

SECTION VII.

PASTORAL PRODUCTION.

§ 1. 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 1905, 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-two years covered by the table the live stock of the Commonwealth increased considerably, horses by 458 per cent., cattle 193 per cent., sheep 314 per cent., and pigs 141 per cent. The average annual increases which these aggregates represent are as follows:—Horses, 3.36 per cent. per annum; cattle, 2.08 per cent.; sheep, 2.77 per cent.; and pigs, 1.70 per cent.

COMMONWEALTH LIVE STOCK, 1860 to 1912.

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
1906	1,765,186	9,349,409	83,687,655	813,569
1907	1,871,714	10,128,486	87,650,263	754,101
1908	1,927,729	10,547,679	87,043,266	695,691
1909	2,022,917	11,040,391	91,676,281	765,137
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

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 want of rain had commenced to be seriously felt in the latter year, when an opportune general downfall in June materially relieved the situation, not however before much loss of stock had resulted, the poor lambing being the principal contributing factor. The drought of 1902: was one of the most severe experienced in Australia, the number of sheep in the Commonwealth diminishing under its influence from 72,040,211 on 31st December, 1901, to 53,668,347 at the same date in 1902—a decrease of more than 25 per cent. The falling off in the number of sheep in 1912 was 9,739,835, of cattle 251,695, and of pigs 265,466, being 10.47, 2.13 and 23.9 respectively. The number of horses during 1912 was the highest ever recorded in the Commonwealth, shewing an increase of 129,086, or 5.66 per cent., over the 1911 figures.

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, 1912, 2,408,113; 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 fifty-two years in the manner shewn in the succeeding table:—

NUMBER OF LIVE STOCK PER HEAD OF POPULATION, 1860 to 1912.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860	0.38	3.45	17.58	0.31	1905	0.42	2.11	18.48	0.25
1865	0.41	2.68	21.25	0.25	1906	0.43	2.29	20.45	0.20
1870	0.43	2.60	25.24	0.33	1907	0.45	2.43	21.06	0.18
1875	0.44	3.37	27.99	0.29	1908	0.46	2.49	20.57	0.16
1880	0.43	3.37	27.87	0.37	1909	0.47	2.55	21.20	0.18
1885	0.42	2.75	25.05	0.28	1910	0.49	2.65	20.80	0.23
1890	0.48	3.27	31.06	0.28	1911	0.50	2.59	20.36	0.24
1895	0.43	3.36	25.93	0.24	1912	0.51	2.45	17.59	0.18
1900	0.43	2.29	18.75	0.25					

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-two years under review, the number of horses varied but slightly in proportion to population, the range being from 0.38 to 0.51 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, 1912, were as follows:—

NUMBER OF LIVE STOCK PER SQUARE MILE, 31st DECEMBER, 1912.

States and Territories.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales	2.31	9.80	125.56	0.95
Victoria	6.04	17.16	135.32	2.73
Queensland	1.01	7.77	30.29	0.21
South Australia... ..	0.73	1.01	14.42	0.18
Western Australia	0.15	0.83	4.71	0.05
Tasmania	1.68	8.48	71.05	1.87
Northern Territory	0.04	0.77	0.14	0.003
Federal Territory	1.65	7.79	206.84	0.22
Commonwealth	0.81	3.89	27.99	0.28

7. **Minor Classes of Live Stock.**—The numbers of minor classes of live stock returned as at 31st December, 1912, were as follows:—Goats, 270,973; camels, 10,045; mules and donkeys, 6973; and ostriches, 1891. 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 270,973 goats shewn above. Of these, 6924 were in Queensland, while the quantity of *mohair* produced in that State in 1912 was set down at 6770 lbs., and the number of skins placed on the market was returned as 1342.

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 1908 to 1912 are as follows:—

QUANTITIES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS

OF THE COMMONWEALTH, 1908 to 1912.

Products.	Unit of Quantity.	1908.	1909.	1910.	1911.	1912.
Animals (living)—						
Cattle	No.	841	894	3,641	9,861	16,050
Horses	"	9,164	6,335	6,619	4,377	7,055
Sheep	"	9,001	2,540	10,281	18,965	31,210
Bones	cwt.	11,008	13,070	14,145	17,151	20,885
Glue Pieces and Sinews	"	23,417	20,199	20,570	29,211	33,033
Glycerine	lb.	*	*	*	*	*
Hair	"	191,475	190,052	304,006	287,957	152,369
Hoofs	cwt.	5,972	4,666	7,677	8,617	10,416
Horns	"	*	*	*	*	*
Meats—						
Frozen Beef	lb.	40,707,121	71,130,972	106,421,146	108,774,397	142,186,123
" Mutton and Lamb	"	91,607,614	116,914,965	190,228,396	129,567,312	115,365,547
" Rabbits and Hares	pair	7,604,053	9,181,312	9,652,127	8,362,994	6,494,259
Other	lb.	659,719	1,114,536	2,640,275	4,025,715	5,851,475
Potted and Extract of	"	"	"	"	"	"
Preserved in Tins, etc.	"	11,979,606	22,877,569	33,556,048	40,347,183	33,571,112
Other	"	—120,055	235,479	591,196	1,062,233	2,837,729
Sausage Casings	"	*	*	*	*	*
Skins—						
Hides	No.	219,798	286,973	286,639	452,942	746,088
Sheep	"	8,683,034	10,658,776	11,119,338	9,748,630	10,650,834
Rabbit and Hare	cwt.	65,391	62,180	86,930	92,587	87,878
Other, including Undressed Furs	No.	"	"	"	"	"
Tallow	cwt.	586,220	929,157	1,256,661	1,343,046	1,058,341
Wool—Greasy	lb.	471,540,092	528,388,349	586,863,111	578,622,185	557,683,801
Scoured	"	70,883,947	73,569,380	77,042,042	69,223,301	60,232,956
Tops	"	"	496,492	1,123,469	2,515,106	3,018,050

* Quantity not available. Note. — signifies net imports.

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 £171,430,744 for the period, or an average of £34,286,149 per annum, of which wool represents nearly 72 per cent. Meats, skins, and tallow rank next in order of importance.

**VALUE OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS OF THE
COMMONWEALTH, 1908 to 1912.**

Products.	1908.	1909.	1910.	1911.	1912.
	£	£	£	£	£
Animals (living)—					
Cattle	704	3,876	11,516	37,864	64,233
Horses	152,672	84,695	-51,267	-128,022	-28,017
Sheep	5,735	6,030	16,448	12,732	61,879
Bones	5,189	6,041	7,366	9,798	12,310
Glue Pieces and Sinews	12,679	11,800	11,037	13,645	18,139
Glycerine	3,179	2,316	10,169	15,926	13,621
Hair	16,739	22,584	25,879	24,987	29,950
Hoofs	2,024	1,622	2,804	3,169	4,922
Horns	18,270	18,729	25,532	25,673	30,339
Meats—					
Frozen Beef	451,503	733,023	1,179,060	1,101,914	1,630,306
" Mutton and Lamb	1,219,107	1,231,027	2,161,495	1,633,597	1,592,302
" Rabbits and Hares	336,093	423,679	486,592	407,034	320,887
" Other	8,507	18,027	40,816	43,390	83,065
Potted and Extract of	22,108	57,061	70,504	57,356	60,779
Preserved in Tins, etc.	213,476	401,606	602,880	756,148	611,288
Other	-2,890	1,663	8,173	13,010	69,485
Sausage Casings	26,600	52,182	38,204	37,129	8,735
Skins—					
Hides	86,310	239,539	286,274	467,364	871,953
Sheep	1,230,878	1,736,464	2,003,810	1,603,718	1,988,122
Rabbit and Hare... ..	304,990	347,244	566,739	498,037	576,179
Other, including Undressed Furs	276,703	607,158	822,095	476,872	647,959
Tallow	785,910	1,229,541	1,888,796	1,934,009	1,545,033
Wool—Greasy	18,017,420	20,580,783	23,431,947	21,388,155	22,066,585
Scoured	4,883,805	4,820,092	5,202,683	4,398,126	3,957,792
Tops ... ..	...	58,638	134,874	275,406	323,299
Total Values	28,077,711	33,695,425	38,984,426	35,112,037	36,561,145

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 has ever since retained. The figures for the several States for a series of years are as follows:—

**NUMBER OF HORSES IN STATES, TERRITORIES, AND COMMONWEALTH,
1860 to 1912.**

Year.	N.S.W.	Victoria.	Q'sland.	S. Aust.	W. Aust.	Tas.	N. T.	Fed. Terr.	Commonwealth.
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	...	1,061,078
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
1906 ...	537,762	406,840	452,916	206,633	104,922	38,299	17,814	...	1,765,186
1907 ...	578,326	424,648	488,486	208,639	113,330	40,392	17,893	...	1,871,714
1908 ...	591,045	424,903	519,969	213,385	116,795	39,881	21,751	...	1,927,729
1909 ...	604,784	442,829	555,613	230,405	125,315	40,492	23,479	...	2,022,917
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

* Statistics not collected prior to 1880.

