SHIPPING.

Growth of Australasian shipping. THE earliest date for which there is reliable information in regard to Australasian shipping is 1822. The growth of the trade of Australasia since then has been marvellous, and although the rate at which population has advanced, has been greater than could reasonably be expected, the growth of shipping has been even more rapid. Taking the whole period covered by the following table the increase of population has averaged about five per cent. yearly, while that of shipping has slightly exceeded seven per cent. The summary herewith gives the tonnage per inhabitant, and annual increase per cent. per annum during each period:

Vessels Entered and Cleared at Australasian Ports.

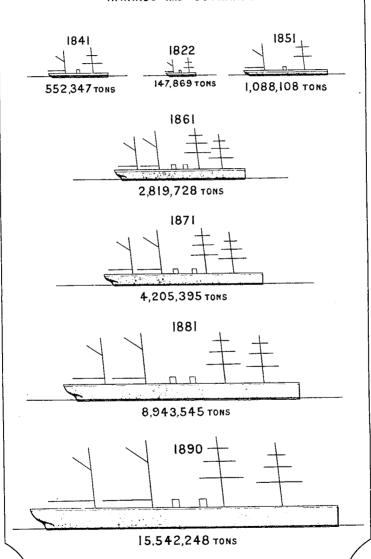
Year.	No. of Vessels. Tonnage.		Tonnage per inhabitant.	Annual increase of tonnage per cent. for each period.	
1822	268	147,869	3.9		
1841	2,576	552,347	2.2	7.2	
1851	5,340	1,088,108	2.4	7.0	
1861	10,496	2,819,728	2:3	10.3	
1871 .	13,194	4,205,395	2.2	4.3	
1881	15,935	8,943,545	3.2	7:3	
1890	17,629	15,542,248	4.2	6.3	

Tonnage entered and cleared.

In the year 1822 all the Colonies on the mainland were comprised in the designation of New South Wales, and as late as 1859 Queensland formed part of the mother Colony. Thus an exact distribution of tonnage can only be made subsequent to the year last named, and this is given in the following table. The tonnage for \$\circ{1}{3}90\$ is somewhat lower than might have been expected, as the latter part of the year was disastrously affected by a great maritime strike.

SHIPPING

INWARDS AND OUTWARDS



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Total Tonnage Entered and Cleared.

				,											
			1822.]	1841.]	1851.		1861.	:	1871.	} -	1881.		1890.
표		No.	Tonnage.	No.	Tonnage.	No.	Tonnage	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
1	New South Wales))			1,056	292,022	2,718	745,696	4,014	1,500,479	4,357	2,786,500	5,666	4,761,872
1	Victoria			1,404	355,896	1,370	240,431	3,598	1,090,002	4,394	1,355,025	4,248	2,412,534	4,933	4,363,341
(Queensland	131	113,717			include	din N.S.W.	*215	*35,889	* 427	*92,893	1,803	882,491	1,222	910,779
S	South Australia			197	37,036	538	155,002	788	199,331	1,238	373,624	2,249	1,359,591	2,262	2,337,674
1	Vestern Australia)	••••	No infe	ormation.	247	49,352	455	115,256	400	126,948	368	285,046	548	904,861
T	'asmania	137	34,152	975	159,415	1,569	239,152	1,580	230,218	1,283	216,160	1,383	383,762	1,509	951,247
ì	Yew Zealand					560	112,149	1,142	403,336	1,438	540,261	1,527	833,621	1,489	1,312,474
A	ustralasia	288	147,869	2,576	552,347	5,340	1,088,108	10,496	2,819,728	13,194	4,205,395	15,935	8,943,545	17,629	15,542,248

^{*} Corrected to allow for tonnage entered and cleared at more than one port.

Increased capacity of vessels.

Owing in a great measure to the utilisation of steam as a motive power, the average carrying capacity of vessels has greatly increased, especially during recent years. In considering the average tonnage, the year 1822 is omitted from the comparison, as a large proportion of that year's tonnage was made up of vessels of the British Navy conveying men and stores to penal establishments, and therefore not fairly included under the term "trade":—

Average Australasian Tonnage.

