SECTION VII.

PASTORAL PRODUCTION.

§ 1. Initiation and Growth of Pastoral Industry.

- 1. Early Statistics.—The live stock which Captain Phillip brought with him when establishing the first settlement in Australia, in January, 1788, is stated to have comprised seven horses, six cattle, twenty-nine sheep, twelve pigs, and a few goats. Later in the same year, in a letter from Captain Phillip to Lord Sydney, then Secretary of State for the Colonies, an enclosure signed by "Andrew Miller, Commissary," sets forth in detail the numbers of each kind of live stock in the colony on 1st May, 1788. A summary of the particulars supplied is as follows:—Horses, 7; cattle, 7; sheep, 29; pigs, 74; rabbits, 5; turkeys, 18; geese, 29; ducks, 35; fowls, 209. In view of the depredation since caused by rabbits their inclusion in this return as part of the live stock of the Commonwealth is of interest.
- 2. Subsequent Development.—During the years immediately succeeding the first settlement the growth of the number of live stock was slow, and notwithstanding importations from India and the Cape of Good Hope the total of the flocks and herds of Australia amounted in 1800 to only 203 horses, 1044 cattle, 6124 sheep, and 4017 pigs. During the next fifty years, however, the pastoral industry made rapid strides, and at the end thereof (1850) the totals reached were 159,951 horses, 1,894,834 cattle, 15,993,954 sheep, and 114,000 pigs.

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 kind of live stock in the Commonwealth from 1860 to 1900 at quinquennial intervals, and thence onwards in single years, are given in the following table, and are shewn continuously in the graphs as given hereinafter.

During the forty-eight years covered by the table the live stock of the Commonwealth increased considerably, horses by 347 per cent., cattle 167 per cent., sheep 332 per cent., and pigs 98 per cent. The average annual increases which these aggregates represent are as follows:—Horses, 3.17 per cent. per annum; cattle, 2.06 per cent.; sheep, 3.10 per cent.; and pigs, 1.43 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		•••	 1,068,402	7,527,142	62,186,702	815,776
1885	•••	•••	 1,143,064	7,397,947	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
1901	•••	•••	 1,620,420	8,491,428	72,040,211	931,309
1902	•••		 1,524,601	7,062,742	53,668,347	777,289
1903		•••	 1,546,054	7,247,508	56,932,705	837,368
1904	•••	•••	 1,595,256	7,840,520	65,823,918	1,062,703
1905	•••	•••	 1,673,805	8,525,025	74,403,704	1,014,853
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		•••	 1,927,731	10,547,629	87,043,266	695,689

COMMONWEALTH LIVE STOCK, 1860 to 1908.

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, and to some extent in 1908. 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 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 six years from 1902 to 1908, horses increased by 403,130, cattle by 3,484,887, and sheep by 33,374,919, the corresponding increases per cent. per annum being horses 3.99 per cent., cattle 6.91 per cent., and sheep 8.39 per cent.

The number of horses in the Commonwealth at the end of 1908 was higher than for any previous year. The number of cattle was higher than for any year since 1898, while the number of sheep, which was higher in 1907 than for any year since 1896, shewed a falling-off in 1908 of about 600,000. The years in which the numbers of live stock attained their maxima are as follows:—Horses, 1908, 1,927,731; cattle, 1894, 12,311,617; sheep, 1891, 106,421,068; and pigs, 1904, 1,062,703.

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 forty-eight years in the manner shewn in the succeeding table:—

Year.	Horses.	Cattle.	Sheep.	Pigs.	. Year	٠.	Horses.	Cattle.	Sheep.	Pigs.
1860 1865 1870 1875 1880 1885 1890	0.38 0.41 0.43 0.44 0.48 0.42 0.48	3.45 2.68 2.60 3.37 3.37 2.75 3.27 3.36	17.58 21.25 25.24 27.99 27.87 25.05 31.06 25.93	0.31 0.25 0.33 0.29 0.37 0.28 0.28	1901 1902 1903 1904 1905 1906 1907 1908		0.42 0.39 0.39 0.40 0.41 0.43 0.45	2.22 1.82 1.85 1.97 2.10 2.27 2.41 2.47	18.83 13.82 14.50 16.52 18.36 20.31 20.88 20.36	0.24 0.20 0.21 0.27 0.25 0.20 0.18 0.16

NUMBER OF LIVE STOCK PER HEAD OF POPULATION, 1860 to 1908.