3. Proportion in the Several States and Territories.—The percentages of the numbers of horses in the several States and Territories on the totals for the Commonwealth 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 1908 to 1912.**

Year.	N.S.W.	Victoria.	Q'sland.	S. Aust.	W. Aust.	Tas.	North'n Terr.	Fed. Terr.	Commonwealth.
	%	%	%	%	%	%	%	%	%
1901 ...	30.03	23.90	28.52	10.20	4.55	2.00	0.80	...	100.00
1908 ...	30.66	22.04	26.97	11.07	6.06	2.07	1.13	...	100.00
1909 ...	29.90	21.39	27.47	11.39	6.19	2.00	1.16	...	100.00
1910 ...	30.04	21.80	27.42	11.51	6.19	1.91	1.13	...	100.00
1911 ...	30.15	22.28	27.16	11.40	6.15	1.84	0.94	0.08	100.00
1912 ...	29.69	22.03	28.01	11.48	6.13	1.83	0.77	0.06	100.00

During the period under review, the proportions in South Australia and Western Australia have increased, that in Victoria has diminished, while in the case of New South Wales, Queensland, Tasmania, and the Northern Territory the proportion in 1912 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 12,161 for the year 1910 and 7807 in 1909, and in value between £256,104 and £173,012 respectively for the same two years. The total number of horses exported during the five years amounted to 48,952, an average of 9790 per annum. The total value of the exports for the period was £1,062,829, or £212,566 per annum.

The average export value per head for the period was £21 14s. 3d. The numbers exported to the principal countries concerned in this trade are as follows:—

NUMBER AND DESTINATION OF HORSES EXPORTED FROM THE COMMONWEALTH, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 years.
	No.	No.	No.	No.	No.	No.
India	6,296	6,136	9,187	7,416	7,299	36,334
Java	605	594	450	880	584	3,113
Straits Settlements	651	353	605	481	410	2,500
Philippine Islands	708	315	727	350	247	2,347
Ceylon	165	97	265	198	156	881
Mauritius	103	70	403	112	46	734
Fiji	88	114	190	180	146	718
German S.W. Africa	622	...	...	...	...	622
New Zealand	52	31	122	92	77	374
Japan	227	1	43	45	41	357
Papua	10	17	110	47	56	240
Siam ... ..	...	...	...	165	...	165
China	38	19	1	13	25	96
Hong Kong	15	29	...	32	...	76
South African Union	19	3	1	12	13	48
Other Countries	69	28	57	86	107	347
Total	9,668	7,807	12,161	10,109	9,207	48,952

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

VALUE OF HORSES EXPORTED FROM THE COMMONWEALTH, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 years.
	£	£	£	£	£	£
India	138,068	126,686	171,862	135,840	129,186	701,642
Java	16,457	19,598	10,424	19,235	13,459	79,173
Straits Settlements	15,491	10,339	21,185	12,939	11,322	71,276
Philippine Islands	12,134	5,303	14,971	7,795	5,449	45,652
Ceylon	3,418	2,201	7,486	3,622	3,403	20,130
Mauritius	2,385	480	7,191	2,371	1,358	13,785
Fiji	2,356	2,982	4,566	4,788	3,642	18,334
German S.W. Africa	13,255	...	...	...	...	13,255
New Zealand	3,436	2,847	12,403	17,322	11,435	47,443
Japan	12,234	60	1,860	2,115	2,650	18,919
Papua	163	936	2,055	920	899	4,973
Siam ... ..	...	...	...	7,298	...	7,298
China	892	295	60	390	625	2,262
Hong Kong	545	888	...	800	...	2,233
South African Union	931	180	25	500	695	2,331
Other Countries	2,453	217	2,016	4,016	5,421	14,123
Total	224,218	173,012	256,104	219,951	189,544	1,062,829

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

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 £67 ls. 1d., as compared with £21 14s. 3d. per head for the exports for the same period. The average number imported per annum was, however, only 3080, and the average annual value £206,554. The following table furnishes a comparison of imports and exports of horses during the five years 1908 to 1912:—

COMMONWEALTH IMPORTS AND EXPORTS OF HORSES, 1908 to 1912.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1908	504	71,546	9,668	224,218	9,164	152,672
1909	1,472	88,317	7,807	173,012	6,335	84,695
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
Total for 5 years	15,402	1,032,768	48,952	1,062,829	33,550	30,061

Note. — signifies value of net imports.

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.

Country.	Date.	Number of Horses.	Country.	Date	Number of Horses.
Russian Empire ¹ ...	1909 & 1911	34,837,100	Sweden	1910	586,835
Utd. States America	1911	20,277,000	Uruguay	1908	556,307
Argentine Republic	1910	8,435,141	Spain	1911	546,035
Germany	1907	4,345,043	Bulgaria	1905	538,271
Austria-Hungary ² ...	1910 & 1911	4,153,495	Denmark	1909	535,018
France	1911	3,236,110	New Zealand ⁶ ...	1911	404,688
Australia	1912	2,408,113	Chile	1910	352,108
Canada ³	1911	2,266,400	Netherlands ...	1910	327,377
United Kingdom ⁴ ...	1911	2,033,216	Belgium	1909	255,229
British India ⁵ ...	1910	1,564,935	Cape Colony ...	1904	255,060
Japan	1910	1,564,643	Algeria	1911	226,764
Italy	1908	906,820	Norway	1907	172,468
Rumania	1900	864,324	Servia	1910	152,617
Mexico	1902	859,217	Switzerland ...	1911	143,723
Cuba	1910	613,042	Orange River Col'ny	1909	132,574

1. European Russia 1911, Asiatic Russia 1909. 2. Austria 1910, Hungary 1911. 3. Exclusive of British Columbia. 4. Agricultural horses, unbroken horses, and breeding mares only. 5. Exclusive of Eastern Bengal. 6. Including mules and asses.

6. **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 1912 than in 1901. Particulars for 1901 and the past five years are as follows:—

NUMBER OF HORSES PER HEAD OF POPULATION, 1901 and 1908 to 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Federal Terr.	C'with.
1901 ...	0.35	0.32	0.91	0.46	0.38	0.18	2.76	...	0.42
1908 ...	0.38	0.34	0.93	0.55	0.45	0.21	6.09	...	0.46
1909 ...	0.37	0.35	0.96	0.59	0.47	0.21	6.70	...	0.47
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

§ 3. Cattle.

1. **Purposes for which Raised.**—In all the States of the Commonwealth cattle-raising 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 the numbers and quality of the dairy herds of the States 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 nine years ended 1912, however, a rapid improvement took place, and the total reached on 31st December, 1912, was over 5,200,000.

The numbers of cattle in the several States and the Northern Territory at quinquennial intervals from 1860 to 1905 and thence onwards for each year are as follows:—

**NUMBER OF CATTLE IN STATES, TERRITORIES AND COMMONWEALTH,
1860 to 1912.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Fed. Ter.	C'wealth.
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	...	...	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
1895	2,150,057	1,795,314	6,822,401	355,867	200,091	162,801	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
1906	2,549,944	1,804,323	3,413,919	325,724	690,011	211,117	354,371	...	9,349,409
1907	2,751,193	1,842,807	3,892,232	334,671	717,377	215,523	374,683	...	10,128,486
1908	2,955,934	1,574,162	4,321,600	340,376	741,788	205,827	407,992	...	10,547,679
1909	3,027,727	1,549,640	4,711,782	344,034	793,217	199,945	414,046	...	11,040,391
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

* Statistics not collected prior to 1880.

