockhampton			881,986	Swansea	9 974 490
Hobart			709,107	Sunderland	9 000 040
Bowen			686,654	Grimsby	0.000.000
Cairns			675,885	Bristol	0.790.090
Thursday Island			420.198	Manchester	0.605 104
Geelong			397,788	Dover	0.000.000
Port Pirie			357,722	SCOTLAND-	2,000,217
Wallaroo			349,848	Glasgow	6.101.819
NEW ZEALAND—	•••		010,019	Toith	0.944.105
Wellington			3,375,015	IRELAND—	2,011,100
Lyttelton			2,195,795	Contr (ina Ousanatama)	4,317,966
Auckland		ı	1,918,093	Politont	9 945 770
Dunedin			972,029	Dublin	0 405 054
Daneani	***	••••	312,023	Dubilii	4,490,004

<sup>\*</sup> Exclusive of coastal shipping, particulars of which are not available.

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

# § 4. Vessels Built and Registered.

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

	Steam.					Sailing.				Barges, Hulks, Dredges, etc., not		Total.	
State.	Dredges and Tugs.		0	Other.		Auxiliary Power.		Other.		Self- propelled.			
	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	
New South Wales Victoria Queensland South Australia Western Australia Tasmania Northern Territory	23	1,719 2,561 3,089 722 247 302	591 171 79 95 36 56	107,101 121,218 11,492 54,699 20,095 5,798 62	93 21 19 4 5 37	1.628 792 190 97 159 885	377 111 129 96 301 115 38	29,868 3,872 2,409 4,893 4,968 4,015 533	51 90 41 73 29 2	9,690 30,774 4,141 13,456 7,599 563	1,159 418 291 290 384 215 40	150,006 159,217 21,321 73,867 33,068 11,563 595	
Total	135	8,640	1,030	320,465	179	3,751	1,167	50,558	286	66,223	2,797	449,637	

VESSELS ON THE REGISTER, 31st DECEMBER, 1914.

2. Vessels Built.—The following tables shew the number and tonnage of vessels built in the Commonwealth during each of the years 1901-1914, 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 1914.

Number.

			Ste	amers B	uilt of		Oil	G. Oin a	Pontoons,		
Yea	r.	Wood.	Iron.	Steel.	Composite.	Total.	Motor Vessels.	Sailing.	Dredges, etc.	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	13	74	l	103	
1905		15		4		19	22	17	2	60	
1906		12	1	1	•••	14	22	20	3	59	
1907		17			1	18	12	34	1 1	65	
1908		13		3	•••	16	18	17	2	53	
1909		10				10	12	35	1 1	58	
1910		9	3	2		. 14	11	35	4	64	
1911		14	1	2	1	18	8	37	4	67	
1912		9		3	2	14	12	30	1 1	57	
1913		16		2		18	12	28	] ]	58	
1914		10	•••		•••	10	3	21	1 1	35	
			•	<u> </u>		l	<u> </u>		<u> </u>		

