SECTION VII.

PASTORAL PRODUCTION.

\S I. Initiation and Growth of Pastoral Industry.

1. Early Statistics.—In previous issues of the Year Book will be found a brief review of the history of the pastoral industry in Australia up to the year 1860. (See Year Book No. 6, page 330.)

2. Subsequent Statistics.—The statistical records of live stock in Australia prior to the year 1860 are somewhat defective, but from that year onwards fairly complete particulars are available in most of the States. At the present time, statistics of live stock are collected annually in all the States, principally through the agency of the police, but in the years 1885 to 1888 inclusive, and 1893 to 1895 inclusive, no such particulars were collected in South Australia, and similar gaps occur in the Victorian records for the periods 1895 to 1899 inclusive, and 1901 to 1903. In order to obtain totals for the Commonwealth for these years the missing numbers have been supplied by interpolation. The results so obtained probably differ but slightly from the actual numbers for the respective years.

3. Increase in Numbers.—Particulars concerning the numbers of each of the principal kinds of live stock in the Commonwealth at quinquennial intervals from 1860 to 1910, and thence onwards in single years, are given in the following table, and are shewn continuously in the graphs as given hereinafter.

During the fifty-four years covered by the table the live stock of the Commonwealth increased considerably, horses by 484 per cent., cattle 179 per cent., sheep 290 per cent., and pigs 146 per cent. The average annual increases which these aggregates represent are as follows:—Horses, 3.32 per cent. per annum; cattle, 1.92 per cent.; sheep, 2.55 per cent.; and pigs, 1.68 per cent.

		Year.		Horses. Cattle.		Sheep.	Pigs.
1860		•••		431,525	3,957,915	20,135,286	351,096
1865		•••		566,574	3,724,813	29,539,928	345,704
1870	•••	•••		716,772	4,276,326	41,593,612	543,388
1875				835,393	6,389,610	53,124,209	549,808
1880		•••		1,061,078	7,523,000	62,176,027	815,776
1885				1,143,064	7,397,847	67,491,976	748,908
1890				1,521,588	10,299,913	97,881,221	891,138
1895				1,680,419	11,767,488	90,689,727	822,750
1900				1,609,654	8,640,225	70,602,995	950,349
1905		•••		1,674,790	8,528,331	74,540,916	1,014,977
1910				2,165,866	11,744,714	92,047,015	1,025,850
1911				2,279,027	11,828,954	93,003,521	1,110,721
1912		•••		2,408,113	11,577,259	83,263,686	845,255
1913				2,521,983	11,483,882	85,057,402	800,505
1914				2,521,272	11,051,573	78,600,334	862,447

COMMONWEALTH LIVE STOCK, 1860 to 1914.

4. Fluctuations.-The increases referred to, however, have not been continuous, marked fluctuations having taken place during the period, mainly on account of the droughts which have from time to time left their impress on the pastoral history of Australia. These were in evidence in 1869, 1877, 1884, 1895 and subsequent years, 1902, to some extent in 1908, and in a severer form during the earlier half of 1912. The falling-off in the number of sheep in 1912 was 9,739,835, of cattle 251,695, and of pigs 265,466, The number of horses during 1913 was the being 10.47, 2.13 and 23.9 respectively. highest ever recorded in the Commonwealth. The winter of 1913 was dry over Southern Australia, though the crops subsequently recovered under the influence of fine Spring rains, but in 1914 and 1915, very pronounced drought conditions developedenveloping the whole of sub-tropical Australia (except the New South Wales coast) during 1914, and all the Central and North-eastern parts of the continent in 1915. Throughout many parts of Western Australia, South Australia, the Riverina, Victoria, and Tasmania, the year 1914 was the driest on record, and similarly throughout a large part of Queensland and North-eastern New South Wales, 1915 was the worst year on record. This drought was, with the exception perhaps of that of 1902, the most intense ever recorded, especially during the winter-spring seasons of 1914 which were phenomenally dry and disastrousresulting in a general failure of the crops all through the wheat belt in 1914, and subsequently heavy stock losses and the failure of the sugar orops of the East Coast, and many cf the cereal crops on the Downs in Queensland.

The extraordinary recuperative power of Australia is evidenced by the large increases in the numbers of stock which the good seasons, supervening on the various droughts, have witnessed. Thus, in the nine years from 1902 to 1911, horses increased by 754,426, cattle by 4,766,212, and sheep by 38,335,174, the corresponding increases per cent. per annum being horses 4.57 per cent., cattle 5.90 per cent., and sheep 6.30 per cent.

The years in which the numbers of live stock attained their maxima are as follows:---Horses, 1913, 2,521,983; cattle, 1894, 12,311,617; sheep, 1891, 106,421,068; and pigs, 1911, 1,110,721.

5. Live Stock in Relation to Population.—The number of each kind of live stock per head of the population of the Commonwealth has varied during the past fiftyfour years in the manner shewn in the succeeding table :—

Yea	ır.	Horses.	Cattle.	Sheep.	Pigs.	Yea	r. 	Horses.	Cattle.	Sheep.	Pigs.
1860	•••	0.38	3.45	17.58	0.31	1900		0.43	2.29	18.75	0.25
1865		0.41	2.68	21.25	0.25	1905		0.42	2.11	18.48	0.25
1870		0.43	2.60	25.24	0.33	1910	•••	0.49	2.65	20.80	0.23
1875		0.44	3.37	27.99	0.29	1911		0.50	2.59	20.36	0.24
1880		0.48	3.37	27.87	0.37	1912		0.51	2.45	17.59	0.18
1885		0.42	2.75	25.05	0.28	1913		0.52	2.36	17.46	0.16
1890	•••	0.48	3.27	31.06	0.28	1914	•••	0.51	2.24	15.91	0.17
1895	•••	0.48	3.36	25.93	0.24						

NUMBER OF LIVE STOCK PER HEAD OF POPULATION, 1860 to 1914.

Considered in relation to population, the live stock attained its maximum in the period 1890-5, and its minimum in the year 1902. During the period of fifty-four years under review, the number of horses varied but slightly in proportion to population, the range being from 0.38 to 0.52 per head. In the case of cattle, the limits of variation were 1.82 and 3.45; sheep, 13.85 and 31.06; and pigs, 0.16 and 0.37.

6. Live Stock in Relation to Area.—The numbers of live stock per square mile in the several States and Territories of the Commonwealth on 31st December, 1914, were as follows :—

States and Te	rritories.		Horses.	Cattle.	Sheep.	Pigs.
New South Wales			2.36	7.99	106.23	0.93
Victoria	•••		6.28	15.50	137.13	2.77
Queensland			1.10	8.13	34.49	0.25
South Australia			0.70	0.79	11.07	0.18
Western Australia			0.16	0.88	4.57	0.06
Tasmania			1.61	6.81	63.89	1.33
Northern Territory			0.04	0.79	0.13	0.002
Federal Territory			1.89	7.77	151.11	0.25
Commonwealth			0.85	3.72	26.42	0.29

NUMBER OF LIVE STOCK PER SQUARE MILE, 31st DECEMBER, 1914.

7. Minor Classes of Live Stock.—The numbers of minor classes of live stock returned as at 31st December, 1914, were as follows:—Goats, 233,644; camels, 11,453; mules and donkeys, 9283; and ostriches, 1658. Of these, goats were most numerous in Queensland, camels and donkeys in Western Australia, and mules and ostriches in South Australia. In the raising of goats, considerable attention has in recent years been devoted to the angora goat and its product—mohair, and over 20,000 angora goats are included in the total of 233,644 goats shewn above. Of these, 7349 were in New South Wales, and 5543 in Queensland, while the quantity of mohair produced in the latter State in 1914 was set down at 3427 lbs., and the number of skins placed on the market was returned as 632.

8. Net Exports of Principal Pastoral Products.—The quantities by which the exports of the principal pastoral products of the Commonwealth exceeded the imports for the years 1910 to 1914-15 are as follows :—

QUANTITIES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS

					1	1	ł	1	1	1
		Prod	ucts.		Unit of Quan- tity.	J910.	1911.	1912.	1913.	1914-15.
Animals	livin	g)					<u> </u>			
Cattle					No.	3.641	9.861	16.050	14,548	10,121
Horses	3				1	6,619	4,377	7.055		
Sheep						10,281				
					0+	14.145				
Glue Pie						20,570				
Glycerin					112		*	*	*	*
TT	-		•••	••••		304,006	287,957	152.369	279.108	206.602
	••	•••			1 amt	7,677		10,416		
TT	••	•••	•••	••• ••		• ',0''	*	*	14,110	*
Meats-	••	•••	•••		• •					
Frozei	Deef				. 1b.	100 401 146	100 774 207	140 100 100	010 011 150	292,056,035
FTUZEI			d Lamb						204,919,042	
••										
,,			d Hares		1 11	9,652,127				10,290,016
- 2 -	Othe				. lb.	2,640,275	4,025,715	4,797,512	7,685,149	13,107,560
Potted				•••						
Preser	ved in	Tins,	, etc.			33,556,048				
Other.		•••	•••			591,196	1,062,233	2,957,745	1,154,580	298,019
Sausag	se Cas:	ings	•••		. ,,	*	*	•	*	*
Skins-										
Hides		•••	•••		. No.	286,639				
Sheep					. ,,	11,119,338	9,748,630	10,650,834	10,997,873	10,396,987
Rabbit	and l	Hare			. cwt.	86,930	92,587	87,878	86,998	56,437
Other.	inclue	ling U	Indressed	Furs	. No.	*	*	*	*	*
Tallow					. cwt.	1,256,661	1.343.046	1.058.341	1,435,156	1.106.023
·Wool-G	reasy				116					443,812,275
	coure	1				77.042.042				
	ops					1.123.469				
-	0.00		•••			-,-10,100	2,010,100	0,010,000	0,001,122	-,000,000

OF THE COMMONWEALTH, 1910 to 1914-15.

282

* Quantity not available.

The values of the net exports for the same five years are furnished in the next table and amount to no less a total than $\pounds 190,825,736$ for the period, or an average of $\pounds 38,165,147$ per annum, of which wool represents nearly 68 per cent. Meats, skins, and tallow rank next in order of importance.

VALUE OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS OF THE COMMONWEALTH, 1910 to 1914-15.

	P	roducts	3.			1910.	1911.	1912.	1913.	1914-15.
Animals (li	ving)—					£	£	£	£	£
Cattle						11,516	37,864	64,233	50,229	19,558
Horses		•••				-51,267	-128,022	-28,017	63,389	378.505
Sheep			•••	•••		16,448	12,732	61,879	46,565	14,204
Bones	•••					7,366	9,798	12,310	22,021	20,918
Glue Piece	s and S	inews				11,037	13,645	18,139	23,328	17,641
Glycerine						10,169	15,926	13,621	13,769	13,900
Hair						25,879	24,987	29,950	28,160	26,445
Hoofs						2,804	3,169	4,922	6,178	4,156
Horns						25,532	25,673	30,339	30,444	15,300
Meats-					- 1					
Frozen E						1,179,060	1,101,914	1,630,306	2,652,144	4,989,810
	futton a					2,161,495	1,633,597	1,592,302	2,896,292	3,413,848
	labbits	and He	res			486,592	407,034	320,887	497,568	531,920
	ther	•••				40,816	49,390	59,706	99,509	180,841
Potted an			•••			70,504	57,356	60,779	203,412	347,471
Preserve	d in Tir	ns, etc.				602,880	756,148	611,288	1,062,618	1,829,601
Other			•••			8,173	13,010	12,944	17,677	4,375
Sausage (Casings					38,204	37,129	8,735	32,133	25,872
Skins—										
Hides						286,274	467,364	871,953	1,418,191	1,234,871
Sheep		•••				2,003,810	1,603,718	1,988,122	2,480,900	1,743,209
Rabbitan						566,739	498,037	576,179	620,487	230,139
Other, in	cluding	Undre	essed	Furs		822,095	476,872	647,959	746,023	106,319
Tallow						1,888,796	1,934,009	1,545,033	2,157,610	1,566,907
Wool-Gre	asy	•••	•••			23,431,947	21,388,155	22,066,585	21,472,360	17,470,385
	oured					5,202,683	4,398,126	3,957,792	4,380,184	4,113,951
To	ps	••• •	•••	•••		134,874	275,406	323,299	415,670	511,021
Total V	alues			•••		38,984,426	35,112,037	36,481,245	41,436,861	38,811,167

Note. - signifies net imports.