3. **Proportion in each State.**—During the period elapsing between 1901 and 1912 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 1908 to 1912.**

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
1908 ...	28.02	14.92	40.97	3.23	7.04	1.95	3.87	...	100.00
1909 ...	27.42	14.04	42.68	3.12	7.18	1.81	3.75	...	100.00
1910 ...	26.74	13.18	43.69	3.28	7.02	1.72	4.37	...	100.00
1911 ...	26.93	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

A comparison of the positions of the several States in 1901 and 1912 shews that, while 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, the Northern Territory also shewing an upward tendency..

4. **Imports and Exports of Cattle.**—Although the various products of the cattle-raising 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 :—

COMMONWEALTH IMPORTS AND EXPORTS OF CATTLE, 1901 and 1908 to 1912.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1901 ...	114	3,591	2,413	22,088	2,299	18,497
1908 ...	112	11,020	953	11,724	841	704
1909 ...	81	5,710	975	9,586	894	3,876
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

The average value of the cattle imported into the Commonwealth during the last five years was £30 2s. 11d. per head, while the average value of the cattle exported during the same period was £4 16s. 5d. The imported cattle were principally for stud purposes.

The comparatively large exports for 1912 were due to shipments to Java and Philippine Islands valued at £19,257 and £35,884 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 for 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 1908 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. †	N.T.	Fed. Ter.	C'wealth.
1901	335,823	251,477	377,433	*72,000	39,424	34,000	...	...	1,110,157
1908	376,574	281,087	243,069	67,369	46,975	36,000	‡3,759	...	1,054,833
1909	412,066	287,548	305,026	82,460	49,716	37,000	3,975	...	1,177,791
1910	483,947	319,665	378,514	84,164	55,723	37,000	4,061	...	1,363,074
1911	548,651	347,926	444,264	87,293	58,049	38,000	§4,061	269	1,528,513
1912	612,773	368,512	580,332	113,344	59,695	41,000	§4,061	267	1,779,984

* Estimated. † Partly estimated. ‡ Not available for previous years. § 1910 figures, those for 1911 and 1912 not available.

For Hobart and Launceston only, the figures for the years 1901 and 1907 to 1910 were, respectively, 8815, 12,037, 11,907, 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 1908 to 1912 are as follows:—

**QUANTITY OF BEEF PRESERVED BY COLD PROCESS EXPORTED FROM THE
COMMONWEALTH, 1908 to 1912.**

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 years.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	12,384,176	52,777,113	91,250,736	81,501,060	108,886,860	346,799,945
Philippine Islands	12,826,444	11,260,779	10,020,181	10,336,535	13,996,124	58,440,063
South African Union	4,316,387	1,698,046	3,784,637	7,337,652	9,228,546	26,365,268
Russia	6,821,701	...	...	...	...	6,821,701
Egypt	1,707,355	2,525,097	1,362,686	1,905,595	2,084,806	9,585,539
Straits Settlements	841,413	1,092,263	1,073,889	1,646,590	1,781,817	6,435,972
Malta	752,761	856,599	862,148	1,526,389	1,030,044	5,087,941
Italy	7,179	90,609	327,056	2,509,466	2,127,876	5,062,186
Hong Kong... ..	354,934	220,919	385,895	618,688	551,012	2,131,448
Canada ... ..	...	...	...	239,653	904,832	1,144,485
Gibraltar ... ..	...	130,703	70,908	403,626	...	605,237
Japan	408,141	102,723	22,119	77,223	1,098	611,304
Ceylon	87,948	56,509	99,564	151,104	150,620	545,745
Hawaiian Islands ... ..	...	105,403	71,606	272,559	1,198,140	1,647,708
Other countries	203,077	225,532	96,103	260,277	208,301	993,230
Total	40,711,516	71,142,295	109,427,528	108,786,417	142,210,076	472,277,832

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

**VALUE OF BEEF PRESERVED BY COLD PROCESS EXPORTED FROM THE
COMMONWEALTH, 1908 to 1912.**

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 years.
	£	£	£	£	£	£
United Kingdom	134,014	533,044	967,662	813,393	1,245,536	3,693,649
Philippine Islands	151,076	125,052	126,719	114,989	162,555	680,391
South African Union	46,181	18,251	36,559	67,940	97,601	266,532
Russia	70,358	...	...	...	...	70,358
Egypt	19,770	26,747	14,582	19,308	24,537	104,944
Straits Settlements	9,820	11,899	12,452	21,065	20,141	75,377
Malta	7,987	8,690	9,790	15,412	11,491	53,370
Italy	120	1,002	3,866	26,497	23,173	54,658
Hong Kong... ..	3,873	2,144	3,826	6,370	4,346	20,559
Canada ... ..	...	...	...	3,707	16,831	20,538
Gibraltar ... ..	...	1,157	517	3,751	...	5,425
Japan	4,494	1,139	205	694	13	6,545
Ceylon	1,507	601	1,035	1,315	1,367	5,825
Hawaiian Islands ... ..	...	1,067	690	4,413	20,325	26,495
Other countries	2,351	2,417	1,243	3,278	2,815	12,104
Total	451,551	733,210	1,179,146	1,102,132	1,630,731	5,096,770

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 1912 were: Queensland, 129,249,438 lbs., valued at £1,472,711; New South Wales, 7,897,831 lbs., valued at £98,244; Victoria, 4,582,640 lbs., valued at £54,794. and South Australia, 480,167 lbs., valued at £4982.

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:—

NUMBER OF CATTLE IN VARIOUS COUNTRIES.

Country.	Date.	No. of Cattle.	Country.	Date.	No. of Cattle.
British India ¹ ...	1910	72,669,279	Netherlands ...	1910	2,026,943
U. S. of America ² ...	1911	60,502,000	New Zealand ...	1911	2,020,171
Russian Empire ...	1909 & 11	53,167,680	Cape Colony ...	1904	1,954,390
Argentine Republic... ³	1910	28,827,900	Belgium ...	1910	1,823,000
Germany ...	1907	20,630,544	Bulgaria ...	1905	1,695,533
Austria-Hungary ³ ...	1910 & 11	16,478,097	Chile ...	1910	1,640,322
France ...	1911	14,552,430	Switzerland ...	1911	1,443,371
United Kingdom ...	1911	11,866,111	Japan ...	1910	1,384,183
Australia ...	1912	11,577,259	Transvaal ...	1911	1,196,069
Uruguay ...	1908	8,192,602	Algeria ...	1911	1,113,952
Canada ⁴ ...	1911	7,086,600	Norway ...	1907	1,094,101
Italy ...	1908	6,198,861	Ceylon ...	1910	1,022,346
Mexico ...	1902	5,142,457	Servia ...	1910	957,918
Cuba ...	1910	3,212,087	Orange River Colony	1909	721,258
Sweden ...	1910	2,747,526	Portugal ...	1906	703,198
Rumania ...	1900	2,588,526 ⁵	Egypt ...	1911	656,166
Spain ...	1911	2,541,112	Natal ...	1909	502,212
Denmark ...	1909	2,253,982			

1. Exclusive of Eastern Bengal. 2. European Russia, 1911; Asiatic Russia, 1909. 3. Austria, 1910, Hungary 1911. 4. Exclusive of British Columbia. 5 Including buffaloes.

8. **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:—

NUMBER OF CATTLE PER HEAD OF POPULATION, 1901 and 1908 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Northern Territ'ry.	Fed. Terr.	C'wealth.
1901 ...	1.49	1.34	7.44	0.63	2.06	0.96	54.68	...	2.22
1908 ...	1.89	1.26	7.76	0.88	2.86	1.03	111.63	...	2.49
1909 ...	1.88	1.21	8.15	0.88	2.99	1.04	117.03	...	2.55
1910 ...	1.91	1.21	8.57	0.95	2.98	1.04	150.86	...	2.65
1911 ...	1.88	1.23	8.15	0.94	2.87	1.12	141.56	4.38	2.59
1912 ...	1.71	1.09	8.19	0.89	3.63	1.13	116.71	3.66	2.45

For the Commonwealth as a whole the ratio of cattle to population is 10 per cent. greater for 1912 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 shews a slight decline. The excess of the 1911 figures over those for 1901 is in evidence in all the States except Victoria, and is most marked in the case of the Northern Territory. In Queensland the ratio has increased very rapidly during the past eight years, the ratio per head of population for 1911 being 72 per cent. greater than for 1903. In Victoria the ratios for the last three years 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

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, 1910, 1911, and 1912 represented more than half the total for the Commonwealth, and even in these years it fell but little short of half the total.