Year.	Average	Tonnage.
1841	**************	214
1851	************	204
1861	•••••	269
1871		320
1881	*******	561
1890	***************************************	882

The increase in the carrying capacity of vessels trading with Australasia is truly remarkable, especially since 1871. The change, however, is due, not so much to Australasian enterprise, as to the general tendency everywhere exhibited to substitute large and speedy steamships for the sailing vessels of former days.

Average daily movements of tonnage.

The following figures represent the average daily movements of tonnage (entered and cleared) in Australasian ports at various periods:—

Australasian Shipping Movements.

In 1822	
1841	1,486
1851	
1861	
1871	12,041 ,,
1881	
1890	42,582 ,,

that is to say, five vessels of 406 tons in the aggregate, entered or cleared every week during the year 1822, whilst in 1890 the average weekly shipping movement was 339 vessels, aggregating 298,889 tons. The daily movement of tonnage in Australasia is larger than that of any European country, except Great Britain, Spain, France, and Germany, and probably of any other country of the world, the United States alone excepted.

The position which each colony occupied in 1881 is much the Relative position same as that held by it to-day, but as might naturally be expected the ratio of increase has been very different for the various colonies. Those least developed in 1881 show the greatest proportionate increase during the period, as the figures herewith demonstrate :--

External and Intercolonial Tonnage—Inwards.

g 1		1881.		1890.	Increase per cent., 1881-90.	
Colony.	No.	Tonnage.	No.	Tonnage.		
	2 251		0.000	2 430 047	05.5	
New South Wales	2,254	1,456,239	2,889	2,413,247	65.7	
Victoria	2,125	1,219,231	2,474	2,178,551	78.7	
Queensland	936	455,985	616	468,607	2.8	
South Australia	1,120	684,203	1,105	1,141,693	66.9	
Western Australia	185	145,048	281	484,534	234·1	
Tasmania	694	192,024	746	475,618	147 .7	
New Zealand	765	420,134	744	662,769	57.8	
ļ						
Australasia	8,079	4,572,864	8,855	7,825,019	71.1	

The meaning of the increase shown above, so far at least as Increase of some of the colonies are concerned, is apt to be misunderstood; thus, the abnormal development of Western Australia should not be set down as due to the increased trade of that colony, but to the circumstance that one of its ports lies in the track of the large steam vessels trading between Europe and the Eastern Colonies; and this remark, to a minor extent, is applicable also to some of the other less populous colonies.

Total tonnage of each colony.

In the next table the total tonnage and the proportion claimed by each colony are given. It will be seen that New South Wales at both periods held the largest share of tonnage, but the proportion in 1890 was less than in 1881:—

External and Intercolonial Tonnage—Inwards and Outwards.

Colon y.		1881.		1890.	Percentage of tonnage to each Colony.		
	No.	Tonnage.	No,	Tonnage.	1881.	1890.	
New South Wales Victoria Queensland South Australia Western Australia New Zealand	4,357 4,248 1,803 2,249 368 1,383 1,527	2,786,500 2,412,534 882,491 1,359,591 285,046 383,762 833,621	5,666 4,933 1,222 2,262 548 1,509 1,489	4,761,872 4,363,341 910,779 2,337,674 904,861 951,247 1,312,474	31·1 27·0 9·9 15·2 3·2 4·3 9·3	30·6 28·1 5·9 15·0 5·8 6·1 8·5	
Australasia	15,935	8,943,545	17,629	15,542,248	100.0	100.0	

In the foregoing tables the trade carried on between the different colonies has been included.

Difficulty in distinguishing external trade. Some little difficulty is met with in distinguishing correctly the external trade for each colony, owing to the circumstance that steam vessels from Europe call at various colonial ports, and are credited to the first port of call, quite irrespective of the fact that little or none of the cargo may be destined for the colony to which the port belongs. Thus the returns of Western Australia for 1890 show external shipping entering inwards 235,815 tons, and 219,692 tons outwards, in all, 455,507 tons, a larger total than either Queensland or Tasmania, though the present importance of these colonies is very much greater than that of Western Australia. The following table gives the total of the other than Australasian tonnage entering and clearing at the ports of each colony; the figures, however, should be taken in conjunction with the import and export statistics given in the next chapter:—