§ 2. Horses.

1. Suitability of Australia for Horse-breeding.—From the earliest times the suitability of the climate and pastures of Australia for the production of serviceable breeds of horses has been fully recognised. By the importation of high-class sires, and the careful selection of breeding mares, these natural advantages were utilised to the fullest extent, all classes of horses being bred. As a consequence of this combination of advantages, the Australian horse, whether of the heavy draught, medium weight, or light saddle and carriage variety, compares more than favourably with the product of other lands. The Australian horse has been found suitable for the army in India, and large numbers are obtained annually for remount purposes.

2. Distribution throughout the Commonwealth.—As regards numbers, the State of New South Wales, the earliest settled of the group, established a lead, which it retained up to the end of 1913. For some years past Queensland has made rapid progress in this regard, and in 1914 there were 742,159 horses in that State, in the same year there being 731,735 in New South Wales, and 552,053 in Victoria. The figures for the several States for a series of years are as follows :—

Year.	n.s.w.	Victoria.	Q'sland.	S. Aust.	W. Aust.	Tas.	N. T.	Fed. Terr.	Common- wealth.
1860	251,497	76,536	23,504	49,399	9,555	21,034			431,525
1865	282,587	121,051	51,091	73,993	15,700	22,152			566,574
1870	337,597	167,220	83,358	83,744	22,174	22,679			716,772
1875	357,696	196,184	121,497	107,164	29,379	23,473			835,393
1880	395,984	275,516	179,152	148,219	34,568	25,267	*2,372	1	1,061,078
1885	344,697	304,098	260,207	164,753	34,392	28,610	6,307		1,143,064
1890	444,163	436,459	365,812	187,686	44,384	31,165	11,919		1,521,588
1895	499,943	424,995	468,743	181,839	58,506	31,580	14,813		1,680,419
1900	481,417	392,237	456,788	166,790	68,253	31,607	12,562		1,609,654
1905	506,884	385,513	430,565	197,099	97,397	37,101	20,231		1,674,790
1910	650,636	472,080	593,813	249,326	134,114	41,388	24,509		2,165,866
1911	687,242	507,813	618,954	259,719	140,277	41,853	21,407	1,762	2,279,027
1912	714,952	530,494	674,573	276,539	147,629	44,039	18,382	1,505	2,408,113
1913	744,458	562,331.	706,472	283,641	156,636	43,941	22,792	1,712	2,521,983
1914	†731,735	552,053	742,159	267,877	161,625	42,232	21,985	1,606	2,521,272

NUMBER OF HORSES IN STATES, TERRITORIES, AND COMMONWEALTH,

1860 to 1914.

* Statistics not collected prior to 1880.

† 30th June, 1915.

3. Proportion in the Several States and Territories.—The percentages of the numbers of horses in the several States and Territories on the total for the Common-wealth for 1901 and the past five years are as follows :—

PERCENTAGE OF HORSES IN EACH STATE AND TERRITORY ON THE TOTAL FOR COMMONWEALTH, 1901 and 1910 to 1914.

Year.	N.S.W.	Victoria.	Q'sland.	S. Aust.	W. Aust.	Tas.	North'n Terr.	Fed. Terr.	Common- wealth.
1901 1910 1911	% 30.03 30.04 30.15	$ \begin{array}{r} & & \\ & & \\ & 23.90 \\ & 21.80 \\ & 22.28 \end{array} $	$\frac{\%}{28.52} \\ 27.42 \\ 27.16$	% 10.20 11.51 11.40		% 2.00 1.91 1.84	% 0.80 1.13 0.94	% 0.08	% 100.00 100.00 100.00
1912 1913 1914	29.69 29.52 29.02	22.03 22.30 21.90	$28.01 \\ 28.01 \\ 29.44$	$11.48 \\ 11.25 \\ 10.62$	$\begin{array}{c} 6.13 \\ 6.21 \\ 6.41 \end{array}$	$1.83 \\ 1.74 \\ 1.68$	0.77 0.90 0.87	0.06 0.07 0.06	100.00 100.00 100.00

During the period under review, the proportions in Queensland, South Australia, and Western Australia have increased, those in New South Wales and Victoria have diminished, while in the case of Tasmania and the Northern Territory the proportion in 1914 was practically identical with that in 1901.

4. Oversea Export Trade in Horses.—Australia's export trade in horses is a fairly considerable, though somewhat fluctuating, one. During the past five years it has varied in number between 8,562 for the year 1913 and 24,107 in 1914-15, and in value between £163,730 in the former and £1,289,307 during the latter year. The total number of horses exported during the five years amounted to 64,146, an average of 12,829 per annum. The total value of the exports for the period was £1,289,307, or £257,861 per annum. The average export value per head for the period was £20 2s. 0d. The numbers exported to the principal countries concerned in this trade are as follows :—

•

Country (o which (Export	jeđ.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 years.
				No.	No.	No.	No.	No.	No.
India				9,187	7,416	7,299	6,775	21,162	51,839
Java				450	880	584	799	65	2,778
Straits Sett	lements			605	481	410	436	24	1,956
Philippine I				727	350	247	88		1,412
~				265	198	156	3		622
.				403	112	46	95		656
T3' ''				190	180	146	106	117	739
New Zealar				122	92	77	90	52	433
T				43	45	41	59	16	204
n *				110	47	56	57	-9	279
a					165				165
01 .				1	13	25			39
Hong Kong					32				32
South Afric			~	1	12	13	8	3	37
Other Coun		·		57	86	107	46	2,659	2,955
To	tal .		•••	12,161	10,109	9,207	8,562	24,107	64,146

NUMBER AND DESTINATION OF HORSES EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

The corresponding particulars relative to the value of the horses exported are given in the next table :—

Country to which	Exported.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 years.
9		£	£	£	£	£	£
India		171,862	135,840	129,186	107,925	387,046	931,859
Java		10,424	19,235	13,459	21,465	1,243	65,826
Straits Settlements		21,185	12,939	11,322	11,614	555	57,615
Philippine Islands		14,971	7,795	5,449	2,061		30,276
Ceylon		7,486	3,622	3,403	840		15,351
Mauritius		7,191	2,371	1,358	3,229		14,149
Fiji		4,566	4,788	3,642	3,215	3,337	19,548
New Zealand		12,403	17,322	11,435	5,319	9,765	56,244
Japan		1,860	2,115	2,650	2,836	875	10,336
Papua		2,055	920	899	1,271	171	5,316
Siam			7,298				7,298
China	••• ···	60	390	625			1,075
Hong Kong			800				800
South African Unic	on	25	500	695	211	60	1,491
Other Countries		2,016	4,016	5,421	3,744	56,926	72,123
Total		256,104	219,951	189,544	163,730	459,978	1,289,307

VALUE OF HORSES EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

It will be seen from the foregoing tables that the export trade in horses with India, the Straits Settlements, and Java was fairly uniform throughout the first four years under review, but that the particulars for some of the other countries specified exhibited marked fluctuations.

During the year ended 30th June, 1915, a large increase took place in the number and value of horses exported to India and "Other Countries." The latter included 2270 horses valued at £50,075 shipped to France, while the former increase is accounted for by the greater demand for remounts for the Indian Army. A large number of horses also left the Commonwealth with the Australian Imperial Forces and are not included with the above figures.

The number of horses imported into the Commonwealth is comparatively small, consisting mainly of valuable animals introduced for breeding purposes, and imported principally from New Zealand and the United Kingdom. The average value per head of the horses imported during the five years was £71 17s. Od., as compared with £20 2s. Od. per head for the exports for the same period. The average number imported per annum was, however, only 2938, and the average annual value £210,944. The following table furnishes a comparison of imports and exports of horses during the five years 1910 to 1914-15;—

Year.		Imp	ports.	Exp	orts.	Net Exports.		
1641		No.	Value.	No.	Value.	No.	Value.	
	-		- £ -		£		£	
1910		5,542	307,371	12.161	256,104	6.619	- 51,267	
1911		5,732	347,973	10,109	219,951	4,377	-128,022	
1912		2,152	217,561	9,207	189,544	7,055	- 28,017	
1913		801	100,341	8,562	163,730	7,761	63,389	
1914-15		452	81,473	24,107	459,978	23,655	378,505	
Total for 5	years	14,679	1,054,719	64,146	1,289,307	49,467	234,588	

COMMONWEALTH IMPORTS AND EXPORTS OF HORSES, 1910 to 1914-15.

Note. - signifies value of net imports.

c

5. Comparison with other Countries.—The numbers of horses in some of the leading horse-breeding countries of the world, according to the latest available returns, are as follows :—

NUMBER OF HORSES IN SOME OF THE LEADING HORSE-BREEDING COUNTRIES IN THE WORLD.

Number of Number of Country. Date. Country. Date. Horses. Horses. 30,437,871 596,136 1912 Sweden ... 1913 Russian Empire Utd. States America 1910 23,015,902 Cuba 1912 334,694 556,307 1912 9,427,000 Uruguay 1908 Argentine Republic ... 4,523,059 Germany ... 1912 Bulgaria 1910 477,733 ••• Austria-Hungary¹ ... 4,379,884 1910-1913 1914 568,240 Denmark •• 3,230,700 2,521,272 1914 1912 525,853 France Spain •• Chile² Australia... 1914 1912.13553,869 New Zealand 404,284 Canada 1911 2,595,912 1911 •• •• 1914 1,915,533 1913 334,445 United Kingdom Netherlands ... •• 317,080 Japan 1913 1,582,125 Belgium... 1910 . . . •• $221,140 \\ 167,714$ 1913-14 British India 1,643,374 Algeria ... 1912 ••• ... Italy 1908 955,878 Norway ... 1910 Rumania ... 1900 864,324 1910 152,523 ••• Servia ... 1902 Mexico 859,217 Switzerland 1911 144,128 ••• • • • Union of Sth. Africa 1911 714,414 Egypt ... 1913 47,911

1. Austria 1910, Hungary 1913, Croatia-Slavonia 1911, Bosnia-Herzegovina 1911. 2. Including mules and asses.

CATTLE.

9. Relation to Population.—In proportion to population, horses are much more numerous in the Northern Territory than in any other of the principal divisions of the Commonwealth. Queensland is next in order, while Tasmania has the smallest number of horses per head. In all cases the number of horses per head of population was somewhat higher in 1914 than in 1901. Particulars for 1901 and the past five years are as follows:—

NUMBER OF HORSES PER HEAD OF POPULATION, 1901 and 1910 to 1914.

Year	•	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Federal Terr.	C'wlth.
1901		0.35	0.32	0.91	0.46	0.38	0.18	2.76		0.42
1910		0.40	0.36	0.99	0.61	0.48	0.21	7.42		0.49
1911		0.41	0.37	0.99	0.62	0.48	0.22	6.59	0.92	0.50
1912		0.40	0.38	1.06	0.64	0.48	0.22	5.29	0.78	0.51
1913		0.41	0.40	1.07	0.64	0.49	0.22	6.21	0.86	0.52
1914		0.39	0.39	1.10	0.61	0.50	0.21	5.53	0.87	0.51

§ 3. Cattle.