The number of sheep in the several States and Territories at quinquennial intervals from 1860 to 1905, and for each year onwards to 1912, is as follows:—

**NUMBER OF SHEEP IN STATES, TERRITORIES AND COMMONWEALTH,
1860 to 1912.**

Year.	New South Wales.	Victoria.	Queensland.	South Aust.	Western Aust.	Tasmania.	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	6,594,966	3,779,308	445,044	1,752,719	...	...	29,539,928
1870	16,308,585	10,761,887	8,163,818	4,400,655	608,892	1,349,775	...	...	41,593,612
1875	25,353,924	11,749,532	7,227,774	6,179,395	881,861	1,731,723	...	...	53,124,209
1880	37,398,121	10,360,285	6,935,967	6,443,904	1,231,717	1,796,715	*9,318	...	62,176,027
1885	37,820,906	10,681,637	8,994,322	6,593,648	1,702,719	1,648,627	49,917	...	67,491,976
1890	55,286,431	12,692,643	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	1,523,346	73,713	...	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
1906	44,132,421	12,937,440	14,886,438	6,624,941	3,340,745	1,729,394	36,276	...	83,687,655
1907	44,461,839	14,146,734	16,738,047	6,829,637	3,684,974	1,744,800	44,232	...	87,650,263
1908	43,370,797	12,545,742	18,348,851	6,898,451	4,097,324	1,728,053	54,048	...	87,043,266
1909	46,202,578	12,937,983	19,593,791	6,432,038	4,731,737	1,734,761	43,393	...	91,676,281
1910	45,560,969	12,862,665	20,331,838	6,267,477	5,168,516	1,788,310	57,240	...	92,047,015
1911	44,722,523	13,857,804	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

* Statistics not collected prior to 1880.

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 1908 to 1912, 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 1908 to 1912.**

Year.	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
1908	49.83	14.41	21.08	7.93	4.71	1.98	0.06	...	100.00
1909	50.40	14.11	21.37	7.02	5.16	1.89	0.05	...	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

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 Victoria,

South Australia and Tasmania, while in the case of Queensland a marked advance in proportion was experienced, and in Western Australia to a minor extent.

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. The following are the particulars of the imports and exports for the years 1901 and 1908 to 1912 :—

COMMONWEALTH IMPORTS AND EXPORTS OF SHEEP, 1901 and 1908 to 1912.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1901	553	12,134	12,094	12,104	11,541	—30
1908	4,020	18,717	13,021	24,452	9,001	5,735
1909	2,775	14,213	5,315	20,243	2,540	6,030
1910	2,863	14,008	13,144	30,456	10,281	16,448
1911	5,254	25,997	24,219	38,729	18,965	12,732
1912	2,903	10,643	34,118	72,522	31,210	61,879

Note. — signifies net imports.

5. **Sheep Slaughtered.**—The numbers of sheep slaughtered in the several States during 1901 and 1908 to 1912 are as follows :—

SHEEP (INCLUDING LAMBS) SLAUGHTERED, 1901 and 1908 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	Sth. Aust.	W. Aust.	Tas.†	N.T.	Fed. Terr.	C'wealth.
1901	4,519,133	2,469,797	554,705	*678,000	428,534	322,000	...	...	8,972,169
1908	5,201,492	3,309,865	705,776	1,212,868	423,056	340,000	300	...	11,193,357
1909	6,430,486	3,708,512	1,076,718	1,335,514	491,103	344,000	523	...	13,386,856
1910	7,470,002	4,245,881	1,751,151	1,316,388	549,977	346,000	516	...	15,679,915
1911	6,539,559	4,348,363	981,153	1,275,734	622,555	350,000	‡516	7,366	14,125,246
1912	5,805,595	4,153,269	1,273,332	1,332,838	610,214	357,000	‡516	6,587	13,539,351

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

6. **Exports of Mutton and Lamb Preserved by Cold Process.**—Australia's export trade in mutton and lamb preserved by cold process is one which 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, 1911 and 1912, was £1,613,000. 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 93.7 per cent. of the total quantity exported from the Commonwealth during the past

five years. The South African Union and Canada took 2.3 and 1.2 per cent. respectively, while the balance of 2.8 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, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 years.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	82,341,131	110,138,905	181,556,597	120,757,079	108,556,172	603,349,884
South African Union	5,323,602	2,458,029	2,720,584	2,657,853	1,910,196	15,070,264
Canada	719,336	1,138,974	2,309,441	2,077,802	1,320,718	7,566,271
Philippine Islands	673,867	682,116	788,577	859,022	677,076	3,680,658
Malta	487,586	630,313	838,371	699,514	266,035	2,922,319
Straits Settlements	471,634	568,684	713,636	845,079	992,831	3,592,064
Egypt	610,269	455,599	369,611	447,411	624,506	2,507,396
Hong Kong	319,382	323,113	318,590	417,316	328,330	1,706,731
Ceylon	156,291	117,141	254,212	332,011	293,523	1,153,176
Hawaiian Islands	234,412	255,051	148,246	102,361	83,770	820,840
Gibraltar ... ..	...	67,190	52,590	99,501	...	219,281
Japan	89,805	22,789	18,681	19,885	...	151,160
Other Countries	180,299	57,735	142,494	254,461	318,824	953,813
Total	91,607,614	116,915,639	190,229,380	129,569,295	115,371,981	643,693,859

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

VALUES OF FROZEN MUTTON AND LAMB EXPORTED FROM THE COMMONWEALTH, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 years.
	£	£	£	£	£	£
United Kingdom	1,115,908	1,161,475	2,069,932	1,529,633	1,499,648	7,376,596
South African Union	55,293	23,578	28,935	28,365	23,919	160,090
Canada	10,257	14,646	23,132	28,027	20,336	96,398
Philippine Islands	8,056	6,059	7,878	9,282	9,271	40,546
Malta	5,526	6,262	10,140	8,274	3,228	33,430
Straits Settlements	5,261	5,488	7,407	9,781	13,887	41,324
Egypt	7,801	4,987	4,385	6,248	8,282	31,703
Hong Kong	3,487	2,997	3,288	4,581	4,483	18,836
Ceylon	1,722	1,096	2,649	3,910	4,448	13,825
Hawaiian Islands	2,927	2,994	1,783	1,549	1,343	10,596
Gibraltar ... ..	...	700	329	829	...	1,858
Japan	891	195	240	202	...	1,528
Other Countries	1,978	558	1,415	2,941	4,033	10,925
Total	1,219,107	1,231,035	2,161,513	1,633,622	1,592,378	7,837,655

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:—

NUMBER OF SHEEP IN VARIOUS COUNTRIES.

Country.	Date.	No. of Sheep	Country.	Date.	No. of Sheep.
Australia ...	1912	83,263,686	Germany ...	1907	7,703,710
Russian Empire ¹	{ 1909 } 1911	81,498,972	Orange River Colony	1909	7,481,251
Argentine Republic ...	1910	73,012,640	Rumania ...	1900	5,655,444
United States of America	1911	53,633,000	Servia ...	1910	3,808,815
Ottoman Empire ...	1908	40,000,000	Chile ...	1910	3,537,728
United Kingdom ...	1911	30,479,807	Mexico ...	1902	3,424,430
Uruguay ...	1908	26,286,296	Transvaal ...	1911	3,360,688
New Zealand ...	1912	23,750,153	Portugal ...	1906	3,072,988
British India ² ...	1910	23,280,662	Canada ⁴ ...	1911	2,389,300
Cape Colony ...	1910	19,026,884	Norway ...	1907	1,393,488
France ...	1911	16,425,330	Natal ...	1909	1,068,996
Spain ...	1911	15,725,882	Sweden ...	1910	1,003,981
Italy ...	1908	11,162,926	Netherlands ...	1910	889,036
Austria-Hungary ³	{ 1910 } 1911	10,975,143	Denmark ...	1909	726,879
Algeria ...	1911	8,528,610	Tunis ...	1911	686,730
Bulgaria ...	1905	8,130,997	Iceland ...	1909	557,127
			Belgium ...	1895	235,722
			Switzerland ...	1911	159,727

1. Including goats. European Russia, 1911; Asiatic Russia, 1909. 2. Exclusive of Eastern Bengal. 3. Austria 1911, Hungary 1910. 4. Exclusive of Alberta.