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 forty-eight years under review, the number of horses varied but slightly in proportion to population, the range being from 0.38 to 0.48 per head. In the case of cattle, the limits of variation were 1.82 and 3.45; sheep, 13.82 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 of the Commonwealth on 31st December, 1908, were as follows:—

NUMBER O	F LIVE	STOCK	PER	SOUARE	MILE,	31st	DECEMBER,	1908.
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State.				Horses.	Cattle.	Sheep.	Pigs.
New South Wales				1.90	9.52	139.74	0.70
Victoria				4.83	17.91	142.75	2.04
Queensland				0.77	6.46	27.36	0.19
South Australia			1	0.26	0.83	7.69	0.09
Western Australia				0.12	0.76	4.20	0.05
Tasmania	•••	•		1.52	7.85	65.92	1.83
Commonwealth				0.65	3.55	29.26	0.23

7. 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 1904 to 1908 are as follows:—

QUANTITIES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS

OF THE COMMONWEALTH, 1904 to 1908.

	Produc	ets.			Unit of Quan- tity.	1904.	1905.	1906.	1907.	1908.
Animals (livi Cattle	ng)	•••			No.	625	258	391	504	841
Horses					,,	12,812	20,487	10,346		9,164
Sheep					,,	5,132	6,569	6,477	—39 8	9.001
Bones		***			cwt.	4,719	8,745	1,570	4,459	11.008
Glue Pieces	and Sine				,,	19,832	21,912	19.355	21.941	23,417
Glycerine		•••			Ϊ́b.	760,282	1.217.175	921.828	592,435	
Hair					- 11	238,512	282,825	328.555	285,478	191,475
Hoofs	•••	***			cwt.	3	10.000	(4.897	6.784	5,972
Horns	•••				,,	16,952	19,396	15,973		• ,
Meats-	•••	•••	•••	•••	"					
Frozen Bee	af				l 1b.	37.072.455	43,460,360	41,561,252	52,050,592	40,707,121
	tton †					46,472,597	86,764,222		109,227,757	
	bits and				pair	*	8,786,111	11,048,201	10.648.534	7.604.05
	er				1b.	717,826	1.351.791	1.056,902	815,559	659.71
Potted and					,, .	*	•	*	• ,	•
Preserved					,, ,	15,329,992	12.986.183	8,581,548	7.820.511	11,979,60
Other					l ".	337,993	1,068,627	141,758		-120,05
Sausage Ca				•••		* ,	*	*	• -,	*
Skins			•••	•••	, "					
Hides					No.	38,200	67.123	1,556	33,623	219,79
Sheep	***	•••	•••	•••		4.164.063	7,237,303	7.696,930		
Rabbit and		•••		•••	cwt.	60.190	73,417	105,569		65,39
Other, incl					TAT or	*	*	*	**	* ,
Tallow			•••		cwt.	512,684	693,117	683,178	674,723	586,22
Wool-Greas				•••	lb.				512,036,100	471.540.09
Scou						55,897,173		64,882,802	72,295,353	

^{*} Quantity not available. † Including lamb. 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 £137,753,843 for the period, or an average of £27,550,769 per annum, of which wool represents about 80 per cent. Skins, meats, and tallow rank next in order of importance.

VALUES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS

OF THE COMMONWEALTH, 1904 to 1908.

	F	rodu	ets.			1904.	1905.	1906.	1907.	1908.
Animals (living)—					£	£	£	£	£
Cattle						-788	4,860	-1,389	1,445	704
Horses						188,542	327,447	206,006	266,325	152,672
Sheep				•••		-1,837	-6,834	-2,704	2,127	5,735
Bones		•••				2,022	3,585	3,503	5,628	5,189
Glue Piec	es and S	Sinews				11,010	11,253	13.948	17.458	12,679
Glycerine						10.624	15,513	9.186	6,983	3,179
Hair						12,744	20,240	28.812	21,086	16,739
Hoofs	•••	•••	•••			\ '		2.355	2.064	2,024
Horns	•••	•••	•••			22,468	24,262	22,870	18,969	18,270
Meats-								,	,	
Frozen	Beef	•••				442.110	441.210	434,455	575,732	451.503
	Mutton'	*				637,476	1.111,421	1,094,984	1.377.502	1,219,107
	Rabbits			•••		220,272	389,738	491,434	472.816	336.093
	Other		•••	•••		6.778	14,733	13,290	12.814	8.507
Potted a				•••		-14,760	-10,161	-11,477	19.891	22,108
Preserv				•••		232,536	232,484	157,432	133,165	213,476
Other		,		•••		4,652	14,461	1,770	673	-2,890
Sausage		8				-8,690	2,552	1,478	41.122	26,600
Skins—	- Cuornagi		•••	•••]	0,000	2,002	-,,,,,	11,122	20,000
Hides			•			26,633	71.209	-9.764	-10.079	86.310
Sheep						820,319	1.321.021	1,587,579	1.822.604	1,230,878
Rabbit			•••			208,884	297,222	476,972	374.882	304,990
Other, i						183,695	308,408	445,201	304,130	276,703
Tallow		-				549,459	783,396	876.748	1.014.870	785,910
Wool-G1		•••	•…	•••		13.137.837	15,568,290	17,539,836	22.898.318	18,017,420
	oured	•••	•••	•••		3,974,502	4,246,634	5.098,195	5,962,599	4,883,805
50	outeu	•••	•••				2,230,002	0,000,180	0,002,099	*,000,000
Total	Values					20,666,488	25,192,944	28,480,720	35,335,980	28,077,711