Colony.		1881.		1890.	Percentage of tonnage to each Colony.		
	No.	Tonnage.	No.	Tonnage.	1881.	1890.	
New South Wales	1,120	1,080,446	1,209	1,757,683	34.3	31.6	
Victoria	626	737,272	756	1,253,206	23.4	22:5	
Queensland	461	282,439	324	261,642	8.9	4.7	
South Australia	541	479,231	724	1,091,706	15.2	19.6	
Western Australia	171	139,200	249	455,507	4.4	8.2	
Tasmania	68	27,679	78	113,290	0.9	$2\cdot 0$	
New Zealand	648	406,820	606	636,290	12.9	11:4	
Australasia	3,635	3,153,087	3,946	5,569,324	100.0	100.0	

A peculiar feature of Australasian trade is the small and Tonnago in ballast. decreasing proportion of tonnage arriving or departing in ballast for places outside Australasia. Thus, in 1881 this description of tonnage amounted to 4.3 per cent. of the whole; in 1890 the proportion was only 3.5 per cent., while in European and American countries of which there are available returns, the proportion varies from 11 to 36 per cent. The details of arrivals and departures in ballast for the years 1881 and 1890 are :-

External Tonnage Inwards and Outwards with Ballast only.

Colony.	1881.	1890.	Percentage of Tonnage in Ballast to Total External Tonnage of each Colony.		
	Tonnage.	Tonnage.	1881.	1890.	
New South Wales	22,376 12,841 25,378 28,590 10,399 4,553 30,622	52,911 46,051 10,290 25,276 9,480 10,145 40,972	2·1 1·7 9·0 6·0 7·5 16·4 7·5	3·0 3·7 3·9 2·3 2·1 8·9 6·4	
Australasia	134,759	195,125	4:3	3.5	

Varied resources of Australasia.

The reason why so small a proportion of Australasian shipping leaves in ballast is no doubt to be found in the large and varied resources of the country, for when the staple produce—wool—is not available, cargoes of wheat and coal may be obtained. The percentage of tonnage in ballast during 1889 for some of the principal countries of the world is given herewith:—

European and American Tonnage in Ballast.

Country.	Percentage of Tonnage in Ballast to total Tonnage.		
United Kingdom	14·4		
France	18.8		
Germany	20.1		
Spain	22.6		
Italy	24.9		
Russia	34.9		
Belgium	24.3		
Netherlands	22.9		
Norway and Sweden	36·1		
United States	11.2		
Australasia (1890)	3.5		

Intercolonial shipping.

The development of the intercolonial shipping has advanced step by step with the external trade of the colonies. New Zealand forms an exception to the rule, a circumstance due to the development of its resources having now reached such a point that the colony is in a position to trade directly with Great Britain, instead of, as formerly, indirectly by way of the ports of New South Wales and Victoria.

The following is a statement of the inward trade of each Colony Inward interfrom other members of the group :-

Intercolonial Tonnage Inwards (Cargo and Ballast).

0.1		1881.	1890.		
Colony.	No.	Tonnage.	No.	Tonnage.	
New South Wales	1,730 1,733 663 837 95 654 457	939,158 780,633 268,593 412,493 74,020 175,439 227,284	2,374 1,965 446 745 149 682 481	1,631,726 1,365,207 330,094 577,923 248,719 368,483 398,661	
Australasia	6,169	2,877,620	6,842	4,920,813	

New South Wales, it will be seen, heads the list with about Position of New South Wales. one-third of the total intercolonial inward shipping-a position, doubtless in a large measure, due to the fact that many vessels which have discharged cargo in other Colonies come to New South Wales. for cargoes for foreign ports. Victoria stands second to New South Wales for vessels inwards from other Colonies, but in regard to outward trade she stands first, as will be seen by the figures annexed :-

Intercolonial Tonnage Outwards (Cargo and Ballast).

		1881.	1890.		
Colony.	No.	Tonnage.	No.	Tonnage.	
New South Wales	1,507 1,889 679 871 102 661 422	766,896 894,629 331,459 467,867 71,826 180,644 199,517	2,083 2,212 452 793 150 749 402	1,372,463 1,744,928 319,043 668,045 200,635 469,474 277,523	
Australasia	6,131	2,912,838	6,841	5,052,111	

Position of Victoria. The position occupied by Victoria as compared with New South Wales in the table just given is peculiar, and arises from the necessity of many vessels arriving with cargoes being compelled to leave in ballast and seek outward freights in New South Wales, particularly at the port of Newcastle. A large proportion of the tonnage from Victoria to New South Wales is of ships in ballast requiring coal, not for Victoria only, but for places outside Australasia; these ships leaving Victorian ports are reckoned as intercolonial, but when entering outward at Newcastle they are of course cleared as engaged in foreign trade. The combined tonnage inward and outward will be found in the following table, with the percentage due to each Colony:—

Intercolonial Tonnage, Inwards and Outwards (Cargo and Ballast.)