8. Relation to Population.—The relation of the flocks of the several States and Territories to the populations at the end of each year 1901 and 1908 to 1912 is as follows:—

NUMBER OF SHEEP PER HEAD OF POPULATION, 1901 and 1908 to 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas	N.T.	Federal Ter.	C'wealth.
1901	30.43	8.82	19.80	13.95	13.56	10.23	10.34	...	18.83
1908	27.99	10.03	32.94	17.88	15.78	9.01	15.13	...	20.57
1909	28.63	10.13	33.91	16.37	17.81	8.98	12.39	...	21.20
1910	27.72	9.90	33.94	15.40	18.63	9.23	17.34	...	20.80
1911	26.74	10.17	33.34	14.76	18.40	9.42	15.70	117.00	20.36
1912	21.86	8.61	31.91	12.74	15.02	9.45	21.82	97.24	17.59

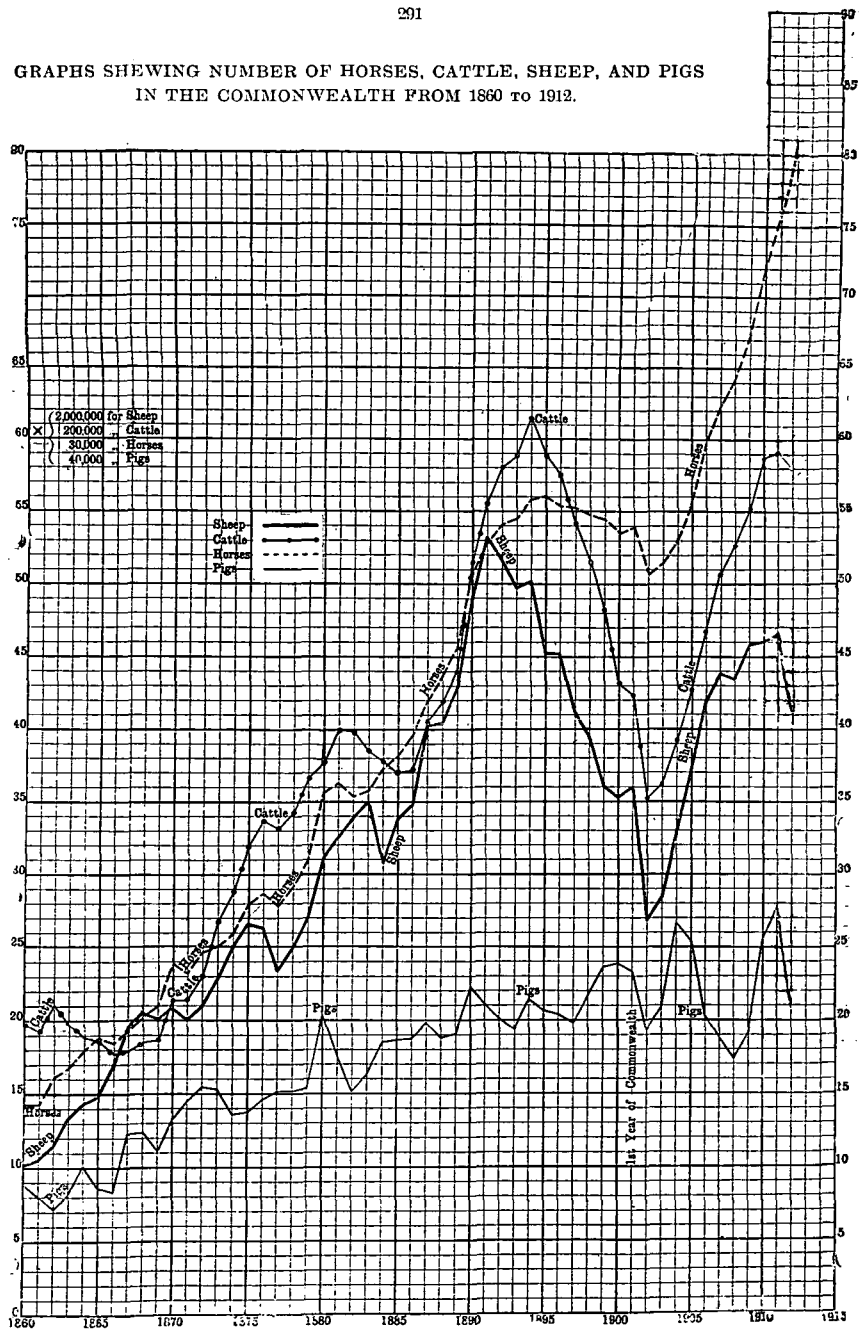
§ 5. Wool.

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, 1913, being about £27,550,000. Most 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 1½ 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 total 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 any uncertainty as to the average loss of weight has thus the less effect.

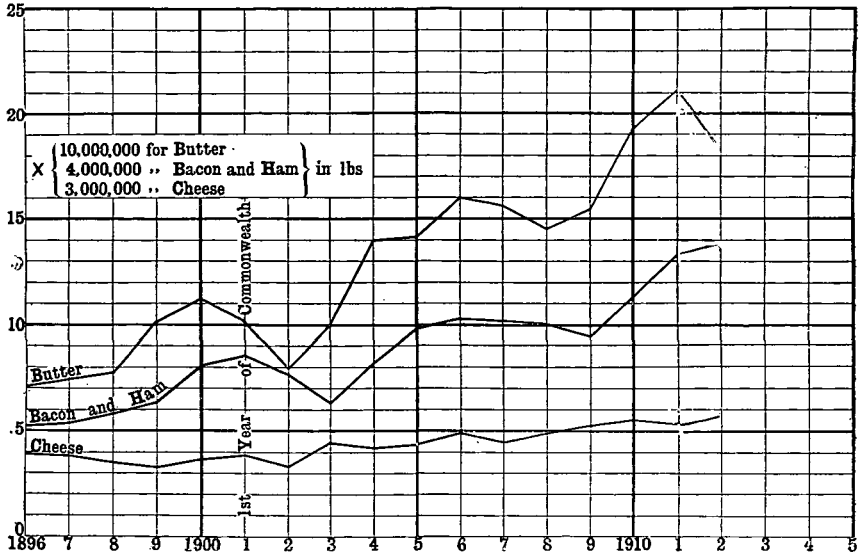
GRAPHS SHEWING NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS
IN THE COMMONWEALTH FROM 1860 TO 1912.



(See pages 275 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.

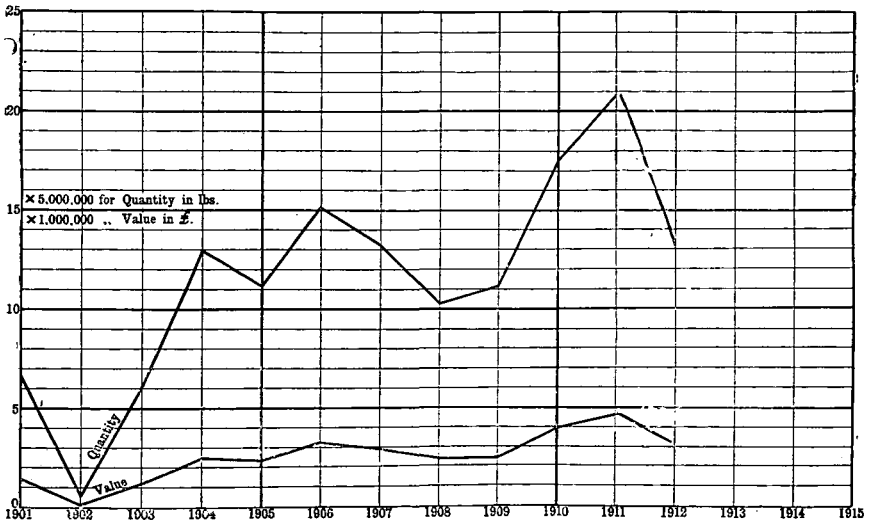
GRAPHS SHEWING THE PRODUCTION OF BUTTER AND CHEESE, AND BACON AND HAM, IN THE COMMONWEALTH, FROM 1896 TO 1912.



(See pages 375, 378.)