^{*} Including lamb.

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 ' e 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 a follows:—

NUMBER OF HORSES, STATES AND COMMONWEALTH, 1860 to 1908.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Common- wealth.
1860	251,497	76,536	23,504	49,399	9,555	21,034	431,52
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	716,77
1875	357,696	196,184	121,497	107,164	29,379	23,473	835,39
1880	395,984	275,516	179,152	157,915	34,568	25,267	1,068,40
1885	344,697	304,098	260,207	171,060	34,392	28,610	1,143,06
1890	444,163	436,459	365,812	199,605	44,384	31,165	1,521,58
1895	499,943	424,995	468,743	196,652	58,506	31,580	1,680,41
1900	,	392,237	456,788	179,352	68,253	31,607	1,609,65
1901	486,716	387,277	462,119	178,199	73,710	32,399	1,620,42
1902	1,	382,317	399,122	179,413	80,158	33,466	1,524,60
1903		377,357	401,984	192,411	82,747	33,541	1,546,05
1904		372,397	413,165	200,241	90,225	36,565	1,595,25
1905	506,884	385,513	430,565	216,345	97,397	37,101	1,673,80
1906		406,840	452,916	224,447	104,922	38,299	1,765,18
1907	,	424,648	488,486	226,532	113,330	40,392	1,871,71
1908	591,045	424,903	519,969	235,136	116,795	39,883	1,927,73

3. Proportion in the Several States.—The percentages of the numbers of horses in the several States on the totals for the Commonwealth for the past nine years are as follows:—

PERCENTAGE OF HORSES IN EACH STATE ON TOTAL FOR COMMONWEALTH,
1900 TO 1908.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Common- wealth.
	%	%	%	%	%	%	%
1900		24.37	28.38	11.14	4.24	1.96	100.00
1901	30.03	23.90	28.52	11.00	4.55	2.00	100.00
1902	29.52	25.08	26.18	11.77	5.26	2.19	100.00
1903	29.62	24.41	26.00	12.45	5.35	2.17	100.00
1904	30.26	23.34	25.90	12.55	5.66	2.29	100.00
1905	30.28	23.03	25.72	12.93	5.82	2.22	100.00
1906	30.47	23.05	25.66	12.71	5.94	2.17	100.00
1907	30.90	22.69	26.10	12.10	6.05	2.16	100.00
1908	30.66	22.04	26.97	12.20	6.06	2.07	100.00

During the period under review, the proportions in New South Wales, South Australia, Western Australia and Tasmania have increased, while those in Victoria and Queensland have diminished.

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 20,808 for the year 1905 and 9668 in 1908, and in value between £366,730 and £224,218 respectively for the same two years. The total number of horses exported during the five years amounted to 66,982, an average of 13,396 per annum. The total value of the exports for the period was £1,394,454, or £278,891 per annum.

The average export value per head for the period was £20 16s. 4d. The numbers exported to the principal countries concerned in this trade are as follows:—

NUMBER AND DESTINATION OF HORSES EXPORTED, 1904 to 1908.

Country to which	Expor	ted.	1904.	1905.	1906.	1907.	1908.	Total for 5 years.
			No.	No.	No.	No.	No.	No.
India :	•••	•••	8,801	7,706	7,931	9,136	6,276	39,850
Hong Kong	•••		34	8,248	6	5	15	8,308
Straits Settlements			592	702	903	991	651	3,839
Java			. 587	326	501	954	605	2,973
Japan			69	1,754	. 51	' 284	227	2,385
Philippine Islands			165	773	118	295	708	2,059
Mauritius			1,207	56	127		103	1,493
New Zealand	•••		659	184	80	75	52	1,050
Natal			141	232	413	165	16	967
China			38	112	298	178	38	664
German East Africa			•••	.	J		622	622
Cape of Good Hope	•••		367	58	51	2	3	481
Ceylon			1		40	199	165	405
Other Countries	•••	•	441	657	253	348	187	1,886
Total	•••		13,102	20,808	10,772	12,632	9,668	66,982

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

VALUE OF HORSES EXPORTED FROM THE COMMONWEALTH, 1904 to 1908.