Colony.	1881.	Percentage of To each Colon		f Tonnage to Colony.
	Tonnage.	Tonnage.	1881.	1890.
New South Wales	1,706,054	3,004,189	29.5	30.1
Victoria	1,675,262	3,110,135	28.9	31.2
Queensland	600,052	649,137	10.4	6.5
South Australia	880,360	1,245,968	15.2	12.5
Western Australia	145,846	449,354	2.5	4.5
Tasmania	356,083	837,957	6.2	8.4
New Zealand	426,801	676,184	7.4	6.8
Australasia	5,790,458	9,972,924	100.0	100 0

Steam and sailing tonnage.

The general tendency to substitute steamers for sailing vessels is very marked in the Australasian trade. Unfortunately the records of Queensland do not admit of a distinction being made between the two classes of vessels, nor do those of South Australia and New Zealand, except of later years. The following table gives such particulars as are available:—

External and Intercolonial Steam Tonnage.

Colony.	1881.	1890.	Percentage of Steam Tonnage to Steam and Sailing.		
Goldiny.	20021	10001	1881.	1890.	
New South Wales	1,758,304	3,654,814	63.1	76.7	
Victoria	1,787,861	3,575,053	74.1	81.9	
South Australia		1,684,480		76.9	
Western Australia	210,664	840,829	73.9	92.9	
Tasmania	265,833	852,219	69.3	89.6	
New Zealand		800,533		61.0	

The following figures give like information for about the same period for some of the principal countries of the world:—

Countries.	Percentage of Steam Tonnage to Steam and Sailing.		
Countries.	1881.	1889.	
United Kingdom	67.7	81.7	
France	69.5	86 · 1.	
Germany	70.8	85·1	
Italy	72.8	88.0	
Belgium	81:3	92.5	
Netherlands	74.4	90.2	
Norway and Sweden	41 '0	64.5	
United States	55.5	65.3	

The relative importance of the various ports of Australasia Relative importance of may be ascertained from an inspection of the following table. Ports.

Melbourne takes first place, then Sydney, Port Adelaide, and Newcastle, each having over a million tons. The tonnage for all the principal ports is given below:—

Total Tonnage of Vessels inwards and outwards at the principal Ports of Australasia, 1881, 1890.

Colony.	Colony. Port.		1890.
(Sydney	1,610,692	3,001,221
New South Wales }	Newcastle	1,127,238	1,467,578
,	Eden	27,277	81,356
Victoria	Melbourne	$2,144,949 \\93,347$	4,096,982 131,803
	Brisbane	406.032	831,164
Queensland	Townsville	205,886	538,217
Queensiand	Rockhampton	207,706	455,463
Ĺ	Cooktown	217,144	411,133
S	Port Adelaide	1,078,920	1,717,429
South Australia	Port Pirie Port Darwin	$33,325 \\ 90,100$	202,101
	Albany	219,902	147,232 820,542
Western Australia }	Freemantle	42,618	59,966
Tasmania	Hobart	204,007	546,357
Lasmania	Launceston	138,657	298,401
(Auckland	238,886	362,104
	Wellington	119,243	284,867
New Zealand	Bluff Harbour	$91,592 \\ 167,151$	167,601
1	Lyttleton	114,637	226,014 $99,971$
Li	200000000	111,007	00,011

Total trade of principal ports. The above figures, as already explained, only partially represent the relative position of the various ports. A better idea of their actual positions will be gained from the following table, which shows the value of the total trade, and the value to every ton of shipping, for the principal ports of each Colony, except Western Australia:—

Total Trade to the principal Ports of Australasia 1890.