EXPLANATION OF GRAPH.—The base of each small rectangle represents an interval of one year, and the vertical height of each small rectangle denotes in the case of butter 10,000,000 lbs.; in the case of bacon and ham, 4,000,000 lbs.; and in the case of cheese 3,000,000 lbs.

GRAPHS SHEWING THE QUANTITY AND VALUE OF NET EXPORTS OF BUTTER FROM THE COMMONWEALTH, FROM 1901 TO 1912.



(See page 376.)

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.

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 three seasons ended 30th June, 1911, 1912 and 1913 :—

ESTIMATED QUANTITY OF WOOL AS IN THE GREASE, SHORN, FELLMONGERED, OR ON SKINS SHIPPED DURING THE SEASONS ENDED 30th JUNE, 1911, 1912 and 1913.

State.	1910-11.	1911-12.	1912-13.
	lbs.	lbs.	lbs.
New South Wales*	374,907,068	371,546,415	326,804,000
Victoria	101,803,644	110,463,041	88,762,612
Queensland	139,250,802	142,382,269	136,878,270
South Australia	63,613,781	60,056,470	56,691,036
Western Australia	29,984,453	30,833,837	26,849,981
Tasmania	11,338,540	10,726,593	12,416,014
Northern Territory	400,000	400,000	450,000
Commonwealth... ..	721,298,288	726,408,625	648,851,913

* Including Federal Territory.

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, and 668,667,078 lbs. for 1912-13.

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, 1908 to 1912.

State.	1908.	1909.	1910.	1911.	1912.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales	1,020,456	1,095,136	1,594,712	2,401,920	2,420,000
Victoria	6,152,250	5,239,806	5,309,730	5,774,863	5,535,483
Queensland	224,460	301,078	270,246	336,486	583,892
South Australia	672,112	634,250	564,432	634,238	710,000
Western Australia ... ..	...	...	...	...	...
Tasmania	1,044,879	991,388	1,087,400	986,000	1,082,000
Commonwealth	9,114,157	8,261,658	8,826,520	10,133,512	10,331,375

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 the rate 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 is 1½d. per lb.; and for the two years commencing 1st January, 1912, 1d. per lb. is payable. During the year 1908-9, an amount of £326 was paid in bounties, in 1909-10 £4933, in 1910-11 £8522, and in 1911-12 £16,898. The quantities of wool on which these amounts were paid were 52,085, 789,216, 1,363,520 and 3,122,244 lbs. respectively.

Figures shewing the exports of wool tops for the calendar years 1909 to 1912 inclusive will be found at the foot of the two following tables.

6. **Exports of Wool.**—About forty-two per cent. of the exports of wool from the Commonwealth is 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 1908 to 1912 the quantities of "greasy" wool exported from the Commonwealth and the principal countries of destination:—

COMMONWEALTH EXPORTS OF WOOL IN THE GREASE, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	lbs.	lbs.	lbs.	lbs.	lbs.	
United Kingdom ...	225,336,019	210,353,060	222,580,179	230,013,473	211,386,638	1,099,969,369
France ...	104,210,690	128,402,229	154,091,890	155,347,112	151,555,672	693,607,593
Germany ...	80,073,180	102,160,121	122,297,188	105,674,113	107,523,165	517,727,767
Belgium ...	37,557,258	47,381,739	63,305,855	58,469,298	54,679,915	261,394,065
United States of America ...	20,430,274	32,846,145	11,079,242	10,154,171	8,686,125	83,195,957
Japan ...	1,972,449	5,320,455	7,869,785	6,583,686	9,330,317	31,086,192
Italy ...	1,548,760	1,915,544	3,710,785	5,644,235	4,856,997	17,676,321
Austria-Hungary ...	...	22,030	...	5,836,992	7,908,480	13,767,502
India ...	394,236	271,030	485,990	478,353	390,536	2,020,145
New Zealand ...	62,775	135,954	1,122,446	154,193	147,794	1,623,162
Canada ...	254,300	157,263	208,269	52,299	126,517	798,648
Other Countries ...	6,168	54,643	41,640	415,698	1,231,062	1,749,211
Total...	471,846,109	529,020,213	587,069,269	578,823,623	557,832,718	3,724,615,932

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

COMMONWEALTH EXPORTS OF "SCOURED AND WASHED WOOL,"*
1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	lbs.	lbs.	lbs.	lbs.	lbs.	
United Kingdom ...	46,401,114	34,168,844	35,571,404	35,940,841	28,305,314	180,387,517
France ...	9,383,368	16,651,577	15,861,390	13,980,442	15,037,742	70,993,519
Germany ...	9,104,503	14,583,296	14,145,596	12,148,316	10,541,771	60,523,482
Belgium ...	5,157,465	7,661,482	11,418,895	7,629,001	5,661,005	37,527,848
Japan ...	722,217	635,722	887,292	1,622,747	2,750,614	6,598,592
Italy ...	65,361	148,695	212,661	397,004	380,550	1,204,271
India ...	70,828	74,876	41,962	33,321	47,826	268,813
United States of America ...	645	151,300	5,310	...	49,849	207,132
New Zealand ...	5,871	3,972	32,488	2,934	42,927	88,192
Austria-Hungary ...	...	...	1,113	16,734	89,036	106,853
Other Countries ...	4,122	2,646	180	10,300	347,472	364,720
Total...	70,915,494	74,082,419	78,178,300	71,770,640	63,254,106	358,200,559

*Including "tops." See hereunder.

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 and in 1912, 3,018,050 lbs. valued at £323,299.

The total value of the wool exported from the Commonwealth to each of the various countries during the five years under review was:—

TOTAL VALUE OF WOOL EXPORTED FROM THE COMMONWEALTH, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	12,022,541	10,562,929	11,447,359	11,159,335	10,418,577	55,610,741
France	4,407,940	5,594,983	6,905,177	6,016,293	6,527,854	29,452,247
Germany	3,632,708	5,006,623	6,053,873	4,851,785	5,050,974	24,595,963
Belgium	1,742,639	2,230,206	3,084,847	2,552,282	2,480,348	12,090,322
United States of America	881,172	1,691,389	579,605	500,015	460,275	4,112,456
Japan	125,408	261,630	420,622	459,000	703,371	1,973,031
Italy	67,021	97,756	181,457	245,804	230,436	822,474
Austria-Hungary ... ..	...	1,025	55	242,461	360,125	603,666
India	21,708	16,657	24,268	21,290	18,739	102,662
New Zealand	1,669	6,637	67,219	6,199	8,844	90,568
Canada	10,873	7,748	10,695	2,824	7,155	39,295
Other Countries	557	2,527	2,106	13,905	87,865	106,960
Total	22,914,336	25,483,110	28,777,283	26,071,103	26,354,563	123,600,385

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 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 Messrs. Helmuth Schwartze and Co., the well-known firm of English wool brokers, 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:—

IMPORTS OF WOOL INTO EUROPE AND NORTH AMERICA, 1901 and 1909 to 1913.

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
1909	2,296,000	380,000	571,000	3,247,000
1910	2,411,000	377,000	461,000	3,249,000
1911	2,524,000	376,000	499,000	3,399,000
1912	2,463,010	463,000	497,000	3,423,000
1913	2,296,000	484,000	437,000	3,217,000

As the River Plate 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 1912 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:—

IMPORTS OF WOOL INTO THE UNITED KINGDOM, 1912.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	lbs.	£		lbs.	£
Australia ...	285,061,874	12,589,003	Peru ...	3,068,147	130,494
New Zealand ...	184,240,455	7,701,364	Russia ...	9,672,877	379,712
Cape Colony ...	83,518,459	3,220,327	Egypt ...	3,181,432	86,272
France ...	29,539,573	1,852,916	Portugal ...	1,873,153	66,216
British India ...	55,270,119	1,590,900	China ...	1,854,106	73,808
Argentine Republic	56,251,740	2,208,681	Netherlands ...	398,820	12,238
Natal ...	37,080,640	1,324,336	Canada ...	544,550	16,881
Chile ...	20,790,605	658,726	Italy ...	1,607,740	74,827
Turkey ...	7,746,791	235,986	Persia ...	379,970	11,103
Belgium ...	4,382,214	210,357	Spain ...	112,194	3,723
Germany ...	3,836,278	169,315	Other Countries ...	1,630,040	57,563
U.S. of America ...	658,256	22,176			
Falkland Islands	4,541,618	152,412			
Uruguay ...	9,614,036	385,679			
			Total ...	806,855,687	33,235,015

It will be seen that of the total importations of wool into the United Kingdom, Australian wool represented over 35 per cent. of quantity and nearly 38 per cent. of value.