Country to which	Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 years.
		£	£	£	£	£	£
India		141,682	144,802	185,254	224,341	137,708	833,787
Hong Kong		1,023	119,504	160	205	545	121,437
Straits Settlements		11,195	15,107	18,022	26,952	15,491	86,767
Java		11,373	4,440	12,296	25,502	16,457	70,068
Japan		8,095	30,215	1,990	11,715	12,234	64,249
Philippine Islands-		3,827	10,151	2,603	4,949	12,134	33,664
Mauritius		7,786	1,140	1,791		2,385	13,102
New Zealand		19,310	13,206	8,261	4,020	3,436	48,233
Natal		3,303	6,550	8,193	4,026	856	22,928
China		851	2,671	5,942	3,299	892	13,655
German East Africa					•••	13,255	13,255
Cape of Good Hope.		3,830	1,190	1,030	70	75	6,195
Ceylon		. 450		4,335	4,886	3,418	13,089
Other Countries	`.	13,055	17,754	8,379	9,505	5,332	54,025
Total		225,780	366,730	258,256	319,470	224,218	1,394,454

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. Thus the exports to Hong Kong and Japan were exceptionally large in 1905.

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 £123 4s. 5d., as compared with £20 16s. 4d. per head for the exports for the same period. The average number imported per annum was, however, only 411, and the average annual value £50,692. The following table furnishes a comparison of imports and exports of horses during the five years 1904 to 1908:—

COMMONWEALTH IMPORTS AND EXPORTS OF HORSES, 1904 to 1908.

	Year.		Imp	orts.	Exp	orts.	Net Exports.		
			No.	Value.	No.	Value.	No.	Value.	
				£		<u></u>		£	
1904			290	37,238	13,102	225,780	12,812	188,542	
1905	•••		321	39,283	20,808	366,730	20,487	327,447	
1906	•••		426	52,250	10,772	258,256	10,346	206,006	
1907	•••	•••	516	53,145	12,632	319,470	12,116	266,325	
1908	•••	•••	504	71,546	9,668	224,218	9,164	152,672	
Tot	al for 5	years	2,057	253,462	66,982	1,394,454	64,925	1,140,992	

5. Interstate Trade in Horses.—From the following table shewing the number of horses which each of the States imported from or exported to other States during the year 1908 it will be seen that the only State shewing an excess of exports over imports was Queensland:—

INTERSTATE TRADE IN HORSES, 1908.

State.	Imports from of the Com			other States monwealth.	Net Interstate Exports.		
2,000	Number.	Value.	Number.	Value.	Number.	Value.	
		£		£		£	
New South Wales	9,991	321,429	8,664	301,273	-1,327	-20,156	
Victoria	6,176	266,988	4,638	300,007	-1,538	33,019	
Queensland	2,812	56,697	7,546	106,245	4,734	49,548	
South Australia	1,949	66,566	1,032	36,462	917	30,104	
Western Australia	700	34,744	19	2,560	681	-32,184	
Tasmania	512	16,778	241	16,655	271	-123	

Note. - signifies net imports.

6. 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:—

Horses. 345

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 Utd. States America Argentine Republic Germany	1907 1907 1907 1904 1895 & 1900 1906 1907 1908 1906 1906	28,337,552 19,992,000 5,462,170 4,267,403	Sweden Denmark Uruguay Spain New Zealand Bulgaria ⁸ Netherlands Cape of Good Hope Belgium Algeria Norway Servia	1906 1903 1905 1907 1907-8 1893 1904 1906 1906 1900	563,554 486,935 450,151 445,776 352,832 343,946 295,277 255,060 244,893 226,152 172,999 172,281
Mexico Italy ⁷	1005	859,217 804,913	Switzerland ¹ Transvaal ⁸	1906 1906	135,091 103,902

Preliminary figures.
 Austria, 1900; Hungary, 1895.
 Employed on farms and in Paris.
 Agricultural horses, unbroken horses, and breeding mares only.
 Exclusive of Formosa.
 Exclusive of cavalry horses and horses for the Royal household.
 Including mules and asses.

7. Relation to Population.—In proportion to population, horses are much more numerous in Queensland than in any of the other States. South Australia is next in order, while Tasmania has the smallest number of horses per head. In all the States except Victoria the number of horses per head of population was somewhat higher in 1908 than in 1900. Particulars for the past nine years are as follows:—

NUMBER OF HORSES PER HEAD OF POPULATION, COMMONWEALTH AND STATES, 1900 to 1908.