1. Purposes for which Raised.—In all the States of the Commonwealth, cattleraising is carried out on a more or less extensive scale, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry in the Commonwealth led to a considerable increase in numbers and improvement in quality of the dairy herds of Victoria, New South Wales, and Southern Queensland in particular, the sub-tropical portion of Australia being apparently the best adapted to this industry. On the other hand, by far the finest specimens of beef-producing cattle are those raised in the tropical districts of the Commonwealth, *i.e.*, in the northern parts of Queensland, in the Northern Territory, and in the Kimberley districts in the north of Western Australia.

2. Distribution throughout Commonwealth.—Until 1880 New South Wales occupied the leading position in the Commonwealth group as a cattle-raising State, but in that year Queensland forged ahead and obtained a lead which it has since maintained. The extent of this lead has, however, varied considerably, owing principally to the effects produced by the tick fever and droughts, from both of which causes the Queensland herds suffered more severely than those of the other States. In fact, during the period from 1894, when the number of cattle in Queensland attained its maximum of rather more than 7,000,000, to 1903, when the number recorded was less than 2,500,000, an uninterrupted decline was experienced. During the eleven years ended 1914, however, a rapid improvement took place, and the total reached on 31st December, 1914, was over 5,450,000.

The numbers of cattle in the several States and the Northern Territory at quinquennial intervals from 1860 to 1910 and for each subsequent year are as follows :—

CATTLE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Fed. Ter.	C'wealth.
				1	1		1		
1860	2,408,586	722,332	432,890	278,265	32,476	83,366			3,957,915
1865	1,961,905	621,337	848,346	158,057	45,148	90,020		i	3,724,813
1870	2,195,096	721,096	1,076,630	136,832	45,213	101,459			4,276,326
1875	3,134,086	1,054,598	1,812,576	219,240	50,416	118,694	•••	•••	6,389,610
1880	2,580,040	1,286,267	3,162,752	283,315	63,719	127,187	*19,720		7,523,000
1885	1,317,315	1,290,790	4,162,652	271,478	70,408	138,642	146,562		7,397,847
1890	2,091,229	1,782,978	5,558,264	359,938	130,970	162,440	214,094	••••	10,299,913
	2,150,057						280,957	••••	11,767,488
1900	1,983,116	1,602,384	4,078,191	214,761	338,590	165,516	257,667	•••	8,640,225
1905	2,337,973	1,737,690	2,963,695	304,027	631,825	206,211	346,910		8,528,331
1910	3,140,307	1,547,569	5,131,699	384,862	825,040	201,854	513,383		11,744,714
1911	3,185,824	1,647,127	5,073,201	393,566	843,638	217,406	459,780	8,412	11,828,954
1912	3,033,726	1,508,089	5,210,891	383,418	806,294	222,181	405,552	7,108	11,577,259
									11,483,882
1914	2,472,631	1,362,542	5,455,943	300,579	863,835	176,524	414,558	4,961	11,051,573

NUMBER OF CATTLE IN STATES, TERRITORIES, AND COMMONWEALTH, 1860 to 1914.

* Statistics not collected prior to 1880. + 30th June, 1915.

3. Proportion in each State.—During the period elapsing between 1901 and 1914 the proportion of cattle in the several States and the Northern Territory has varied considerably, as shewn hereunder :—

PERCENTAGE OF CATTLE IN EACH STATE AND TERRITORY ON TOTAL FOR COMMONWEALTH, 1901 and 1910 to 1914.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Federal Territory.	C'wealth.
	%	%	%	%		%	%		%
1901	24.11	19.12	44.43	2.65	4.69	1.99	3.01		100.00
1910	26.74	13.18	43.69	3.28	7.02	1.72	4.37		100.00
1911	26.92	13.92	42.89	3.33	7.14	1.84	3.89	0.07	100.00
1912	26.20	13.03	45.01	3.31	6.97	1.92	3.50	0.06	100.00
1913	24.51	13.31	46.34	3.07	7.27	1.79	3.64	0.07	100.00
1914	22.37	12.33	49.37	2.72	7.82	1.60	3.75	0.04	100.00
]	

A comparison of the positions of the several States in 1901 and 1914 shews that, while New South Wales and Victoria's proportion of the Commonwealth herds suffered considerable diminution, and that for Tasmania a falling off to a slight extent, fairly large increases are in evidence in the other States, more especially in Western Australia, the Northern Territory also shewing an upward tendency.

4. Imports and Exports of Cattle.—Although the various products of the cattleraising industry bulk largely in the export trade of the Commonwealth, the export of live cattle from Australia has never been considerable. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for breeding. Details are as follows :—

		Imp	orts.	Exp	orts.	Net Exports.		
Year.	. -	No.	Value.	No.	Value.	No.	Value.	
			£		£		£	
1901		114	3,591	2,413	22,088	2,299	18,497	
1910		104	8,665	3,745	20,181	3,641	11,516	
1911		103	7,806	9,964	45,670	9,861	37,864	
1912]	33	1,502	16,083	65,735	16,050	64,233	
1913		57	5,572	14,605	55,801	14,548	50,229	
1914		221	21,090	10.342	40,648	10,121	19,558	

COMMONWEALTH IMPORTS AND EXPORTS OF CATTLE, 1901 and 1910 to 1914.

The average value of the cattle imported into the Commonwealth during the last five years was £86 3s. 4d. per head, while the average value of the cattle exported during the same period was £4 3s. 4d. The imported cattle were principally for stud purposes.

The comparatively large exports for the years 1912 and 1913 were due to shipments to Java and Philippine Islands valued at $\pounds 42,290$ and $\pounds 61,766$ respectively. The bulk of these cattle were exported from Western Australia.

5. Cattle Slaughtered.—Complete returns of the number of cattle slaughtered annually in the Commonwealth are not obtainable, as these particulars were collected in Tasmania prior to 1911 for Hobart and Launceston only, and were collected in South Australia for the first time in 1908 in respect of the year 1907. Estimates of the missing data for these States have, however, been made, as shewn in the following table:—

CATTLE (INCLUDING CALVES) SLAUGHTERED IN STATES, TERRITORIES AND COMMONWEALTH, 1901 and 1910 to 1914.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. †	N.T.	Fed. Ter.	C'wealth.
1901 1910 1911 1912 1913 1914	335,823 483,947 548,651 612,773 679,901 635,196	251,477 319,665 347,926 368,512 410,694 470,011	444,264	*72,000 84,164 87,293 113,344 116,282 112,183	39,424 55,723 58,049 59,695 62,613 61,387	34,000 37,000 38,000 41,000 30,038 30,064	4,061 \$4,061 \$4,061 \$4,061 *4,000	 269 267 276 142	$\begin{array}{c} 1,110,157\\ 1,363,074\\ 1,528,513\\ 1,779,984\\ 2,007,232\\ 2,089,852 \end{array}$

* Estimated. † Partly estimated prior to 1913. 1 Not available. § 1910 figures, those for 1911, 1912 and 1913 not available.

For Hobart and Launceston only, the figures for the years 1901, 1909, and 1910 were, respectively, 8815, 10,059, and 11,569.

6. Export of Beef Preserved by Cold Process.—A large export trade in beef preserved by cold process is carried on by the Commonwealth, mainly with the United Kingdom, the Philippine Islands, and the South African Union. The quantities so exported during the five years 1910 to 1914-15 are as follows:—

CATTLE.

Country to wh	ich	Exported.		1910.	1911.	1912.	1913.	1914-15.	Total for 5 years.
			_	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom				91,250,736	81,501,060	108.886.860	169,963,291	253 396,440	704.998.387
Philippine Islands				10,020,181	10.336.535	13,996,124		11.352.425	60.240.712
South African Ur				0 704 007	7.337.652				26.201.769
Egypt				1,362,686	1,905,595	2,084,806			13.624.940
Straits Settlement				1,073,889	1,646,590	1,781,817			8,816,397
United States					-,010,000	289			21.012.267
17-14-				000 140	1,526,389	1,090,044			5,959,112
T4 - 1	•••		••••	207 026	2,509,466	2,127,876			11,491,071
	•••	•••	•••	385,895	618,688	551,012			2,195,604
Hong Kong	•••	•••	••••		010,000				
Germany	•••	•••	•••			97,491			1,911,290
Canada	•••	•••	•••		239,653	904,832			4,557,700
Gibraltar	•••	•••	•••	70,908	403,626		353,582		1,315,405
Japan			•••	22,119	77,223	1,098			137,145
Ceylon				99,564	151,104	150,620			833,712
Hawaiian Islands				71,606	272,559	1,198.140	2,356,115	1,538,997	5,437,417
Other countries				96,103	260,277	110,521	1,624,773	584.514	2.676.188
Total		•••			108,786,417		218,918,606		871,409,116

QUANTITY OF BEEF PRESERVED BY COLD PROCESS EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

The value of the beef preserved by cold process exported from the Commonwealth during the same years is as follows :---

Country to wh	ich	Exported.		1910.	1911.	1912.	1913.	1914-15.	Total for 5 years.
				£	£	£	£	£	£
United Kingdom	•••	•••		967,662	813,393	1,245,536	2,037,978	4,430,370	9,494,939
Philippine Islands	5			126,719	114,989	162,555	183,047	169,327	756,637
South African Ur	nion			36,559	67.940	97,601	65,906	2,500	270.506
Egypt				14.582	19,308	24,537	49,134	71.040	178,601
Straits Settlemen	ts			12,452	21,065	20,141	25,576	33,447	112,681
United States			!			5	66,838	209,938	276.781
Malta				9,790	15,412	11,491	13,214	22,349	72,256
Italy			l	3,866	26,497	23,173	75,130	2,130	130,796
Hong Kong				3,826	6,370	4,346	4,392	2,924	21,858
Germany			(1,219	23,388		24,607
Canada			!		3.707	16,831	44,456	1.272	66,266
Gibraltar				517	3,751		3,595	6,691	14,554
Japan		•••		205	694	13	350		1,262
Ceylon				1,035	1,315	1,367	2,643	3,003	9,363
Hawaiian Islands		•••		690	4,413	20,325	38,003	24,498	87,929
Other countries	•••	•••		1,243	3,278	1,591	18,625	10,565	35,302
Total		•••		1,179,146	1,102,132	1,630.731	2,652,275	4,990,054	11,554,338

VALUE OF BEEF PRESERVED BY COLD PROCESS EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

During the five years under review, the largest of Australia's customers for beef preserved by cold process has been the United Kingdom, while the most consistent and the second largest customer has been the Philippine Islands; the South African Union and Egypt ranked next in order of importance. The exporting States during 1914-15 were: Queensland, 244,017,053 lbs., valued at £4,065,833; New South Wales, 23,626,403 lbs., valued at £444,561; Victoria, 19,426,042 lbs., valued at £384,804; and South Australia, 4,996,991 lbs., valued at £94,856.

7. Comparison with other Countries.—In the following comparison of the herds of Australia with those of some of the principal cattle-raising countries of the world, the latest available figures have been inserted in each case :—

Country.	Date.	No. of Cattle.	Country.		Date.	No. of Cattle
British India ¹ U. S. of America Russian Empire Argentine Republic Germany France United Kingdom Australia United Kingdom Uruguay Uruguay Italy Italy Mexico Sweden Rumania ¹	1913-14 1910 1912 1912 1912 1914 1914 1914 1914 1908 1911 1908 1911 1902 1912	$125,041,337\\63,682,648\\41,356,310\\29,120,000\\20,182,021\\17,648,787\\13,120,649\\12,144,563\\11,051,573\\8,192,602\\6,533,436\\6,198,861\\5,796,949\\5,142,457\\2,829,553\\2,720,741\\2,588,526\\$	Spain Denmark Netherlands New Zealand Belgium Chile Bulgaria Switzerland Japan Algeria Norway Ceylon Servia Portugal Egypt Tunis	· · · · · · · · · · · · · · · · · · ·	1912 1914 1913 1911 1910 1912-13 1910 1911 1913 1912 1910 1911 1911	2,561,894 2,462,862 2,096,599 2,020,171 1,879,754

NUMBER OF CATTLE IN VARIOUS COUNTRIES.