10. **The Wool Market.**—The market for wool, which had been for some years steadily improving, received a severe set-back in the early portion of the season 1907-8 by the disastrous financial crisis which occurred in America soon after the commencement of that season. The result was that buying was restricted, prices fell, and a considerable quantity of wool was withdrawn from sale and held over until the succeeding season. The season 1908-9 consequently opened rather inauspiciously, but, although prices did not reach the high level attained in 1906-7, the demand, particularly in the latter part of the season, was much more spirited than in 1907-8, and the sales must be regarded as having been very satisfactory. The season 1909-10 opened favourably and prices exhibited a distinctly upward tendency, with the result that the price averaged over 20 per cent. more than was obtained during the preceding year. The 1910-11 season opened with a fall of 10 per cent. on the closing rates of the previous season; values gradually recovered before the middle of the series, when wool was selling almost as well as at any period of the previous year; prices again declined $7\frac{1}{2}$ to 10 per cent., but made a good recovery towards the close of the season, the average for the year being 8 per cent. below that of the previous year. At the commencement of the 1911-12 season values were fully 10 per cent. lower than those ruling at the close of the previous sales. The strained international relationship existing among the European powers was mainly responsible for this.

Early in October the market experienced a further decline of $2\frac{1}{2}$ per cent. on good wools and of about 5 per cent. on inferior sorts. Towards the end of that month a hardening tendency was manifested, the increased American demand having a material effect in hastening the improvement. During the middle of the season a further advance on prices was in evidence, and this, with a few slight fluctuations, was well maintained throughout the rest of the season. The level of prices throughout 1911-12 was some $7\frac{1}{2}$ per cent. lower than during the previous season.

The 1912-13 season was particularly free from any violent fluctuations, and was a year of considerable and widespread demand and steady markets. Commencing with an advance of some 5 per cent. on closing rates of previous season, a further advance was experienced during the October sales. November witnessed a rush of fresh orders and frequently increased limits, which resulted in a further advance of about 5 per cent.

The market then firmed steadily, and at the close of the first series of sales, wools were some 10 per cent. or, say, $\frac{3}{4}$ d. to $1\frac{1}{4}$ d. per lb. above opening rates, and from 15 to 20 per cent. higher than prices ruling at same date of previous year. The second series at the beginning of January opened strong on December rates, the Yorkshire, German, and French buyers competing eagerly for every lot, merino and fine crossbred being in specially keen request. Towards the end of January the market was at the highest point of the season, prices being well maintained during the balance of the second series. The season closed with the Brisbane sales in June, when a portion of the new clip was offered, and a slightly easier feeling was noticeable owing to the tightness of the money market, particularly in Germany.

The average advance in value for all wool in Australia during the 1912-13 season was just under 20 per cent.

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, 1903 to 1912.

Year	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
Average value per lb. ...	d. 8.75	d. 9.30	d. 9.83	d. 10.14	d. 10.73	d. 9.17	d. 9.35	d. 9.58	d. 8.87	d. 9.50

(i.) *Exports of Wool from each State and Quantity sold Locally.* Over 88 per cent. of the wool grown in Australia is now sold in the local markets prior to export from the Commonwealth. 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 shows the number of bales of wool exported oversea from each State during the season ended 30th June, 1913, 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 293.

**EXPORTS OF WOOL TO PLACES OUTSIDE THE COMMONWEALTH, AND THE
QUANTITY SOLD LOCALLY IN THE SEVERAL STATES, DURING THE
SEASON ENDED 30th JUNE, 1913.**

State.	Oversea Exports.		Sold at Local Sales prior to Export.		Ratio of Local Sales to	
					Oversea Exports from each State.	Total Exports from C'wealth.
	Bales.	%	Bales.	%	%	%
New South Wales ...	773,010	44.98	664,482	43.76	85.96	38.66
Victoria ...	435,795	25.36	420,013	27.66	96.38	24.44
Queensland ...	254,495	14.81	259,150	17.06	101.83	15.08
South Australia ...	164,250	9.56	147,983	9.74	90.09	8.61
Western Australia ...	68,656	3.99	3,182	0.21	4.63	0.19
Tasmania ...	22,271	1.30	23,840	1.57	107.05	1.39
Commonwealth ...	1,718,486	100.00	1,518,650	100.00	...	88.37

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 86, South Australia 90, and Queensland 102 per cent. In Tasmania and Queensland some of the wool sold locally was subsequently shipped to interstate ports. Of the total quantity sold in the Commonwealth, New South Wales and Victoria disposed of 43.76 and 27.66 per cent. respectively; Queensland, South Australia, Tasmania, and Western Australia following next in the order named.

During the season under review 1,718,486 bales of wool were shipped from the Commonwealth, of which 88.37 per cent. was sold in the Australian markets. Of this ratio New South Wales and Victoria are represented by 63, Queensland and South Australia 23½, while Tasmania and Western Australia account 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, 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 1913.**

Year ended 30th June.				Oversea Exports.	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
1909	...	...	...	1,796,347	1,449,917	80.71
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

The steady development of the Australian wool market is clearly shewn in this table. In eighteen years the quantity sold has nearly doubled, and the ratio of wool sold to

that exported has increased from 51 per cent. in 1895 to over 88 per cent. in the season ended 30th June, 1913.

During the past season 1,518,650 bales of wool were sold in Australia and 286,151 bales in New Zealand, representing the total value of £24,642,643. 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 1912-13 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, 1913.

Destination.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	Tas.	C'wealth.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
United Kingdom	101,424	188,229	48,205	61,388	15,021	414,267
France, Belgium, and Holland	276,220	129,988	108,472	43,954	4,013	557,647
Germany	189,570	55,267	81,345	17,425	1,905	345,512
Austria, Italy and other Euro- pean Countries	55,091	15,190	8,593	12,471	ii	91,356
America	5,719	10,897	2,953	360	...	19,929
Japan, China and India ...	16,032	1,150	4,818	...	...	22,000
Local Woollen Mills	20,426	19,292	9,764	15,567	2,890	27,500
Scourers and Speculators ... }						40,439
Total Sales	664,482	420,013	259,150	151,165	23,840	1,518,650

PERCENTAGE DISTRIBUTION.

	%	%	%	%	%	%
United Kingdom	15.27	44.82	18.60	40.61	63.01	27.28
France, Belgium and Holland	41.57	30.95	39.93	29.08	16.83	36.72
Germany	28.53	13.16	31.39	11.52	7.99	22.75
Austria, Italy and other Euro- pean Countries	8.29	3.62	3.31	8.25	0.05	6.02
America	0.86	2.59	1.14	0.24	...	1.31
Japan, China and India ...	2.41	0.27	1.86	...	...	1.45
Local Woollen Mills	3.07	4.59	3.77	10.30	12.12	1.81
Scourers and Speculators ... }						2.66
Total Sales	100.00	100.00	100.00	100.00	100.00	100.00

(a) Including Western Australia, 3182 bales.