	Year.	 N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth
1900	•••	 0.35	0.33	0.92	0.50	0.38	0.18	0.43
1901	•••	 0.35	0.32	0.91	0.49	0.38	0.19	0.42
1902		 0.32	0.32	0.78	0.49	0.38	0.19	0.39
1903		 0.32	0.31	0.78	0.52	0.36	0.19	0.39
1904	•••	 0.33	0.31	0.79	0.54	0.37	0.20	0.40
1905	•••	 0.34	0.32	0.82	0.57	0.38	0.20	0.41
1906		 0.35	0.33	0.85	0.58	0.40	0.21	0.43
1907		 0.37	0.34	0.90	0.58	0.43	0.22	0.45
1908		 0.37	0.33	0.94	0.58	0.44	0.21	0.45

8. Value of Australian Horses.—An accurate valuation of the horses in Australia cannot readily be obtained, but the following estimate may be taken as furnishing a rough approximation to the values as at 31st December, 1908:—

ESTIMATED VALUE OF HORSES IN AUSTRALIA, 31st DECEMBER, 1908.

State	n.s.w.	Victoria.	Q'nsland.	S. Aust.	W. Aust.	Tas.	C'wealth.
Value	£	£	£	£	£	£	£.
	6,500,000	5,310,000	4,680,000	2,590,000	1,640,000	500,000	21,220,000

§ 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 States 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 and New South Wales 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 of South Australia, 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 past five years, however, a rapid improvement has taken place, and the total reached on 31st December, 1908, was over 4,800,000.

The numbers of cattle in the several States at quinquennial intervals from 1860 to 1900 and thence onwards for each year are as follows:—

NUMBER OF CATTLE IN STATES AND COMMONWEALTH, 1860 to 1908.

Year.	n.s.w.	Victoria.	Queensland.	S. Aust.	W. Aust.	Tasmania.	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	307,177	63,719	127,187	7,527,142
1885	1,317,315	1,290,790	4,162,652	418,140	70,408	138,642	7,397,947
1890	2,091,229	1,782,978	5,558,264	574,032	130,970	162,440	10,299,913
1895	2,150,057	1,795,314	6,822,401	636,824	200,091	162,801	11,767,488
1900	1,983,116	1,602,384	4,078,191	472,428	338,590	165,516	8,640,225
1901	2,047,454	1,623,282	3,772,707	480,777	398,547	168,661	8,491,428
1902	1,741,226	1,644,180	2,543,471	519,163	437,136	177,566	7,062,742
1903	1,880,578	1,665,078	2,481,717	536,580	497,617	185,938	7,247,508
1904	2,149,129	1,685,976	2,722,340	520,379	561,490	201,206	7,840,520
1905	2,337,973	1,737,690	2,963,695	647,631	631,825	206,211	8,525,025
1906	2,549,944	1,804,323	3,413,919	680,095	690,011	211,117	9,349,409
1907	2,751,193	1,842,807	3,892,232	709,354	717,377	215,523	10,128,486
1908	2,955,884	1,574,162	4,321,600	748,368	741,788	205,827	10,547,629
				·	1		

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3. Proportion in each State.—During the period elapsing between 1900 and 1908 the proportion of cattle in the several States has varied considerably, as shewn hereunder:—

PERCENTAGE OF CATTLE IN EACH STATE ON TOTAL FOR COMMONWEALTH,

1900 то 1908.

	Year.	1	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth
			% .	%	%	%	%	%	%
1900			22.95	18.55	47.20	5.47	3.92	1.91	100.00
1901			24.11	19.12	44.43	5.66	4.69	1.99	100.00
1902	•••		24.65	23.28	36.01	7.35	6.19	2.52	100.00
1903			25.95	22.97	34.24	7.40	6.87	2.57	100.00
1904			27.41	21.50	34.72	6.64	7.16	2.57	100.00
1905			27.42	20.38	34.77	7.60	7.41	2.42	100.00
1906			27,27	19.30	36,52	7.27	7.38	2.26	100.00
1907			27.16	18.20	38.43	7.00	7.08	2.13	100.00
1908			28.02	14.92	40.97	7.10	7.04	1.95	100.00

A comparison of the positions of the several States in 1900 and 1908 shews that, while Queensland's proportion of the Commonwealth herds and that of Victoria have suffered a marked diminution, the Tasmanian proportion was slightly higher in the latter than in the former year, and fairly large increases were in evidence in New South Wales, South Australia and Western Australia. The most noticeable increase in proportion is that of Western Australia, from 3.92% in 1900 to 7.04% in 1908.