 Including buffaloes.
 Austria, 1910, Hungary 1913, Croatia-Slavonia 1911, and Bosnia-Herzegovina 1911.

S. Relation to Population.—The number of cattle per head of population differs considerably in the several States, and is also subject to marked variation from year to year in the same State. Particulars for 1901 and the past five years are as follows:—

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Northern Territ'ry.	Fed. Terr.	C'wealth.
1901 1910 1911 1912 1913 1914	$1.49 \\ 1.91 \\ 1.88 \\ 1.71 \\ 1.54 \\ 1.33$	$1.34 \\ 1.21 \\ 1.23 \\ 1.09 \\ 1.08 \\ 0.95$	7.44 8.57 8.15 8.19 8.06 8.06	0.63 0.95 0.94 0.89 0.82 0.68	2.06 2.98 2,87 2.63 2.60 2.67	$\begin{array}{c} 0.96 \\ 1.04 \\ 1.12 \\ 1.13 \\ 1.02 \\ 0.88 \end{array}$	54.68 150.86 141.56 116.71 113.74 104.34	 4.38 3.66 3.84 3.57	2.222.652.592.452.362.24

NUMBER OF CATTLE PER HEAD OF POPULATION, 1901 and 1910 to 1914.

For the Commonwealth as a whole the ratio of cattle to population is 1 per cent. greater for 1914 than for 1901, and exhibits a continuous increase from 1902 to 1910, while the proportion for 1911 is approximately the same as for the previous year; 1912, 1913 and 1914 shew a slight decline. The excess of the 1914 figures over those for 1901 is in evidence in the States of Queensland, South Australia, and Western Australia, and is most marked in the case of the Northern Territory. In New South Wales, Victoria, and Tasmania the ratios for 1914 are the lowest for the period under review.

§ 4. Sheep.

1. The Founding of the Commonwealth Pastoral Industry.—Fortunately for Australia, the suitability of its climate and general conditions for the production of a high class of wool was, at an early date in the history of its settlement, surmised and tested by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. To the energy of this enterprising pastoralist is due in large measure the rapid and extremely satisfactory development of Australia as a producer of fine wool, and though SHEEP.

it would appear that the introduction of the Merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the pastoral industry in Australia must certainly be his.

2. Distribution throughout Commonwealth.—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of the mother State, New South Wales has maintained amongst the Commonwealth group the lead in sheep production which naturally attached to it as the portion of the Commonwealth in which settlement was first effected. From 1878 onwards, the number of sheep in New South Wales has, in every year except 1902, 1908, and the past five years represented more than half the total for the Commonwealth, and even in these years it fell but little short of that amount.

The number of sheep in the several States and Territories at quinquennial intervals from 1860 to 1910, and for each year onwards to 1914, is as follows:----

NUMBER OF SHEEP IN STATES, TERRITORIES, AND COMMONWEALTH, 1860 TO 1914.

Year.	New South Wales.	Victoria.	Queens- land.	South Aust.	Western Aust.	Tas- mania.	Northern Territory	Federal Territory.	Total C'wealth.
1860	6.119.163	5,780,896	3,449,350	2,824,811	260.136	1.700.930			20,135,286
1865	8.132.511	8.835.380		3,779,308	445.044	1.752.719			29,539,928
1870	16.308.585		8.163.818	4,400,655	608,892	1,349,775			41,593,612
1875		11,749,532	7.227.774	6.179.395	881.861	1.731.723			53,124,209
1880		10.360.285		6.443.904	1.231.717	1.796.715	*9,318		62,176,027
1885	37,820,906	10,681,837	8,994,322	6,593,648	1,702,719	1,648,627	49,917		67,491,976
1890	55,986,431	12,692,843	18,007,234	7,004,642	2,524,913	1,619,256	45,902		97,881,221
1895	47,617,687	12,791,084	19,856,959	6,531,006	2,295,832	1,523,846	73,313		90,689,727
1900	40,020,506	10,841,790	10,339,185	5,235,220	2,434,311	1,683,956	48,027		70,602,995
1905	39,506,764	11,455,115	12,535,231	6,277,812	3,120,703	1,583,561	61,730		74,540,916
1910	45,560,969	12,882,665	20,331,838	6,267,477	5,158,516	1,788,310	57,240		92,047,015
1911			20,740,981	6,171,907	5,411,542	1,823,017	50,983	224,764	93,003,521
1912	38,855,861	11,892,224	20,310,036	5,481,489	4,596,958	1,862,669	75,808	188,641	83,263,686
1913	39,701,348			5,073,057	4,421,375	1,745,356	67,109	148,875	85,057,402
1914	1132,874,359	12,051,685	23,129 919	4,208,461	4,456,186	1,674,845	70,200	134,679	78,600,334

* Statistics not collected prior to 1880. † 30th June, 1915.

3. Proportion in the Several States and Territories.—Particulars concerning the relative positions of the several States and Territories with respect to the total flocks of Australia during the years 1901 and 1910 to 1914, and the variations in such positions which have taken place during those years are as hereunder :—

PERCENTAGE OF SHEEP IN EACH STATE AND TERRITORY ON TOTAL FOR COMMONWEALTH, 1901 and 1910 to 1914.

Ye	ar.	N.S.W.	Vic.	Q'sland.	S. Aust.	W. Aus.	Tas.	N.T.	Fed. Terr.	C'wealth
		%	%	%	%	%	%	%	%	%
1901	•••	58.10	14.82	13.92	6.95	3.65	2.49	0.07		100.00
1910		49.50	14.00	22.09	6.81	5.60	1.94	0.06		100.00
1911		48.09	14.90	22.30	6.64	5.82	1.96	0.05	0.24	100.00
1912		46.67	14.28	24.39	6.58	5.52	2.24	0.09	0.23	100.00
1913		46.68	14.24	25.61	5.96	5.20	2.05	0.08	0.18	100.00
1914		41.83	15.33	29.43	5.35	5.67	2.13	0.09	0.17	100.00

During the period, the proportion of total Commonwealth flocks declined considerably in the case of New South Wales, and in a less marked degree in South Australia and Tasmania, while in the case of Queensland a marked advance in proportion was experienced, and there were smaller advances in Victoria and Western Australia.

SHEEP.

4. Oversea Imports and Exports of Sheep.—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively small importance. The principal countries to which such exports have been consigned during recent years are the South African Union, Straits Settlements, and Papua, Western Australia being the principal exporting State. The following are the particulars of the imports and exports for the years 1901 and 1910 to 1914 :—

COMMONWEALTH IMPO	RTS AND	EXPORTS	0F	SHEEP.	1901	and	1910	to	1914.	
-------------------	---------	---------	----	--------	------	-----	------	----	-------	--

	Year.		Imp	orts.	Exp	orts.	Net Exports.			
1			No.	Value.	No.	Value.	No.	Value.		
		~-		£		£		£		
1901			553	12,134	12,094	12,104	11,541			
1910			2,863	14,008	13,144	30,456	10,281	16,448		
911			5,254	25,997	24,219	38,729	18,965	12,732		
912			2,903	10,643	34,113	72,522	31,210	61,879		
.913			8,448	28,508	41,770	75,073	33,322	46,565		
914			6,140	23,622	16,889	37.826	10,749	14,204		

Note. - signifies net imports.

5. Sheep Slaughtered.—The numbers of sheep slaughtered in the several States during 1901 and from 1910 to 1914 are as follows :—

SHEEP (INCLUDING LAMBS) SLAUGHTERED, 1901 and 1910 to 1914.

Year.	N.S.W.	Victoria.	Q'land.	Sth. Aust.	W. Aust.	Tas.†	N.T.	Fed. Terr.	C'wealth.
1910 1911 1912 1913		4,245,881 4,348,363	981,153 1,273,332 1,375,827	$1,316,388 \\1,275,734 \\1,332,838 \\1,222,315$	$\begin{array}{r} 428,534\\549,977\\622,555\\610,214\\602,383\\588,342\end{array}$	357,000 315,726	$^{\pm 516}_{\pm 516}$	$7,366 \\ 6,587 \\ 4,765$	8,972,169 15,679,915 14,125,246 13,539,351 14,684,573 13,970,032

• Estimated. † Partly estimated. ‡ Figures for 1910; those for 1911, 1912, and 1913 not available.

6. Exports of Mutton and Lamb Preserved by Cold Process. —Australia's export trade in mutton and lamb preserved by cold process has, in recent years, advanced rapidly. In 1903 the value of exports was £492,114, while seven years afterwards, in 1910, the value amounted to no less a sum than £2,161,513; the average for the past two years, 1913 and 1914, was £3,155,190. In all the States considerable attention is now being paid to the breeding of a class of sheep that will best meet the requirements of consumers. Crosses between the Merino and the Lincoln, or between the Merino and the Leicester breeds, have proved exceedingly valuable, as they furnish both a good quality of wool and also an excellent carcase for export purposes. The breeding of Shropshire and Southdown sheep with a view to combining meat production with that of wool is also on the increase. Special attention is being paid to the raising of lambs for the home markets, as it is becoming very widely recognised that with suitable breeds, the export trade in lambs is a very profitable one.

Australia's principal customer in this trade is the United Kingdom, which has absorbed 94.8 per cent. of the total quantity exported from the Commonwealth during the past

SHEEP.

five years. The South African Union and Canada took 1.1 and 0.9 per cent. respectively, while the balance of 3.2 per cent. was principally absorbed by the Philippine Islands, Malta, Straits Settlements, and Egypt. The recent revision of the tariff of the United States of America will doubtless have the effect of eventually opening up a vast market in that country for Australian mutton and lamb and other meat products. The quantities exported to various countries are as follow:--

QUANTITY OF MUTTON AND LAMB PRESERVED BY COLD PROCESS EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

Country to which	1 Exported.		1910.	1911.	1912.	1913.	1914-15.	Total for 5 years.
			lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom			181,556,597				187,897,976	790,207,962
South African Union	ı			2.657.853	1,910,196		387,006	9,225,896
Canada	•••		2,309,441	2,077,802	1,320,718		413,013	7,783,884
Germany					133,429	5,144,062		5,277,491
Philippine Islands			788,577	859,022	677,076	778,693	370,296	3,473,664
Malta			838,871	699,514	266.035	1,059,183	798,996	3,662,599
Straits Settlements			713.836	845,079	992,831	928,783	1,068,164	4,548,693
Egypt			369,611	447,411	624,506	633,109	902.604	2,977,241
Hong Kong			318,590	417,316	328,330	401.380	256,068	1,721,684
Ceylon			254,212	332,011	293,523	365,065	304,115	1.548.926
Hawaiian Islands			145,246	102,361	83,770	91.085	30,802	453.264
United States			-		2,051	571,008	195,225	768.284
Gibualtan		••••	52,590	. 99,501			463.106	615.197
Tanan	•••	••••	18,681	19.885		39	400,100	38,605
Athon Countries	•••	••••			102 044		100 500	
Other Countries	•••	•••	142,494	254,461	183,344	306,071	176,506	1,062,876
		1						
Total			190,229,330	129,569,295	115,371,981	204,931,783	193,263,877	833,366,266

The corresponding particulars concerning the values of the exports are :---

VALUES	0F	FROZEN	MUTTON	AND	LAMB	EXPORTED	FROM	THE	COMMONWEALT	Ή,
				191	0 to 1	1914-15.				