#### INTERSTATE SHIPPING.

# VESSELS BUILT IN THE COMMONWEALTH, 1901 TO 1914—continued. TONNAGE.

	Steam	Steamers.		Oil Motor Vessels.		Sailing.		Pontoons, Dredges, etc.		Total.	
	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	
	2,270	1,251	41	33	1,083	958		•••	3,394	2,242	
	3,166	1,849	96	82	2,409	2,087	64	64	5,735	4,082	
	1,569	956	624	455	3,179	2,731	385	350	5,757	4,492	
	2,094	1,240	161	125	1,607	1,388		•••	3,862	2,753	
	2,444	1,462	291	214	338	290	967	896	4,040	2,862	
	1,426	735	268	189	498	425	546	536	2,738	1,885	
	2,381	1.305	108	93	791	736	152	145		2,279	
		1.317	265	199	493	418	260	260		2,194	
	1,351	735	184	151	789	664	98	98		1,648	
	1.944	1.105	137	124	807	691	688	646		2,566	
	2.092		143	115	779	-694	762	720		2,645	
i				304	673	579		78		2,553	
							1			1,844	
		1.176	22	15	408	363	43	43		1,597	
		Gross 2,270 3,166 1,569 2,094 1,426 2,381 2,492 1,351 1,944 1,944 2,092 2,592 2,177	Gross. Net.  2,270 1,251 3,166 1,849 1,569 956 2,094 1,240 1,426 735 2,381 1,305 2,492 1,317 1,351 735 1,944 1,105 2,092 1,116 2,592 1,592 2,177 1,167	Gross. Net. Gross.  2,270 1,251 41 3,166 1,849 96 1,569 956 624 2,094 1,240 161 2,444 1,462 291 1,426 735 268 2,381 1,305 108 2,492 1,317 265 1,351 735 184 1,944 1,105 137 2,092 1,116 143 2,592 1,592 391 2,177 1,167 300	Gross. Net. Gross. Net.  2,270 1,251 41 33 3,166 1,849 96 82 1,569 956 624 455 2,094 1,240 161 125 2,444 1,462 291 214 1,426 735 268 189 2,381 1,305 108 93 2,492 1,317 265 199 1,351 735 184 151 1,944 1,105 137 124 2,092 1,116 143 115 2,592 1,592 391 304 2,177 1,167 300 205	Gross. Net. Gross. Net. Gross.  2,270 1,251 41 33 1,083 3,166 1,849 96 82 2,409 1,569 956 624 455 3,179 2,094 1,240 161 125 1,607 2,444 1,462 291 214 338 1,426 735 268 189 498 2,381 1,305 108 93 791 2,492 1,317 265 199 493 1,351 735 184 151 789 1,944 1,105 137 124 807 2,092 1,116 143 115 779 2,592 1,592 391 304 673 2,177 1,167 300 205 494	Gross. Net. Gross. Net. Gross. Net.  2,270 1,251 41 33 1,083 958 3,166 1,849 96 82 2,409 2,087 1,569 956 624 455 3,179 2,731 2,094 1,240 161 125 1,607 1,388 2,444 1,462 291 214 338 290 1,426 735 268 189 498 425 2,381 1,305 108 93 791 736 2,492 1,317 265 199 493 418 1,351 735 184 151 789 664 1,944 1,105 137 124 807 691 2,092 1,116 143 115 779 694 2,592 1,592 391 304 673 579 2,177 1,167 300 205 494 472	Gross.         Net.         Gross.	Gross.         Net.         Met.         Met.	Gross. Net. Gross. Net. Gross. Net. Gross. Net. Gross.  2,270	

## § 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 1914-15. The shipping on the Murray River, between the States of New South Wales, Victoria and South Australia, is not included:—

INTERSTATE SHIPPING, 1891 to 1914-15.—NUMBER OF VESSELS.
ENTERED.

				1		Ī	1	1
State.			1891.	1896.	1901.	1906.	1911.	1914-15.
New South Wales		•••	1,692	1,470	1,611	1,575	1,791	1,934
Victoria Queensland	•••	••••	$1,525 \\ 376$	1,280 439	1,502 430	1,561 478	1,648 567	1,732 584
South Australia		• • • •	611	823	650	752	789	662
Western Australia			149	520	446	335	415	349
Tasmania			680	567	713	840	864	909
Northern Territory	•••		*	*	*	*	39	49
•			<del>.</del>					
Total	•••	•••	5,033	5,099	5,352	5,541	6,113	6,219
			CL	EARED.	<u>'</u>	<u> </u>	<u>'</u>	
New South Wales			1,415	1,275	1,473	1,417	1,728	1,792
Victoria	•••		1,733	1,380	1,569	1,610	1,765	1,890
Queensland	•••		389	455	395	431	572	554
South Australia	• • •		716	918	756	802	900	766
Western Australia	• • •		158	496	456	363	394	341
Tasmania	• • •	]	679	573	694	809	836	884
Northern Territory	•••			<u> </u>	*	*	40	39
Total	•••		5,090	5,097	5,343	5,432	6,235	6,266

# INTERSTATE SHIPPING, 1891 TO 1914-15.—NUMBER OF VESSELS—contd.

### TOTAL.

State.		1891.	1896.	1901.	1906.	1911.	1914-15.
New South Wales Victoria Queensland South Australia Western Australia Tasmania Northern Territory	 	3,107 3,258 765 1,327 307 1,359	2,745 2,660 894 1,741 1,016 1,140	3,084 3,071 825 1,406 902 1,407	2,992 3,171 909 1,554 698 1,649	3,519 3,413 1,139 1,689 809 1,700	3,726 3,622 1,138 1,428 690 1,793 88
Total	 	10,123	10,196	10,695	10,973	12,348	12,485

<sup>•</sup> Included with South Australia.