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. One effect of this is that although considerably more than twice as many cattle were exported during the past eight years as were imported, the value of imports exceeded the value of exports by no less than £10,057. Details are as follows:—

COMMONWEALTH IMPORTS AND EXPORTS OF CATTLE, 1901 to 1908.

		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	
1902		2,929	49,231	4,489	19,002	1,560	- 30,229	
1903		161	9,569	939	9,302	778	- 267	
1904		145	7,903	770	7,115	625	- 788	
1905		1,022	10,591	1,280	15,451	258	4,860	
1906		161	6,762	552	5,373	391	- 1,389	
1907		183	10,204	687	8,759	504	- 1,445	
1908		112	11,020	953	11,724	·8 4 1	704	
otal for 8 ye	ears	4,827	108,871	12,083	98,814	7,256	10,057	

^{* -} signifies net imports.

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The comparatively large export figures for 1901 and 1902 were due to exports to Natal and Cape of Good Hope.

5. Interstate Trade in Cattle.—The trade in cattle between the various States is considerable, the total number transferred from one State to another during 1908 being no less than 395,774, representing an aggregate value of £2,398,574, or about £6 per head. The principal exporting State was Queensland. Details of the interstate trade in cattle during the year are as follows:—

INTERSTATE	TRADE	IN	CATTLE	1908

Chaha		n other States monwealth.		other States monwealth.	Net Interstate Exports.		
State.	Number.	Value.	Number.	Value.	Number.	Value.	
		£		£		£	
New South Wales	234,622	1,259,968	92,739	641,112	141,883	-618,856	
Victoria	86,692	688,455	118,158	403,185	31,466	-285,270	
Queensland	40.875	204,109	145,404	1,080,608	104,529	876,499	
South Australia	32,408	233,575	38,584	269.849	6.176	36,274	
Western Australia	753	7,540	•••		753	- 7.540	
Tasmania	424	4.927	889	3,820	465	- 1,107	
	1	,,,,,,			4	!	

Note. - signifies net imports.

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

CATTLE (INCLUDING CALVES) SLAUGHTERED, COMMONWEALTH AND STATES, 1901 to 1908.

	Year.	 N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
1901		 335,823	251,477	377,433	72,000	39,424	34,000	1,110,157
1902		 288,131	233,206	344,731	72,000	43,882	34,000	1,015,950
1903		 275,199	235,284	262,423	73,000	40,501	35,000	921,407
1904		 299,089	243,937	210,715	73,000	44,199	35,000	905,940
1905	•••	 320,857	249,454	214,462	74,000	51,758	35,000	945,531
1906		 358,877	261,034	223,469	75,000	55,034	35,000	1,008,414
1907		 380,042	289,709	228.457	60,527	53,505	36,000	1.048,240
1908		 376,574	281,087	243,069	71,128	54,000	36,000	1.061.858

For Hobart and Launceston only, the figures for the years 1901 to 1908 were, respectively, 8815, 10,193, 9842, 10,708, 12,035, 10,503, 12,037, and 11,907.

7. Export of Frozen Beef.—A large export trade in beef preserved by cold process is carried on by the Commonwealth, mainly with South Africa, the United Kingdom,

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and the Philippine Islands. The quantities so exported during the five years 1904 to 1908 are as follows:—

QUANTITY OF FROZEN BEEF EXPORTED FROM AUSTRALIA, 1904 to 1908.

Country to which l	Exported.		1904.	1905.	1906.	1907.	1908.	Total for 5 years.
			lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Philippine Islands			7,448,649	12,804,318	10,453,286	9,626,173	12,826,444	53,158,870
Natal			6,437,661	18,632,290	8,881,485	8,657,618	2,777,557	45,386,611
Cape of Good Hope			16,596,558	6,117,907	5,419,763	10,695,660	1,538,830	40,368,718
United Kingdom			3,668,850	1,603,195	1,706,386	8,360,147	12,384,176	27,722,754
Russia				l	10,247,609	10,551,438	6,821,701	27,620,748
Egypt			392,804	1,372,096	1,979,830	1,540,290	1,707,355	6,992,375
Malta			1.887.526	947,363	'	781,382	752,761	4,369,032
Straits Settlements				719,981	736,796	972,507	841,413	3,270,697
Gibraltar				119,272	1,247,683	345,374		1,712,329
Hong Kong			56,488	338,813	188,873	286,499	354,934	1,225,607
Mauritius			455,602	371.077	391,664			1,218,343
Japan				29,212	121,963	5,283	408,141	564,599
Ceylon			55,385	69,639	148,300	86,688	87,948	447,960
Hawaiian Islands				l	6,681	4,257		10,938
Other countries		• • •	91,422	399,923	30,933	137,276	210,256	869,810
				ļ		<u> </u>		
Total			37,090,945	43,525,086	41,561,252	52,050,592	40,711,516	214,939,391

The value of the frozen beef exported from the Commonwealth during the same years is as follows:—

VALUE OF FROZEN BEEF EXPORTED FROM AUSTRALIA, 1904 to 1908.