Country to which Exported.	1910.	1911.	1912.	. 1913.	1914-15	Total for 5 years.
3	£	£	£	£	£	£
United Kingdom	2,069,939	1,529,633	1,499,648	2.712.682	3.321.045	11,132,940
South African Union	28,93				6,538	
Canada	23,139	2 28,027	20,336		7,507	106,258
Germany			1,670	67,396		69,066
Philippine Islands	7,878	9,282	9,271	9,649	6,212	42,292
Malta	10,140	8,274	3,228	14,142	12,920	48,704
Straits Settlements	7,40	9,781	13,387	11,841	18,553	60,969
Egypt	4,38			9,435	16,577	44,927
Hong Kong	3,288	3 4,581	4,483	5,571	4,422	22,345
Ceylon	, 2,649		4,448	5,091	5,346	21,444
Hawaiian Islands	1,78	1,549	1,343	1,386	772	6,833
United States			35	7,793	3,066	10,894
Gibraltar	! 329				7,660	8,818
Japan	240			1		443
Other Countries	1,41	5 2,941	2,328	4,353	3,230	14,267
Total	2,161,51	3 1,633,622	1,592,378	2,896,532	3,413,848	11,697,893

7. Comparison with other Countries.—As regards the size of its flocks and the quantity and quality of wool produced, Australia occupies the foremost position amongst the sheep-raising countries of the world. The following comparison gives the latest available figures relative to the number of sheep in the principal wool producing countries :—

Country.	Date.	No. of Sheep	Country.	Date.	No.of Sheep.
	1912	83,546,000	0	1910	8,632,380
	1914 1912	78,600,334 57,255,196		1912	5,803,445 5,655,444
United States of America		52,838,748 27,094,678	Chile	{ 1912 1913	4,567,194
Union of South Africa	1913	35,710,843		1910	3,818,997
	1914 1908	27,886,095		1902 1906	3,424,430 3,072,988
	1913	24,798,763	Canada	1911	2,175,302
British India }	1913 1914	23,091,955	Norway Sweden	1910	1,393,383
France		14,559,586	Netherlands	1913	842,018
Spain Italy	1912 1908	15,829,954; 11,162,926	Tunis Denmark	1913	728,540 514,918
Austria-Hungary ²	1910) 1913	12,337,542	Iceland Belgium	1910	578,634 185,373
Algeria	1912	8,338,023		1911	161,414

NUMBER OF SHEEP IN VARIOUS COUNTRIES.

1. Including goats. 2. Austria 1910, Hungary 1913. Croatia-Slavonia 1911, Bosnia-Herzegovina 1911.

8. Relation to Population.—The relation of the flocks of the several States and Territories to the populations at the end of the year 1901 and from 1910 to 1914 is as follows :—

NUMBER OF SHEEP PER HEAD OF POPULATION, 1901 and 1910 to 1914.

N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.Ţ.	Federal Ter.	C'wealth
30.43 27 72	8.82 9.90	19.80 33.94	13.95 15.40	13.56 18.63	10.23 9 23	10.34 17 34		18.83 20.80
26.74	10.17	33.34	14.76	18.40	9.42	15.70	117.00	20.36
21.67	8.58	33.00	11.53	13.79	8.65	18.28	74.89	17.46
-	30.43 27.72 26.74 21.86	30.43 8.82 27.72 9.90 26.74 10.17 21.86 8.61 21.67 8.58	30.43 8.82 19.80 27.72 9.90 33.94 26.74 10.17 83.34 21.86 8.61 31.91 21.67 8.58 33.00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

§ 5. Wool.

1. Importance of Wool Production.—The chief contributing factor to the pastoral wealth of Australia is the production of wool, the value of the output for the season ended 30th June, 1915, being about £25,047,000. The bulk of the wool produced in the Commonwealth is exported, but with the increased activity of the local woollen mills there has, in recent years, been an increasing quantity used in Australia, although even now the quantity so used represents little more than 2 per cent. of the whole clip.

2. Greasy and Scoured Wool.—For the purpose of comparing the clips of the several States or of the Commonwealth as a whole for a series of years, it is convenient to have the total production expressed in terms of greasy wool.

The quantity of Australian wool scoured and washed before export is, on the average, about 20 per cent. of the total clip. The ratio of loss of weight in scouring varies largely with season, locality, breed, and condition. It seems preferable to express "scoured and washed" wool in terms of "greasy" rather than vice versa, since the absolute error arising from uncertainty as to average loss of weight has thus the less effect.

In the following tables, relative to the production of wool, "scoured and washed" • has been converted into the estimated equivalent amount of "greasy" on the assumption that two pounds of "greasy" wool are on the average required to produce one pound of "scoured and washed" wool.

3. Total Production.—The estimated production of wool in the several States, formerly based on Customs returns, being no longer available from that source, an effort has been made to arrive at approximate figures from data collected by the State Statisticians from growers and fellmongers, etc. Particulars for years prior to 1910 will be found in former issues (see Year Book No. 6, page 346). The following table gives the estimates obtained in reference to the five seasons ended 30th June, 1911 to 1915 :--

ESTIMATED QUANTITY OF WOOL AS IN THE GREASE, SHORN, FELLMONGERED, OR ON SKINS SHIPPED DURING THE SEASONS ENDED 30th JUNE, 1911 to 1915.

State.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.
New South Wales [*] Victoria Queensland South Australia Western Australia Tasmania Northern Territory	$\begin{array}{c} \text{lbs.}\\ 374,907,068\\ 101,803,644\\ 139,250,802\\ 63,613,781\\ 29,984,453\\ 11,338,540\\ 400,000\end{array}$	$\begin{array}{r} 1 bs. \\ 371,546,415 \\ 110,463,041 \\ 142,382,269 \\ 60,056,470 \\ 30,833,837 \\ 10,726,593 \\ 400,000 \end{array}$	$\begin{array}{r} 1 bs.\\ 326,804,000\\ 88,762,612\\ 136,878,270\\ 56,691,036\\ 26,849,981\\ 12,416,014\\ 450,000 \end{array}$	1bs. 357,985,000 106,833,690 154,183,114 55,014,048 26,625,787 10,092,564 400,000	lbs. 318,935,000 95,406,867 155,478,740 38,848,978 24,562,110 8,154,824 †400,000
Commonwealth		726,408,625	648,851,913	711,134,203	641,786,519

* Including Federal Territory.

+ Approximate figures.

It is to be noted that a shortage has apparently occurred in the collection of these statistics, the estimates falling considerably below the approximate totals obtained from oversea shipments of wool and skins, together with quantity used in local manufactories. The Commonwealth total so obtained represented 758,090,676 lbs. for the season 1910-11, 785,753,099 lbs. for 1911-12, 668,667,078 lbs. for 1912-13, and 754,123,633 lbs. for 1913-14. The abnormal conditions of wool shipments obtaining during the 1914-15 season do not admit of any similar comparison with the estimated production.

4. Wool Locally Used.—The quantity of wool used in the manufactories of the several States of the Commonwealth during the past five calendar years was approximately as follows:—

LOCALLY USED WOOL, ESTIMATED AS "GREASY," COMMONWEALTH AND STATES, 1910 to 1914.

State.			1910.	1911.	1912.	1913.	1914.
New South Wales Victoria Queensland South Australia Western Australia Tasmania	····	 	lbs. 1,594,712 5,309,730 270,246 564,432 1,087,400	1bs. 2,401,920 5,774,868 336,486 634,238 986,000	lbs. 2,420,000 5,535,483 583,892 710,000 1,082,000	1bs. 2,484,446 6,978,300 406,829 645,000 1,105,000	1bs. *4,173,576 7,215,380 356,553 389,700 1,141,200
Commonwealth		 	9,826,520	10,133,512	10,331,375	11,619,575	13,276,409

* Year ended 30th June, 1915.

5. Bounties on Combed Wool or Tops Exported.—Under the Bounties Act 1907, bounties are payable on combed wool or tops exported from the Commonwealth, provided they were produced therein. The maximum amount to be paid may not exceed a total of £10,000 per annum; any unexpended sum may be carried forward and be available for the years following. For the three years commencing 1st January, 1909, the rate of bounty granted was 1½d. per 1b., and for the two years commencing 1st January, 1912, 1d. per 1b. was payable for all combed wool or tops produced; thenceforward to the end of 1915, 1d. per 1b. is payable up to 1,000,000 lbs. to any one manufacturer during a year and ¾d. per 1b. in excess of that quantity. During the year 1908-9, an amount of £326 was paid in bounties, in 1909-10, £4,933, in 1910-11, £8,522, in 1911-12, £16,898, in 1912-13, £13,061, 1913-14, £12,706, and in 1914-15, £7,727. The quantities of wool on which these amounts were paid were 52,085, 789,216, 1,363,555, 3,122,244, 3,134,614, 3,068,170 and 3,635,811 lbs. respectively.

Figures shewing the exports of wool tops for the years 1909 to 1914-15 inclusive will be found at the head of the next page.

6. Exports of Wool.—About forty-four per cent. of the exports of wool from the Commonwealth during the past five years was despatched to the United Kingdom, the other leading consignees being France, Germany, Belgium, the United States of America and Japan. The following table shews for the years 1910 to 1914-15 the quantities of "greasy" wool exported from the Commonwealth and the principal countries to which consigned :—

COMMONWEALTH EXPORTS OF WOOL IN THE GREASE, 1910, to 1914-15.

Country to which Expo	ted.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
		lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom		222,880,179	230,013,473	211,386,638	185,387,090	319,614,694	1,169,282,074
France			155,347,112	151,555,672	159,782,827	12,787,863	633,565,364
Germany		122,297,188	105,674,113	107,523,165	91,068,893	3,036,083	432,599,442
Belgium		63,305,855	58,469,298	54,679,915	51,881,724	2,984,856	231,321,648
United States of Americ	a	11,079,242	10,154,171	8,686,125	14,666,551	61,731,511	106,317,600
Japan		7,869,785	6,583,686	9,339,817	7,199,671	22,670,413	53,663,372
Italy		3,710,785	5,644,235	4,856,997	5,778,424	18,191,774	38,182,215
Austria-Hungary			5,836,992	7,908,480	11,731,933	829,746	26,307,151
India		485,990	478,353	390,536	501,827	443,451	2,300,157
New Zealand		1,122,446	154,193	147,794	101,104	541,513	2,067,050
Canada		208,269	52,299	126,517	88,916	951,452	1,427,453
Other Countries		41,640	415,698	1,231,062	247,918	170,474	2,106,792
					•	_	
Total		587,093,269	578,823,623	557,832,718	531,436,878	443.953.830	2,699,140,318

Similar particulars concerning the exports of "scoured and washed" wool are as follows :---

COMMONWEALTH EXPORTS OF "SCOURED AND WASHED WOOL,"* 1910 to 1914-15.

Country to which Ex	ported.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
United Kingdom France Belgium Belgium Belgium Japan India United States of Ame New Zealand Austria-Hungary Other Countries	 rica	15,861,390 14,145,596 11,418,895 897,992	lbs. 35,940,841 13,989,442 12,148,316 7,629,001 1,602,747 397,004 33,321 2,934 16,734 10,300	lbs. 28,305,314 15,037,742 10,541,771 5,661,005 2,750,614 380,550 47,826 49,849 42,927 89,036 347,472	$\begin{array}{c} 1 \text{bs.} \\ 26,176,484 \\ 18,804,399 \\ 10,135,857 \\ 5,269,008 \\ 3,564,433 \\ 188,298 \\ 100,434 \\ 124,301 \\ 11,042 \\ 62,932 \\ 11,998 \end{array}$	1bs. 48,171,821 2,154,275 1,748,008 920,506 6,141,036 655,302 135,408 4,557,800 1,879 147,864 315,392	lbs. 174,165,864 65,847,248 48,719,548 30,899,315 14,946,122 1,833,815 358,951 4,737,269 91,270 317,679
Total		78,178,300	71,770,640	63,254,106	64,450,086	64,949,291	685,342

• Including "tops." See next page.