Colony.	Chief Port.	Total Trade.	Trade to each ton of Shipping
New South Wales Victoria Queensland South Australia Tasmania New Zealand	Melbourne Brisbane Port Adelaide Launceston	£ 29,971,039 30,058,617 4,307,987 8,511,682 1,614,824 2,907,819	£ 10·0 7·3 5·2 5·0 5·4 10·2

The comparative importance of the shipping movements of Tonnage of the United Australasia may be seen from viewing them in connection with the Kingdom. tonnage annually visiting the chief ports of the United Kingdom. In absolute tonnage, it will be observed, Melbourne is exceeded only by London, Liverpool, Cardiff, and Newcastle. Hull comes next on the list, having a slight lead over Sydney, which in its turn exceeds Glasgow, Newport, Southampton, and all the other British ports. In the following table the figures for the British Ports as well as Australasian are for 1890:-

Tonnage of principal Ports of United Kingdom and Australasia.

Port.	Inwards.	Outwards.	Total.	
England—	Tons.	Tons.	Tons.	
London	7,708,705	5,772,062	13,480,767	
Liverpool	5,782,351	5,159,450	10,941,801	
Cardiff	3,173,699	5,641,511	8,815,210	
Newcastle	2,040,219	3,441,239	5,481,458	
Hull	1,997,138	1,665,996	3,653,134	
. Newport	920,560	1,316,430	2,236,990	
Southampton	888,352	813,133	1,701,485	
Scotland—				
Glasgow	1,121,700	1,697,662	2,819,362	
Leith	706,491	626,573	1,333,064	
Kirkcaldy	387,107	716,541	1,103,648	
Grangemouth	415,749	616,173	1,031,922	
Ireland—	,			
Belfast	243,255	86,924	330,179	
Dublin	248,732	79,033	327,765	
Australasia—		·		
Melbourne	2,051,826	2,045,156	4,096,982	
Sydney	1,644,589	1,356,632	3,001,221	
Adelaide	883,458	833,971	1,717,429	
Brisbane	415,814	415,350	831,164	
Albany	431,817	388,725	820,542	
Hobart	273,494	272,863	546,357	
Auckland	185,444	176,660	362,104	

The yearly movement of tonnage in the ports of Melbourne Tonnage of Melbourne and and Sydney far exceeds that of any other British possessions, Sydney. except Hong Kong. Two other exceptions might be mentioned

those of Gibraltar and Malta, but as these are important naval stations, and the trade is very limited compared with the tonnage, they can hardly be placed in the same category.

Nationality of Tonnage. The shipping trade of Australasia is almost entirely in British hands, as will be seen from the subjoined table. Although in recent years direct communication with continental Europe has been established, and two splendid lines of steamers have entered on the direct trade, the proportion of the total shipping belonging to Great Britain and her dependencies has fallen only from 92.9 to 87.6 per cent. during the period covered:—

Nationality of Tonnage.—External and Intercolonial Tonnage,

Inwards and Outwards.

Nationality.	1881.		1890.		Percentage of Tonnage of each Nation to Total Tonnage.	
	No.	Tonnage.	No.	Tonnage.	1881.	1890.
British	15,127	8,313,535	16,227	13,608,674	92.9	87.6
French	91	47,713	228	479,318	0.5	3.1
German	199	130,070	534	842,618	1.5	5.4
Scandinavian	133	66,566	172	121,214	0.7	0.8
United States	308	328,540	372	381,864	3.7	2.5
Other nationalities	77	57,121	96	108,560	0.6	.7
Total	15,935	8,943,545	17,629	15,542,248	100.0	100.0

. Under the term "British," used in the foregoing table, are included vessels owned in Australasia. The returns published by the various colonies are not in a form such as to admit of the purely local tonnage being distinguished from the other shipping of the empire. In the following table the number and tonnage

of vessels registered in each colony are given; the statement, Vessels registered in however, does not show the whole volume of shipping. Few of Australasia. the large class of vessels employed in the intercolonial trade have been built in Australasia, and are consequently not registered in local ports, so that the registrations are confined for the most part to vessels locally built :--

Vessels registered in Ports of different Colonies at the close of 1890.

	Vessels Registered.		
Colony.	Number.	Gross Tonnage	
New South Wales	1,095	123.432	
Victoria	396	86,170	
Queensland	124	24,215	
South Australia	304	35,314	
Western Australia	118	5,470	
Tasmania	224	19,803	
New Zealand	521	98,907	
Australasia	2,782	393,311	