Country to which F	Exporte	1.	1904.	1905.	1906.	1907.	1908.	Total for 5 years.
			£	£	£	£	£	£
Philippine Islands]	84,287	140,350	112,546	108,505	151,076	596,764
Natal			70,593	179,342	83,694	90,884	28,156	452,669
Cape of Good Hope			220,249	56,220	63,185	125,204	18.025	482,883
United Kingdom		1	35,632	16,788	15.896	87,903	134,014	290,233
Russia					105,445	112,098	70.358	287,901
Egypt			3,954	16.861	22,027	19.135	19,770	81,747
Malta			20,318	10,540		8,852	7,987	47,697
Straits Settlements]		7,553	8,080	11,515	9.820	36,968
Gibraltar				1,490	12,204	4,432		18,126
Hong Kong			667	3.737	2,347	3,950	3,873	14,574
Mauritius			4,748	3,296	4,665			12,709
Japan				268	1,501	32	4,494	6,295
Cevlon			779	1,027	2,258	1,422	1.507	6.993
Hawaiian Islands			1		84	96		180
Other countries	•••		1,210	4,453	523	1,704	2,471	10,361
		-						
Total			442,437	441,925	434,455	575,732	451,551	2,346,100

During the five years under review the most consistent as well as the largest of Australia's customers for frozen beef has been the Philippine Islands; Natal, the Cape of Good Hope and the United Kingdom ranked next in order of importance. A considerable trade with Russia has also sprung into existence during the last few years.

8. 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:—

NUMBED	ΛF	CATTIF	IN VADIOUS	COUNTRIES.
NIIMBER	UF	CAILLE	IN VARIOUS	COUNTRIES.

Country.	•	Date.	No. of Cattle.	Country.	Date.	No. of Cattle
British India ¹		1905-6	91,130,7312	Spain	. 1907	2,452,197
United States of A	merica	1907	71,267,000	Cape of Good Hope	. 1904	1,954,390
Russian Empire		1907	42,305,490	Denmark	. 1903	1,840,466
Argentine Republ	ic	1907	25,844,800	New Zealand	. 1907	1,773,326
Germany		1904	19,331,568	Belgium	. 1906	1,779,678
Austria-Hungarys		1895 &		Bulgaria ²	. 1893	1,767,974
•		1900	16,249,535	Netherlands	. 1904	1,690,463
France		1906	13,968,014	Ceylon	. 1906	1,542,909
United Kingdom		1907	11,630,142	Switzerland	. 1906	1,497,904
Australia		1908	10,547,629	Japan ⁴	. 1906	1,190,373
Canada		1907	7,672,584	Algeria	. 1906	1,064,685
Uruguay		1905	6,028,980	Norway	. 1900	950,201
Italy		1905	5,672,000	Servia	. 1905	943,946
Mexico	•••	1902	5,142,457	Natal	. 1905	783,887
Sweden		1906	2,600,151	Orange River Colony	1905	525,372
Rumania		1900	2,588,526	Transyaal	. 1906	444,780

^{1.} Exclusive of Bengal. 2. Inclusive of buffaloes. 3. Austria 1900, Hungary 1895. 4. Exclusive of Formosa.

9. 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 the past nine years are as follows:—

NUMBER OF CATTLE PER HEAD OF POPULATION, 1900 to 1908.

Y	ear.		N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	C'wealth
1900		•••	1.46	1.34	8.26	1.30	1.88	0.96	2.29
1901	•••		1.49	1.34	7.46	1.31	2.05	0.97	2.22
1902			1.24	1.36	4.98	1.42	2.05	1.00	1.82
1903	•••		1.32	1.38	4.81	1.45	2.19	1.04	1.85
1904	•••	•••	1.47	1.39	5.22	1.40	2.32	1.12	1.97
1905	•••		1.57	1.43	5.61	1.71	2.48	1.14	2.10
1906			1.67	1.46	6.38	1.77	2.64	1.17	2.27
1907			1.75	1.48	7.18	1.81	2.74	1.17	2.43
1908			1.86	1.24	7.82	1.84	2.78	1.11	2.47

For the Commonwealth as a whole the ratio of cattle to population is slightly greater for 1908 than for 1900. This excess of the 1908 figures over those for 1900 is in evidence in all the States except Queensland and Victoria, and is most marked in the case of Western'Australia. In Queensland the ratio has increased very rapidly during the past five years, and that for 1908 is greater than for any year since 1900. In Victoria owing to the unfavourable season the ratio for 1908 is the lowest for the period under review.