The figures for "scoured and washed wool" for 1909 include for the first time an export of tops, amounting to 496,492 lbs. and valued at £58,638. In 1910 the corresponding export was 1,123,469 lbs., valued at £134,874; in 1911, 2,513,106 lbs., valued at £275,406; in 1912, 3,018,050 lbs. valued at £323,299; in 1913, 3,561,722 lbs. valued at £415,670; and in 1914-15, 4,095,966 lbs. valued at £511,021. In the latter year Japan took 4,052,965 lbs., valued at £506,161.

The total value of the wool exported from the Commonwealth to the principal countries during the five years under review was:---

TOTAL	VALUE	OF WOOL	EXPORTED	FROM	THE	COMMON WEALTH.	1910 to 1914-15.

Country to wh	ich	Exported	1.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
				£	£	.£	£	£	£
United Kingdom			• • • •		11,159,335	10,418,577	9,456,636	15,413,174	57,895,081
France				6,905,177	6.016,293	6,527,854	7,429,856	694,751	27,573,931
Germany				6.053.873	4,851,785	5.050.974	4,693,157	295,376	20,945,165
Belgium				3.084.847	2,552,282	2.480.348	2,386,892	187,755	10,692,124
United States of				FROCOF	500.015	460.275	745.354	3.110.301	5,395,550
Japan				100,600	459.000		735,018	1.502.576	3,820,587
Italy				101 457	245.804	230,436	256,718	716.260	1.630.675
Austria-Hungary	••••			55	242.461	360,125	519,477	50,436	1,172,554
Tadia	•••	•••		24,268	21,290	18,739	30,586	30,739	125,622
New Zealand	••••	•••							
	•••		••••	67,219	6,199	8,844	5,199	19,962	107,423
Canada	•••			10,695	2,824	7,155	5,404	50,063	76,141
Other Countries	•••	•••		2,106	13,905	87,865	12,765	30,789	147,430
				<u></u>					
Total				28,777,283	26,071,193	26,354,563	26,277,062	22,102,182	129,582,283

7. Care needed in Comparing Clips.—The Customs returns do not furnish a reliable indication of increase or decrease in successive clips, since in each case up to 1913 they relate to the year ended 31st December. Ordinarily, therefore, they include for any year imports and exports of wool belonging to two distinct clips. A further defect in the comparability of successive clips arises as follows:—Owing to climatic or other conditions, the time of shearing may be so far delayed that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

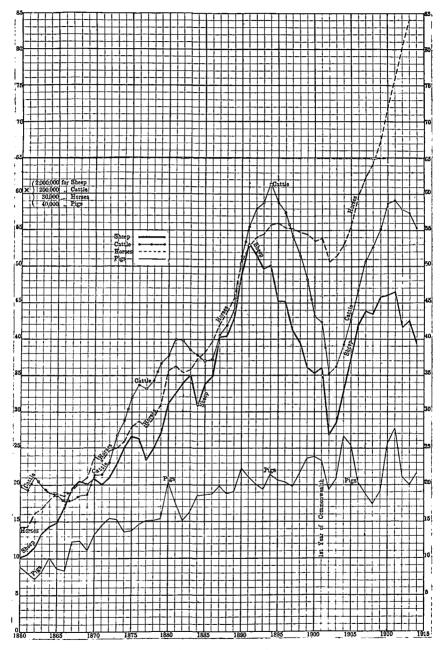
8. Wool-producing Countries in Southern Hemisphere.— The next table, compiled by one of the leading English wool-broking firms, furnishes interesting evidence of the relative importance of the three great wool-producing countries of the Southern Hemisphere. The figures given represent for the respective years the imports of wool into Europe and North America:—

	Year.		Commonwealth and New Zealand.	Cape Colony.	River Plate.	Total.
			Bales.	Bales.	Bales.	Bales.
1901	•••		1,745,000	217,000	532,000	2,494,000
1910	•••		2,411,000	377,000	461,000	3,249,000
1911	•••		2,524,000	376,000	499,000	3,399,000
1912	•••		2,463,000	463,000	497,000	3,423,000
1913	•••		2,296,000	484,000	437,000	3,217,000
1914	•••		2,332,000	499,000	406,000	3,237,000
1915	•••		2,157,000	519,000	378,000	3,054,000

IMPORTS OF WOOL INTO EUROPE AND NORTH AMERICA, 1901, and 1910 to 1915.

As the River Plate bale is much larger than the Australian or Cape bale, a comparison of the number of bales would be somewhat misleading. Allowing approximately for the difference in size of the several bales, it may be said that during the last five years the importations from Australia and the Dominion of New Zealand represent about 65 per cent. of the total.

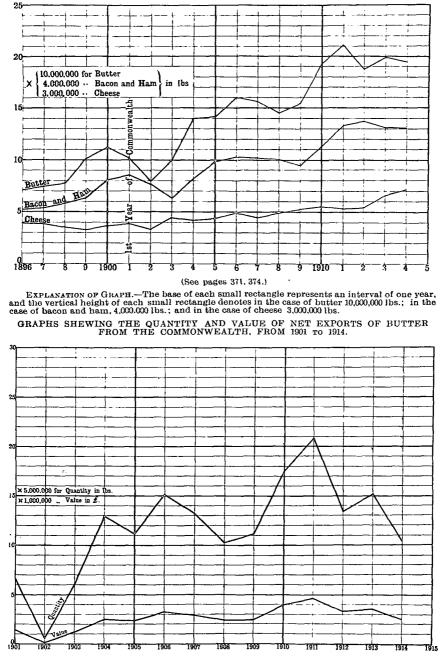
9. United Kingdom Importation of Wool.—The quantity and value of wool imported into the United Kingdom during the year 1914 from the principal wool-producing countries, furnish evidence of the important position which the Commonwealth occupies in the supply of wool to the mother country. This is shewn in the following table :—



GRAPHS SHEWING NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS IN THE COMMONWEALTH FROM 1860 TO 1914.

(See pages 280 et seq.)

EXPLANATION OF GRAPH.—The base of each small square represents an interval of one year. The totals of the sheep, cattle, horses, and pigs for the Commonwealth are indicated by the several curves or graphs, the vertical side of a small square representing 2,000,000 in the case of sheep; 200,000 for cattle; 30,000 for horses; 40,000 for pigs.



GRAPHS SHEWING THE PRODUCTION OF BUTTER AND CHEESE, AND BACON AND HAM, IN THE COMMONWEALTH, FROM 1896 TO 1914.

(See page 372.)

EXPLANATION OF GRAPH.—The base of each small rectangle represents an interval of one year, and the vertical height of each small rectangle represents 5,000,000 lbs. in weight, or £1,000,000 in value.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
Australia New Zealand Union of Sth. Africa Argentine Republic British India France Chile U.S. of America Belgium	45,906,646 46,982,929 18,872,776 18,007,066 4,726,658 3,909,781 2,732,564	£ 11,177,492 8,628,368 4,715,190 1,826,228 1,420,363 1,315,509 571,463 251,915 192,071 149,667	Uruguay Portugal China Persia Italy Denmark Morocco Netherlands Spain Iceland&Greenland	$1,669,771 \\ 1,277,972 \\ 1,037,596 \\ 366,634 \\ 256,511 \\ 316,680 \\ 239,920 \\ 105,239 \\ 56,915 \\ \end{cases}$	£ 79,293 60,874 52,522 29,553 19,606 12,400 11,144 8,398 3,567 2,670
Falkland Islands Egypt Peru Turkey Germany	2,866,450 4,129,230	$149,080\\136,955\\134,778\\124,806\\102,397$	Canada Other Countries Total	51,520 894,891 712,618,116	2,335 34,095 31,212,739

IMPORTS OF WOOL INTO THE UNITED KINGDOM, 1914.

It will be seen that of the total importations of wool into the United Kingdom, Australian wool represented over 34 per cent. of quantity and nearly 36 per cent. of value.

10. The Wool Market.—A résumé of Australian wool market conditions for the seasons 1907-8 to 1912-13 will be found in Year Book No. 7 (pages 296 and 297), and for the season 1913-14 in Year Book No. 8 (page 297).

The 1914-15 season opened in the midst of a dislocation of trade, consequent on the European War. The Bank of England rate rose to 10 per cent., Stock Exchanges in Europe and America closed, and moratoria were declared in several parts of the world. The wool market, always highly susceptible to European complications, at once felt the effects, and the outlook in August was unpromising, but the various Governments took immediate measures to preserve credit, and averted a crisis. An extraordinary demand, however, soon arose for crossbred wool, this gathered strength as the army orders became more extensive, and lasted throughout the season. Merino wool, on the other hand, met with small demand at the commencement of the season, the Continental countries, that had absorbed some 60 per cent. in the previous season, were, of course, non-purchasers, while the embargo on the export of wool to America caused a further restriction. Permission to ship merino wool to America early in 1915, together with a revival in the home trade, considerably improved the market, and values rose rapidly, until towards the end of the season prices were considerably above the high levels of November, 1899.

The season closed with values for all good and superior wools on a higher plane than for many years. On the other hand, burr-infested wools met with little or no demand, few carbonising plants being available for their treatment.

The average values per lb. of Australian greasy wool according to the export returns for the past ten years have been as follows :---

EXPORT	VALUE	PER	LB.	OF	AUSTRALIAN	GREASY	WOOL,	1905	to	1914-15.	

Year	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914-15.
Average value	d.	d.	d.'	d.						
per lb	9.83	10.14	10.73	9.17	9.35	9.58	8.87	9.50	9.70	9.45

(i.) Exports of Wool from each State, and Quantity sold Locally. Over 78½ per cent. of the wool grown in Australia was sold in the local markets prior to export from the Commonwealth during 1914-15. Under normal conditions buyers from the United Kingdom, France, Germany, and other European countries, also from America, Japan, China, and India, attend the sales conducted in Sydney, Melbourne, Geelong, Brisbane, Adelaide, Fremantle, Hobart, and Launceston.

The following table shews the number of bales of wool exported oversea from each State during the season ended 30th June, 1915, and the proportion sold at the local sales prior to shipment. It must be noted that as considerable quantities of wool grown in some States are sold in or shipped from others, these figures therefore do not shew actual local production, but total oversea shipments and sales. The estimated quantity of wool produced in each State is given on page 296.

EXPORTS OF WOOL TO PLACES OUTSIDE THE COMMONWEALTH, AND THE QUANTITY SOLD LOCALLY IN THE SEVERAL STATES, DURING THE SEASON ENDED 30th JUNE, 1915.

							Ratio of Lo	cal Sales to
State.			Oversea H	Exports.	Sold at Lo prior to F		Oversea Exports from each State.	Total Ex- ports from C'wealth.
			Bales.	%	Bales.	%	%	%
New South Wales			731,218	46.40	547,496	. 44.77	74.87	34.75
Victoria	•••		391,626	24.85	377,541	30.87	96.40	23.96
Queensland	•••		268, 120	17.03	182,542	14.93	68.08	11.58
South Australia	•••	•••	101,536	6.45	92,372	7.55	90.97	5.86
Western Australia	•••		65,306	4.14				
Tasmania	•••	• •••	17,882	1.13	22,921	1.88	128.18	1.46
Commonwealth		•••	1,575,688	100.00	1,222,872	100.00		77.61

It will be seen that in regard to the ratio of local sales to oversea exports, Victoria's sales represent over 96 per cent. of her exports, New South Wales about 75, South Australia 91, and Queensland 68 per cent. In Tasmania some of the wool sold locally was subsequently shipped to interstate ports. Of the total quantity sold in the Common-wealth, New South Wales and Victoria disposed of 44.77 and 30.87 per cent. respectively; Queensland, South Australia, and Tasmania following in the order named.

During the season under review 1,575,688 bales of wool were shipped from the Commonwealth, of which 77.61 per cent. was sold in the Australian markets. Of this percentage New South Wales and Victoria are represented by 58.71, Queensland and South Australia 17.44, while Tasmania accounts for the balance.