Of the total quantity sold, amounting to 1,518,650 bales, 994,515 were purchased for the Continent of Europe, 414,267 for the United Kingdom, 19,929 for America, 22,000 for Asiatic countries, 40,439 by scourers and speculators, while 27,500 bales went for consumption in the local woollen mills. Of the Continental purchases 56 per cent. went to France, Belgium and Holland, nearly 35 per cent. to Germany, and 9 per cent. to Austria, 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:—

**PROPORTIONS OF THE VARIOUS DESCRIPTIONS OF WOOL SOLD LOCALLY IN
THE SEVERAL STATES OF THE COMMONWEALTH DURING THE SEASON
ENDED 30th JUNE, 1913.**

Description of Wool.	N S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Common-wealth.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
Greasy ...	592,572	406,687	198,107	144,998	3,182	23,840	1,369,386
Scoured ...	71,910	13,326	61,043	2,985	...	...	149,264
Total ...	664,482	420,013	259,150	147,983	3,182	23,840	1,518,650
Fleece, etc. ...	649,870	398,290	250,048	139,695	3,029	23,032	1,463,964
Lambs ...	14,612	21,723	9,102	8,288	153	808	54,686
Total ...	664,482	420,013	259,150	147,983	3,182	23,840	1,518,650
Merino ...	616,272	219,387	255,508	130,225	2,387	9,774	1,233,553
Crossbred & all strong breeds...	48,210	200,626	3,642	17,758	795	14,066	285,097
Total ...	664,482	420,013	259,150	147,983	3,182	23,840	1,518,650
Greasy ...	89.18	96.83	76.44	97.98	100.00	100.00	90.17
Scoured ...	10.82	3.17	23.56	2.02	...	...	9.83
Total ...	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Fleece, etc. ...	97.80	94.83	96.49	94.40	95.19	99.61	96.40
Lambs ...	2.20	5.17	3.51	5.60	4.81	3.39	3.60
Total ...	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Merino ...	92.74	52.23	98.59	88.00	75.02	41.00	81.23
Crossbred & all strong breeds...	7.26	47.77	1.41	12.00	24.98	59.00	18.77
Total ...	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Wool in the grease represented over 90 per cent. of total sales during the period under review. Of fleece and lambs, the former shews about 96.4, and the latter 3.6 per cent. The poor lambing in 1912 resulted in the falling off of lamb's wool from 5 per cent. in 1911-12 to 3.6 in 1912-13. The class of wool produced principally is 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 every bale of 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 1912-13:—

PERCENTAGE OF BALES OF EACH DESCRIPTION OF WOOL SOLD IN THE SEVERAL STATES TO THE TOTAL SOLD IN THE COMMONWEALTH, 1912-13.

Description of Wool.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Commonwealth.
	%	%	%	%	%	%	%
Greasy ...	43.28	29.70	14.46	10.59	0.23	1.74	100.00
Scoured ...	48.18	8.93	40.89	2.00	...	...	100.00
Fleece, etc. ...	44.39	27.21	17.08	9.54	0.21	1.57	100.00
Lambs ...	26.72	39.72	16.64	15.16	0.28	1.48	100.00
Merino ...	49.96	17.79	20.71	10.56	0.19	0.79	100.00
Crossbred and all strong breeds ...	16.91	70.37	1.28	6.23	0.28	4.93	100.00

§ 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 1908 to 1912 being no less a sum than £11,424,741, or an average of £2,284,948 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 1908 to 1912 are as follow:—

COMMONWEALTH EXPORTS OF SHEEPSKINS WITH WOOL, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
France ...	3,265,111	3,140,764	4,325,337	4,322,505	5,297,141	20,350,858
United Kingdom ...	3,522,791	3,968,494	3,763,002	3,306,567	3,707,050	18,267,904
Belgium ...	710,902	1,100,023	1,282,942	1,020,847	1,277,530	5,392,244
Germany ...	124,465	57,041	106,534	109,621	63,112	460,773
U.S. of America ...	11,041	86,664	155,782	39,811	129,899	423,197
Italy ...	44,083	27,565	29,575	26,140	...	127,363
Canada ...	...	...	10,446	...	679	11,125
New Zealand ...	225	...	100	...	661	986
Other Countries ...	...	234	...	6,869	...	7,103
Total ...	7,678,618	8,380,785	9,673,718	8,832,360	10,476,072	45,041,553

The next table furnishes corresponding particulars as to value :—

**VALUE OF SHEEPSKINS WITH WOOL EXPORTED FROM THE COMMONWEALTH,
1908 to 1912.**

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	£	£	£	£	£	£
France ...	508,477	598,172	884,450	735,259	980,298	3,706,656
United Kingdom	515,937	737,592	710,229	568,618	666,962	3,199,338
Belgium ...	123,456	274,823	316,958	253,995	314,301	1,283,533
Germany ...	23,338	9,566	16,720	13,195	10,576	73,395
U.S. of America...	1,058	9,836	16,978	3,706	12,713	44,291
Italy ...	10,621	10,244	9,630	4,075	...	34,570
Canada...	...	...	1,071	...	66	1,137
New Zealand ...	25	...	25	...	113	163
Other Countries ...	...	63	...	697	...	760
Total ...	1,182,912	1,640,296	1,956,061	1,579,545	1,985,029	8,343,843

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, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
United Kingdom ...	1,086,103	1,140,338	875,994	459,252	131,103	3,692,790
United States of America	167,460	1,285,946	710,001	590,582	271,028	3,025,017
France ...	101,767	3,315	23,863	21,666	55,845	206,456
New Zealand ...	5,040	9,840	15,552	9,484	1,515	41,431
Germany ...	2,812	...	14,447	...	...	17,259
Belgium ...	...	...	8,428	331	167	8,926
Canada ...	...	1,068	1,956	...	...	3,024
Italy ...	...	...	...	...	...	...
Other Countries ...	475	...	...	...	...	475
Total ...	1,363,657	2,440,507	1,650,241	1,081,315	459,658	6,995,378

Corresponding details concerning value are given hereunder :—

**VALUE OF SHEEPSKINS WITHOUT WOOL EXPORTED FROM THE
COMMONWEALTH, 1908 to 1912.**

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom ...	62,605	50,077	37,015	17,138	3,854	170,689
United States of America	7,390	57,795	22,544	16,295	8,730	112,754
France ...	7,477	312	1,711	1,225	5,948	16,673
New Zealand ...	272	422	514	196	27	1,431
Germany ...	184	...	538	...	...	722
Belgium ...	...	...	396	12	4	412
Canada ...	...	50	115	...	...	165
Italy ...	...	...	...	...	...	...
Other Countries ...	38	...	...	...	...	38
Total ...	77,966	108,656	62,833	34,866	18,563	302,884

4. **Hides.**—The Commonwealth trade in hides has now assumed considerable proportions, and during 1912 the total value of hides exported amounted to £1,007,254. The exports took place principally to the United Kingdom, Belgium, Germany, Italy, the United States of America, and France. 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 1912 was £135,301.

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

COMMONWEALTH EXPORTS OF HIDES, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
United Kingdom	152,107	196,827	253,442	245,993	350,519	1,198,888
Belgium	63,377	79,977	41,326	80,453	108,455	373,588
Germany	99,745	47,335	21,810	64,536	78,059	311,485
Italy	43,156	11,316	45,541	68,991	117,352	286,356
U.S. of America...	15,012	56,131	21,318	29,232	82,808	205,501
France	20,971	20,546	11,938	15,790	15,151	84,396
Canada	1,050	3,737	4,000	33,519	65,407	107,713
Japan	1,670	6,598	4,697	6,436	5,025	24,426
Austria-Hungary	5,998	515	...	103	1,275	7,891
Sth. African Union	50	200	...	...	...	250
Other Countries ...	24	166	1,975	5,815	9,717	17,697
Total ...	403,160	423,348	406,047	550,868	833,768	2,617,191

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

VALUE OF HIDES EXPORTED FROM THE COMMONWEALTH, 1908 to 1912.

Country to which Exported.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	106,619	177,738	294,702	279,474	430,609	1,289,142
Belgium	54,674	89,547	48,343	91,110	139,188	422,862
Germany	68,413	42,710	23,947	79,530	103,081	317,681
Italy	24,891	8,333	41,983	62,047	125,744	262,998
U.S. of America...	12,079	56,639	21,988	28,772	94,783	214,261
France	15,205	22,805	11,073	17,988	19,865	86,936
Canada	1,127	3,591	4,049	35,320	74,273	118,360
Japan	2,235	10,315	7,873	11,060	8,378	39,861
Austria-Hungary	5,360	627	...	161	1,757	7,905
Sth. African Union	42	260	...	...	...	302
Other Countries ...	23	225	2,087	5,795	9,576	17,706
Total ...	290,668	412,790	456,045	611,257	1,007,254	2,778,014

The number and value of hides imported into the Commonwealth during the five years 1908 to 1912 are as follows:—

HIDES IMPORTED INTO THE COMMONWEALTH, 1908 to 1912.

Particulars.	1908.	1909.	1910.	1911.	1912.	Total for 5 Years.
No.	183,362	136,375	119,408	97,926	87,680	624,751
Value	£ 204,358	173,251	169,771	143,893	135,301	826,574

§ 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 305, covers the period from 1860 to 1912.

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 total for 1912 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 figures shew a slight decline, amounting to slightly over 2 per cent., on the previous year's returns.

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 then reached in the latter year being the highest since 1894. The return for 1912, however, again shews a considerable decrease.

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, however, a considerable decrease in 1912.