## INTERSTATE SHIPPING, 1891 to 1914-15.—TONNAGE.

#### ENTERED.

State.	1891.	1896.	1901.	1906.	1911.	1914-15.
New South Wales Victoria Queensland South Australia Western Australia Tasmania North'rn Territory	1,617,559 1,392,818 267,753 658,600 237,708 371,205	1,589,753 1,486,624 343,026 1,051,893 683,918 281,029	2,031,089 1,956,900 545,469 1,124,499 973,474 485,023	2,456,269 2,473,771 692,354 1,582,802 968,664 721,240	3,318,605 2,959,551 840,052 1,970,490 1,378,800 895,546 64,518	4,033,368 3,246,141 1,169,991 1,801,181 1,363,190 818,124 106,433
Total	4,545,643	5,436,243	7,116,454	8,895,100	11,427,562	12,538,428
		CL	EARED.			
New South Wales Victoria Queensland South Australia Western Australia Tasmania North'rn Territory	1,814,339 1,692,189 302,723 829,616 269,256 352,406	1,341,635 1,599,065 359,046 1,203,830 687,632 250,557	1,856,501 2,038,424 440,659 1,365,668 977,846 433,735	2,177,496 2,617,966 578,561 1,772,356 1,051,629 636,944	3,209,723 3,233,531 855,776 2,343,269 1,303,359 728,170 66,357	3,612,502 3,658,856 1,002,909 2,169,611 1,210,138 721,144 76,476
Total	4,760,529	5,441,765	7,112,833	8,834,952	11,740,185	12,451,536
		Т	OTAL.		·	
New South Wales Victoria Queensland South Australia Western Australia Tasmania North'rn Territory	2,931,898 3,085,007 570,476 1,488,216 506,964 723,611	2,931,388 3,085,689 702,072 2,255,723 1,371,550 531,586	3,887,590 3,995,324 986,128 2,490,167 1,951,320 918,758	4,633,765 5,091,737 1,270,915 3,355,158 2,020,293 1,358,184	6,528,328 6,193,082 1,695,828 4,313,759 2,682,159 1,623,716 130,875	7,645,870 6,904,997 2,172,800 3,970,792 2,573,328 1,539,268 182,909
Total	9,306,172	10,878,008	14,229,287	17,730,052	23,167,747	24,989,964

<sup>\*</sup> Included with South Australia.

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

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

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

To ascertain the aggregate movement of shipping between the States during the year 1914-15, 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
01	HER	COMMONY	VEALTI	i ST	ATE:	S, 1914-15.		

	En	tered.	. Cl	eared.	Total.		
State.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	
New South Wales	440	1,653,893	416	1,653,996	856	3,307,889	
Victoria	356	1,383,057	353	1,389,614	709	2,772,671	
Queensland	153	604,175	171	750,424	324	1,354,599	
South Australia	141	581,385	84	391,160	225	972,545	
Western Australia	20	80,610	4	9,161	24	89,771	
Tasmania	14	36,411	46	203,918	60	240,329	
Tota 1914-15	1,124	4,339,531	1,074	4,398,273	2,198	8,737,804	
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, 1910 to 1914-15.

	1910.	1911.	1912.	1913.	1914-15.
Oversea vessels moving	Tons.	Tons.	Tons.	Tons.	Tons.
interstate			10,711,434 6,809,428		8,787,804 8,140,155
Total	15,607,274	16,597,728	17,520,862	19,552,757	16,877,959

The following table shews the number and tonnage of vessels which entered and cleared each State during 1914-15, including the coastal movements of oversea vessels:—

	E	ntered.	C	leared.	Total.		
State.	Vessels.	Tonnage.	Vessels.	Tonnage	Vessels.	Tonnage.	
New South Wales	2,374	5,687,261	2,208	5,266,498	4,582	10,953,759	
Victoria	2,088	4,629,198	2,243	5,048,470	4,331	9,677,668	
Queensland	737	1,774,166	725	1,753,233	1,462	3,527,399	
South Australia	803	2,382,566	850	2,560,771	1,653	4,943,337	
Western Australia	369	1,443,800	345	1,219,299	714	2,663,099	
Tasmania	923	854,535	930	925,062	1,853	1,779,597	
Northern Territory	49	106,433	39	76,476	88	182,909	
(1914-1	7,343	16,877,959	7,340	16,849,809		s •••	
Total $\left\{ 1906 \right\}$	6,586	12,244,136	6,539	12,277,699			

INTERSTATE SHIPPING OF EACH STATE, 1914-15.

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 1910 to 1914-15 will be found to be as follows:—

NUMBER AND TONNAGE OF VESSELS ENGAGED SOLELY IN INTERSTATE TRADE, 1910 to 1914-15.