(ii.) Exports of Wool from Commonwealth and Quantity sold Locally. The number of bales of wool exported from the Commonwealth and sold at local sales prior to shipment during 1895, 1900, 1905, 1910, and the past five seasons is shewn in the following table :--

EXPORTS OF WOOL FROM THE COMMONWEALTH, AND THE QUANTITY SOLD LOCALLY, FROM 1895 to 1915.

	Year e	ended 30th	June.		Oversea Ex- ports.	Sold prior to Export.	Ratio of Wool sold to Exports
					Bales.	Bales.	%
1895					1,595.652	817,333	51.22
1900		•••	•••		1,221,163	807,031	66.09
1905				[1,218,969	926,940	76.04
1910					1,921,705	1,624,561	84.54
1911					1,975,378	1,642,555	83.15
1912		•••		[2,020,547	1,700,494	84.16
1913					1,718,486	1,518,650	88.37
1914					1,966,576	1,703,744	86.64
1915	·	•••	•••	••••	1,575,688	1,222,872	77.61

The steady development of the Australian wool market is clearly shewn in this table. In the nineteen years ended 1914, the quantity sold more than doubled, and the ratio of wool sold to that exported increased from 51 per cent. in 1895 to over 86½ per cent. in the season ended 30th June, 1914. The abnormal conditions obtaining during the 1914-15 season materially reduced the ratio, which was only 77.61 as compared with 86.64 for the previous season.

During the past season 1,222,872 bales of wool were sold in Australia, and 321,927 bales in New Zealand, representing the total value of $\pounds 19,742,546$. This enormous quantity far exceeds the sales of any other country in the world.

(iii.) Distribution of Wool sold in Australian Markets. The estimated approximate distribution of wool sold in the local markets during the season 1914-15 is shewn in the following table, and exhibits the world-wide representation of buyers at the Australian sales :--

ESTIMATED APPROXIMATE DISTRIBUTION OF WOOL SOLD LOCALLY IN THE SEVERAL STATES OF THE COMMONWEALTH DURING THE SEASON ENDED 30th JUNE, 1915.

Destination.	N.S.W.	Victoria.	Q'land.	S. Aust.	Tas.	C'wealth.
·	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
United Kingdom France, Belgium, and Holland Germany and Austria Italy and other European Countries America	482	251,863 8,709 338 13,080 73,542	90,501 17,715 7,619 13,408 30,195	55,620 2,097 699 13,535	16,609 2,812	699,619 53,867 8,439 69,902 229,697
Japan, China, and India Local Woollen Mills Scourers and Speculators	53,291 } 31,023	4,992 25,017 -	19,380 3,724	128 20,293	3,500 {	77,791 36,616 46,941
Total Sales	547,496	377,541	182,542	92,372	22,921	1,222,872
Pi	ERCENTAC	JE DISTE	IBUTION	•		
	%	%	%、	%	%	%

66.71 49.60 60.20 72.46United Kingdom 52.06 57.214.40 France, Belgium, and Holland 4.632.319.70 2.27... 0.75 Germany and Austria 0.09 0.09 4.170.69 • • • ... Italy and other European Countries 7.81 3.46 7.34 5.71. 19.48 16.54 14.6512.2718.80 America 20.01 ••• Japan, China, and India 6.36 9.73 1.3210.61 0.13••• Local Woollen Mills ... 2.99•• 5.67 2.0422.00 15.276.63 Scourers and Speculators 3.84100.00 100.00 100.00 100.00 Total Sales 100.00 100.00

Of the total quantity sold, amounting to 1,222,372 bales, 699,619 or 57.21 per cent. were purchased for the United Kingdom, 229,697 or 18.8 per cent. for America, 132,208 or 10.80 per cent. for the Continent of Europe, 77,791 or 6.36 per cent. for Japan and other Asiatic countries, 46,941 by scourers and speculators, while 36,616 bales went for consumption in the local woollen mills. Of the Continental purchases, 40.7 per cent. went to France, Belgium, and Holland, 6.4 per cent. to Germany and Austria, and nearly 52.9 per cent. to Italy and other European countries. (iv.) Quantities of Various Descriptions of Wool Sold in each State. The quantities and ratios of the various descriptions of wool marketed in each State are shewn in the following tables:--

Scoured 43,181 8,088 29,254 2,812 83,33 Total 547,496 377,541 182,542 92,372 22,921 1,222,87 Fleece, etc. 23,102 25,620 7,417 4,619 21,636 1,160,85 Lambs 23,102 25,620 7,417 4,619 22,921 1,222,87 Merino 2476,321 187,329 177,144 86,227 8,022 935,04 Crossbred and all strong breeds 747,496 377,541 182,542 92,372 22,921 1,222,87 Total 476,321 187,329 177,144 86,227 8,022 935,04 Crossbred and all 71,175 190,212 5,398 6,145 14,899 287,82 Total 92,11 97.85 83.97 97.00 100.00 93.15 Scoured 7.89 2.15 <th>Description of W</th> <th>/ool.</th> <th>N.S.W.</th> <th>Vic.</th> <th>Q'land.</th> <th>S. Aust.</th> <th>W. Aust.</th> <th>Tas.</th> <th>Common- wealth.</th>	Description of W	/ool.	N. S.W .	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Common- wealth.
Fleece, etc. 524,394 351,921 175,125 87,753 21,636 1,160,85 Total 23,102 25,620 7,417 4,619 1,285 62,04 Total 547,496 377,541 182,542 92,372 22,921 1,223,87 Merino 476,321 187,329 177,144 86,227 8,022 935,04 Crossbred and all strong breeds 71,175 190,212 5,398 6,145 14,899 287,82 Greasy 92.11 97,85 83,97 97.00 100,00 93.15 Scoured 95.78 93.21 95.93 95.00 94.00 94.92 Fleece, etc. 95.78 93.21 95.93 95.00 94.00 94.92 Total 87.00 49.61 97.04 93.00 35.00 76.46 Greasp code 87.00 49.61			504,315	369,453	153,288	89,560	(a)	22,921	Bales. 1,139,537 83,335
Lambs 23,102 25,620 $7,417$ $4,619$ $1,285$ $62,04$ Total $547,496$ $377,541$ $182,542$ $92,372$ $22,921$ $1,222,87$ Merino $476,321$ $187,329$ $177,144$ $86,227$ $8,022$ $935,04$ Crossbred and all strong breeds $71,175$ $190,212$ $5,398$ $6,145$ $14,899$ $287,82$ Greasy $547,496$ $377,541$ $182,542$ $92,372$ $22,921$ $1,222,87$ Greasy $547,496$ $377,541$ $182,542$ $92,372$ $22,921$ $1,222,87$ Greasy $92,11$ $97,85$ 83.97 $97,00$ $90,00$ 93.15 Scoured $7,89$ 2.15 16.03 3.00 94.00 94.92 Lambs 4.22 6.79 4.07 5.00 94.00 5.06	Total		547,496	377,541	182,542	92,372		22,921	1,222,872
Merino 476,321 187,329 177,144 86,227 8,022 935,04 Crossbred and all strong breeds 71,175 190,212 5,398 6,145 14,899 287,82 Total 547,496 377,541 182,542 92,372 22,921 1,222,87 Greasy 7.89 2.15 16.03 3.00 100.00 93.15 Scoured 7.89 2.15 16.03 3.00 6.81 Total 100.00 100.00 100.00 100.00 100.00 Fleece, etc. 95.78 93.21 95.93 95.00 94.00 94.92 Total 4.22 6.79 4.07 5.00 6.00 5.06 Total 87.00 49.61 97.04 93.00 35.00 76.46 Crossbred and all strong breeds 87.00 50.39 2.96									1,160,829 62,043
$\begin{array}{c} \begin{array}{c} \mbox{Crossbred and all} \\ \mbox{strong breeds} & \dots & 71,175 & 190,212 & 5,398 & 6,145 & \dots & 14,899 & 287,82 \\ \hline \mbox{Total} & \dots & 547,496 & 377,541 & 182,542 & 92,372 & \dots & 22,921 & 1,222,87 \\ \hline \mbox{Greasy} & \dots & 92,11 & 97,85 & 83.97 & 97,00 & \dots & 100.00 & 93.15 \\ \mbox{Scoured} & \dots & & 7.89 & 2.15 & 16.03 & 3.00 & \dots & 100.00 & 100.00 \\ \hline \mbox{Total} & \dots & 100.00 & 100.00 & 100.00 & 100.00 & \dots & 100.00 & 100.00 \\ \hline \mbox{Fleece, etc.} & \dots & 95.78 & 93.21 & 95.93 & 95.00 & \dots & 94.00 & 94.95 \\ \mbox{Lambs} & \dots & \dots & 44.22 & 6.79 & 4.07 & 5.00 & \dots & 94.00 & 94.95 \\ \hline \mbox{Total} & \dots & 100.00 & 100.00 & 100.00 & 100.00 & \dots & 100.00 & 100.00 \\ \hline \mbox{Merino} & \dots & \dots & 87.00 & 49.61 & 97.04 & 93.00 & \dots & 35.00 & 76.46 \\ \mbox{Crossbred and all} & 13.00 & 50.39 & 2.96 & 7.00 & \dots & 65.00 & 23.54 \\ \hline \end{tabular}$	\mathbf{Total}	•••	547,496	377,541	182,542	92,372		22,921	1,222,872
strong breeds $71,175$ $190,212$ $5,398$ $6,145$ $14,899$ $287,82$ Total $547,496$ $377,541$ $182,542$ $92,372$ $22,921$ $1,222,87$ Greasy $92,11$ 97.85 83.97 97.00 100.00 93.16 Scoured 7.89 2.15 16.03 3.00 6.81 Total 100.00 100.00 100.00 100.00 100.00 100.00 Fleece, etc. 95.78 93.21 95.93 95.00 94.00 94.92 Lambs 4.22 6.79 4.07 5.00 6.00 5.08 Merino 87.00 49.61 97.04 98.00 35.00 76.46 Strong breeds 13.00 50.39 2.96 7.00 65.00 23.54			476,321	187,329	177,144	86,227		8,022	935,043
Greasy 92.11 97.85 83.97 97.00 100.00 93.15 Scoured 7.89 2.15 16.03 3.00 100.00 93.16 Total 7.89 2.15 16.03 3.00 100.00 93.16 Total 100.00 100.00 100.00 100.00 100.00 100.00 Fleece, etc. 95.78 93.21 95.93 95.00 94.00 94.92 Lambs 4.22 6.79 4.07 5.00 94.00 94.92 Total 4.22 6.79 4.07 5.00 94.00 94.92 Total 87.00 100.00 100.00 100.00 100.00 100.00 Merino 87.00 49.61 97.04 93.00 35.00 76.46 Crossbred and all strong breeds 13.00 50.39 <			71,175	190,212	5,398	6,145		14,899	287,829
Greasy 92.11 97.85 83.97 97.00 100.00 93.15 Scoured 7.89 2.15 16.03 3.00 100.00 93.16 Total 100.00 100.00 100.00 100.00 100.00 100.00 Fleece, etc. 95.78 93.21 95.93 95.00 $$ 94.00 94.92 Lambs 4.22 6.79 4.07 5.00 $$ 6.00 5.06 Total 100.00 100.00 100.00 $$ 100.00 100.00 Merino 87.00 49.61 97.04 93.00 $$ 35.00 76.46 crossbred and all 13.00 50.39 2.96 7.00 $$ 65.00 23.54	Total		547,496	377,541	182,542	92,372		22,921	1,222,872
Fleece, etc. 95.78 93.21 95.93 95.00 94.00 94.92 Lambs 4.22 6.79 4.07 5.00 94.00 94.92 Total 100.00 100.00 100.00 100.00 100.00 100.00 Merino 87.00 49.61 97.04 93.00 35.00 76.46 Crossbred and all strong breeds 13.00 50.39 2.96 7.00 65.00 23.54			92.11	97.85	83.97	97.00	1	100.00	% 93.19 6.81
Lambs 4.22 6.79 4.07 5.00 6.00 5.08 Total 100.00 100.00 100.00 100.00 100.00 100.00 Merino 87.00 49.61 97.04 93.00 35.00 76.46 Crossbred and all 13.00 50.39 2.96 7.00 65.00 23.54	Total		100.00	100.00	100.00	100.00		100.00	100.00
Merino 87.00 49.61 97.04 93.00 35.00 76.46 Crossbred and all strong breeds 13.00 50.39 2.96 7.00 65.00 23.54							1		94.92 5.08
Crossbred and all strong breeds 13.00 50.39 2.96 7.00 65.00 23.54	Total		100.00	100.00	100.00	100.00		100.00	100.00
strong breeds 13.00 50.39 2.96 7.00 65.00 23.54			87.00	49.61	97.04	93.00		35.00	76.46
Total 100.00 100.00 100.00 100.00 100.00			13.00	50.39	2.96	7.00		65.00	23.54
	Total		100.00	100.00	100.00	100.00		100.00	100.00

PROPORTIONS OF THE VARIOUS DESCRIPTIONS OF WOOL SOLD LOCALLY IN THE SEVERAL STATES OF THE COMMONWEALTH DURING THE SEASON ENDED 30th JUNE, 1915.

(a) No sales.

Wool in the grease represented over 93 per cent. of total sales during the period under review. Of fleece and lambs, the former shews about 94.9, and the latter 5.1 per cent. The class of wool produced is principally merino, which is almost exclusively grown in the northern and central parts of the continent, the bulk of the merino wool sold in Victoria coming from Riverina and other parts of New South Wales. Victoria, the southern parts of South Australia and of New South Wales, and Tasmania, produce nearly the whole of the crossbred and other strong bred wools. (v.) Percentages in each State of Various Descriptions of Wool Sold. The following table gives the percentages of each description of wool sold in the several States during the season 1914-15:—

PERCENTAGE OF BALES OF EACH DESCRIPTION OF WOOL SOLD IN THE SEVERAL STATES TO THE TOTAL SOLD IN THE COMMONWEALTH, 1914-15.

Description of W	7001.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Common- wealth.
		%	%	%	%	%	%	%
Greasy		44.26	32.42	13.45	7.85		2.02	100.00
Scoured "	•••	51.82	9.71	35.10	3.37			100.00
Fleece, etc.		45.17	30.32	15.09	7.56		1.86	100.00
Lambs	•••	37.24	41.29	11.95	7.44		2.08	100.00
Merino Crossbred and	 all	50.94	20.03	18.95	9.23		0.85	100.00
strong breeds		24.73	66.08	1.88	2.13		5.18	100.00

(a) No sales.

§ 6. Hides and Sheepskins.

1. Extent of Trade.—In addition to the hides and sheepskins treated in the tanneries of the several States, a very considerable export trade is carried on, the total value of the hides and sheepskins exported from Australia during the five years 1909 to 1913 being no less a sum than £15,003,959, or an average of over £3,000,000 per annum.

2. Sheepskins with Wool.—By far the largest item included in the amount mentioned in the preceding paragraph arises from the value of sheepskins with wool exported, which are shipped principally to France and the United Kingdom. Details concerning the number so exported during the five years 1910 to 1914-15 are as follow :---

COMMONWEALTH EXPORTS OF SHEEPSKINS WITH WOOL, 1910 to 1914-15.

Country to which Exported.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years
	No.	No.	No	No.	No.	No
France	4,325,337	4,322,505	5,297,141	5,932,257	2,227,714	22,104,954
United Kingdom	3,763,002	3,306,567	3,707,050	3,861,161	5,844,442	20,482,222
Belgium	1,282.942	1.020.847	1,277,530	996,821	29,366	4,607,506
U.S. of America	155,782	39,811	129,899	\$9,037	1,016,958	1,441,487
Germany	106,534	109.621	63,112	57,735	2,578	339,580
Canada	10,446		679		206,876	218,001
Italy	29,575	26,140		960		56,675
New Zealand	100		661		39,083	39.844
Other Countries		6,869		261	-1,051	8,181
	·					
Total	9,673,718	8,832,360	10,476,072	10,948,232	9,368,068	49,298,450

The next table furnishes corresponding particulars as to value :---

VALUE OF SHEEPSKINS WITH WOOL EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

Country to which Exported.	1910.	1911.	1912.	19 13.	1914-15.	Total for 5 Years.
	£	£	£	£	£	£
France	884,450	735,259	980,298	1,315,156	387,692	4,302,855
United Kingdom	710,229	568,618	666,962	804,432	1,021,432	3,771,673
Belgium	316,958	253,995	314,301	335,569	10,877	1,231,700
U.S. of America	16,978	3,706	12,713	15,127	213,249	261,773
Germany	16,720	13,195	10,576	11,620	812	52,923
Canada	1,071		66		46,374	47,511
Italy	9,630	4,075		100		13,805
New Zealand	· 25		113		9,748	9,886
Other Countries		697		55	468	1,220
Total	1,956,061	1,579,545	1,985,029	2,482,059	1,690,652	9,693,346

3. Sheepskins without Wool.—In the case of sheepskins without wool the principal countries to which export takes place are the United Kingdom and the United States of America. Particulars concerning the quantities exported are as follows :—

COMMONWEALTH EXPORTS OF SHEEPSKINS WITHOUT WOOL, 1910 to 1914-15.

Country to which Expo	orted.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
		No.	No.	No.	No.	No.	No.
United Kingdom		875,994	459,252	131,103	128,578	720,417	2,315,344
United States of Am	erica	710,001	590,582	271,028	21,760	640,302	2,233,673
France		23,863	21,666	55,845	5,364		106,738
New Zealand		15,552	9,484	1,515		12	26,563
Germany		14,447					14,447
Belgium		8,428	331	167			8,926
Canada		1,956				3.096	5,052
Italv							
Other Countries		•••					
Total		1,650,241	1,081,315	459,658	155,702	1,363,827	4,710,743

Corresponding details concerning value are given hereunder :---

VALUE OF SHEEPSKINS WITHOUT WOOL, EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

Country to which Exported.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	37,015	17,138	3,854	5,130	37,875	101,012
United States of America	22,544	16,295	8,730	1,550	35,766	84,885
France	1,711	1,225	5,948	382		9,266
New Zealand	514	196	27		2	739
Germany	538					538
Belgium	396	12	4			412
Canada	115				233	348
Italy ·						
Other Countries					•••	
Total	62,833	34,866	18,563	7,062	73,876	197,200

HIDES AND SHEEPSKINS.

4. Hides.—The Commonwealth trade in hides has now assumed considerable proportions, and during 1914-15 the total value of hides exported amounted to $\pounds 1,380,886$. The exports took place principally to the United Kingdom, the United States of America, and Canada. Large quantities of hides are also imported into the Commonwealth, mainly from New Zealand and the Pacific Islands. The total value of hides imported during 1914-15 was $\pounds 146,015$.

Particulars concerning the export of hides during the past five years are as follows:---

Country to which Exported.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
United Kingdom U.S. of America Belgium Germany Canada Italy France Japan Austria-Hungary Sth. African Union Other Countries	No. 253,442 21,318 41,326 21,810 4,000 45,541 11,938 4,697 1,975	No. 245,993 29,232 80,453 64,536 33,519 68,991 15,790 6,436 103 5,815	No. 350,519 82,808 108,455 78,059 65,407 117,352 15,151 5,025 1,275 9,717	No. 360,549 136,687 244,394 206,588 11,205 85,984 16,208 155 3,631 7,674	No. 485,500 371,364 40,211 18,773 264,785 9,830 8,873 6,863 203 480 11,600	No. 1,696,003 641,409 514,839 389,766 378,916 327,698 67,960 23,176 5,212 480 36,781
Total	406,047	550,868	833,768	1,073,075	1,218,482	4,082,240

In the next table are given particulars relative to the value of hides exported :----

Country to which Exported.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	294,702	279,474	430,609	580,195	670,421	2,255,401
U.S. of America	21,988	28,772	94,783	196,583	375,270	717,396
Belgium	48,343	91,110	139,188	385,627	52,647	716,915
Germany	23,947	79,530	103,081	339,605	30,259	576,422
Italy	41,983	62,047	125,744	102,834	12,299	344,907
Canada	4.049	35,320	74,273	16,622	198,421	328,685
France	11,073	17,988	19,865	20,078	13,933	82,937
Japan	7.873	11,060	8,378	335	13,063	40,709
Austria-Hungary		161	1,757	5,545	355	7,818
Sth. African Union					531	531
Other Countries	2,087	5,795	9,576	10,547	13,687	41,692
Total	456,045	611,257	1,007,254	1,657,971	1,380,886	5,113,413

VALUE OF HIDES EXPORTED FROM THE COMMONWEALTH, 1910 to 1914-15.

The number and value of hides imported into the Commonwealth during the five years 1910 to 1914-15 are as follows :---

HIDES IMP	ORTED	INTO	THE	COMMONWEALTH,	1910 to) 1914-15.
-----------	-------	------	-----	---------------	---------	------------

Particulars.	1910.	1911.	1912.	1913.	1914-15.	Total for 5 Years.
No Value £	119,408 169,771	97,926 143,893	87,680 135,301	135,193 • 239,780	83,999 146,015	524,206 834,760

\S 7. Graphical Representation of Pastoral Production.

1. General.—As comparatively complete statistics relative to the number of horses, cattle, sheep and pigs are available from 1860, the graphical representation of the increase in numbers for the Commonwealth as a whole, shewn on page 299, covers the period from 1860 to 1914.

2. Horses.—With relatively unimportant fluctuations the number of horses in the Commonwealth increased at a fairly consistent rate until 1895, when a decline set in, culminating in the losses of the disastrous drought of 1902. At this latter point the number was practically identical with that for 1890. From 1902 onwards a rapid improvement has been experienced, the totals for 1913 and 1914 being the highest recorded.

3. Cattle.—The graph for cattle furnishes evidence of rapid increase in number, interrupted by three marked periods of decline, of which the first extended from 1862 to 1866, the second from 1881 to 1885, and the third from 1894 to 1902. So extensive was this last-mentioned decline that the number receded to that of 1879. From 1902 a rapid recovery took place, and the total for 1911 exceeded that existing at the end of the year 1895, though still short of the maximum attained in 1894. The 1912 and 1913 figures shew a slight decline, while those for 1914 shew a more serious falling off, the difference between the 1911 and 1914 returns amounting to over $6\frac{1}{2}$ per cent.

4. Sheep.—In the case of sheep the graph furnishes evidence of five periods in which the upward movement in number has been arrested or reversed. The first of these occurred between 1868 and 1871, the second between 1875 and 1877, the third during 1884, the fourth, by far the most serious, between 1891 and 1902, and the fifth during 1912. From 1902 to 1907 a rapid increase took place, succeeded by a slight decline in 1908, and a rapid advance in 1909, 1910 and 1911, the point reached in the latter year being the highest since 1894. The return for 1912 shews a considerable decrease; this was followed by an increase in 1913, but there was a heavy falling off in 1914, amounting to $7\frac{1}{2}$ per cent.

5. Pigs.—The graph for pigs exhibits more numerous fluctuations than that for any of the other classes of live stock represented, and from 1904 to 1908 furnished evidence of a persistent decline. In 1909, however, an upward movement took place; and this was well maintained during the two succeeding years, the 1911 returns exceeding all previous records. There was a considerable decrease in 1912, and a smaller one during 1913. The 1914 returns, however, show an upward tendency.