			 E	ntered.	Cleared.			
	Year.		No.	Tons.	No.	Tons.		
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	6,809,420		
1913	•••	•••	 5,174	8,080,267	5,187	8,105,988		
1914-15		•••	 5,143	8,140,155	5,142	8,112,00		

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 1914 the total net tonnage owned by the twenty-three companies from whom returns have been received amounted to 206,424 tons. A summary of the various mail services carried on during the year 1916 is given in Section XVIII. of this work.

The subjoined table gives particulars, so far as they are available, of all steamships engaged in regular interstate or coastal services at the end of each of the years 1901 and 1910 to 1914. The figures for 1910 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 1910 to 1914.

Particulars.	1901.	1910.	1911.	1912.	1913.	1914.	
Number of companies making returns            Number of steamships            Tonnage         Gross           Net            Horse-power         Nominal           Indicated            Number of passengers ( lat class	11	24	24	24	23	23	
	113	180	178	180	190	174	
	184,574	291,470	288,181	311,144	364,997	340,852	
	114,080	172,410	170,062	179,996	206,340	206,424	
	18,237	29,128	29,456	32,520	37,865	35,723	
	122,519	245,608	249,388	276,703	321,794	288,856	
	4,617	7,041	8,616	9,084	9,826	8,068	
for which licensed to 2nd class and carry steerage  Complement Masters and officers Engineers Crew	4,490	6,395	6,256	6,376	7,635	8,666	
	403	600	590	604	649	622	
	332	499	491	509	559	527	
	2,875	4,440	4,369	4,609	5,509	5,493	

<sup>5.</sup> 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 1906 to 1914:—

NUMBER AND TONNAGE OF VESSELS WRECKED,\* 1901 and 1906 to 1914.

	Class of			N	lumber	and T	onnage o	of Ves	sels.			Passengers and Crew.	Lives Lost.
Year.	Vessel.	Under 50 tons. 50 to 500 ton			00 tons.		to 2000 ons.		ver ) tons.	Total.		Passe and (	Lives
1901	Steam Sailing	No. 7 11	Tons. 189 217	No. 5 6	Tons. 949 785	No. 2 5	Tons. 2,811 5,800	No. 	Tons.	No. 14 22	Tons. 3,949 6,802	No. 250 172	No. 40 10
	Total	18	406	11	1,734	7	8,611			36	10,751	422	. 50
1906	Steam Sailing	4 5	89 77	2 3	154 276	ӕ	1,725	1 2	2,415 5,022	7 11	2,658 7,100	60 105	12 1
	Total	9	166	5	430	1	1,725	3	7,437	18	9,758	165	13
1907	Steam Sailing	3 8	71 162	4 6	916 421	3 5	3,572 6,895			10 19	4,559 7,478	204 170	16 29
	Total	11	233	10	1,337	8	10,467			29	12,037	374	45
1908	Steam Sailing	6 56	137 775	7 3	816 <b>27</b> 6	2 3	2,930 4,074	2 1	5,585 2,062	17 63	9,468 7,187	299 348	37 219
	Total	62	912	10	1,092	5	7,004	3	7,647	80†	16,655	647	256
1909	Steam Sailing	1 6	48 163	3 3	359 362	1 2	1,382 2,681	1 	2,286 	6 11	4,075 3,206	131 88	40 6
	Total	7	211	6	721	3	4,063	1	2,286	17	7,281	219	46
1910	Steam Sailing	1 5	34 115	5 2	941 205	1 2	958 3,095	2	9,307	9	11,240 3,415	624 94	2 20
	Total	6	149	7	1,146	3	4,053	2	9,307	18	14,655	718	22
1911	Steam Sailing	4 7	109 103	5 4	681 642	3 4	5,194 5,100			12 15	5,984 5,845	275 128	161 25
	Total	11	212	9	1,323	7	10,294			27	11,829	403	186
1912	Steam Sailing	1 4	11 44	6 3	866 407	 5	7,836	1	2,182 	8 12	3,059 8,287	227 111	151 19
	Total	5	55	9	1,273	5	7,836	1	2,182	20	11,346	338	170
1913	Steam Sailing	1 10	25 175	2 5	237 359		:::	:::		3 15	262 534	23 51	
	Total	11	200	7	596					18	796	74	7
1914	Steam Sailing	3 10	130 184	4 11	926 1,124	2 2	2,721 2,297		3,558	10 23	7,335 3,605	205 160	18 34
	Total	13	314	15	2,050	4	5,018	1	3,558	‡33	10,940	365	52

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