10. Value of Australian Cattle.—The value of the cattle in the several States of the Commonwealth on the 31st December, 1908, was approximately as follows:—

VALUE OF CATTLE IN AUSTRALIA, 31st DECEMBER, 1908.

State.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.
Value	£ 16,260,000	£ 10,230,000	£ 19,450,000	£ 4,490,000	5,190,000	£ 1,540,000	£ 57,160,000

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§ 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 Southli 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 and 1908, 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 at quinquennial intervals from 1860 to 1900, and for each year onwards to 1908, are as follows:—

NUMBER OF SHEEP IN AUSTRALIA, 1860 to 1908.

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

During 1908 the Victorian proportion of total Commonwealth flocks declined considerably, a smaller decrease being also in evidence in the case of New South Wales. In the case of Tasmania the proportion remained unchanged, while in the other three States an advance in proportion was experienced, being most marked in the case of Queensland.

PERCENTAGE OF SHEEP	IN EAC	H STATE	ON	TOTAL	FOR	COMMONWEALTH,
	1	900 то 19	800			

Year		N.S.W.	Vic.	Q'nsland.	S. Aust.	W. Aust.	Tas.	C'wealth.
		-%	%	%	%	%	%	%
1900		56.68	. 15.36	14.64	7.48	3.45	2.39	. 100.00
1901		58.10	14.82	13.92	7.02	3.65	2.49	100.00
1902		49.66	19.57	13.44	9.17	5.04	3.12	100.00
1903		50.33	18.16	14.74	9.40	4.57	2.80	100.00
1904		52.45	15.45	16.47	8.93	4.33	2.37	100.00
1905]	53.10	15.40	16.85	8.33	4.19	2.13	100.00
1906		52.73	15.46	17.79	7.96	3.99	2.07	100.00
1907		50.73	16.14	19.10	7.84	4.20	1.99	100.00
1908		49.83	14.41	21.08	7.99	4.71	1.98	100.00

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 Natal, Cape of Good Hope, Straits Settlements, and New Caledonia. The following are the particulars of the imports and exports for the past eight years:—

COMMONWEALTH IMPORTS AND EXPORTS OF SHEEP, 1901 to 1908.

		Imp	ports.	Ext	orts.	Net Exports.		
	Year.		No.	Value.	No.	Value.	No.	Value.
				£		£		£
1901	•••		553	12,134	12,094	12,104	11,541	30
1902			47,654	66,042	24,296	15,558	-23,358	-50,484
1903	•••		4,727	9,840	18,111	24,468	13,384	14,628
1904			2,614	13,056	7,746	11,219	5,132	-1,837
1905	•••		5,521	24,263	12,090	17,429	6,569	-6,834
1906		!	11.502	51,403	17,979	48,699	6,477	-2.704
1907			11,759	42,167	11,361	40,040	-398	-2,127
1908	•••		4,020	18,717	13,021	24,452	9,001	5,735
Tota	al for 8	years	88,350	237,622	116,698	193,969	28,348	-43,653

Note. — signifies net imports.

. 5. Interstate Trade in Sheep.—The number and value of the sheep passing from one State to another are considerable, and for 1908 amounted to a total of 3,773,882, valued at £2,346,199, or an average of about 12s. 6d. per head. The exporting States were Queensland and New South Wales, whilst the heaviest importing State was Victoria. Details are as follows:—

INTERSTATE TRADE IN SHEEP, 1908.

State.	Imports from of the Com	nother States monwealth.		other States monwealth.	Net Interstate Exports.		
•	Number.	Value.	Number.	Value.	Number.	Value.	
27 6 12 311 1	1 500 000	£		£ 100 045	000.045	£	
New South Wales	1,536,389	968,133	1,839,336	1,109,645	302,947	141,512	
Victoria	1,561,757	897,639	1,047,054	643,238	-514,703	-254,401	
Queensland	309,829	248,174	734,061	462,818	424,232	214,644	
South Australia	214,050	91,071	148,996	102,957	65,054	11,886	
Western Australia	90,447	91,314	•••		-90,447	-91.314	
Tasmania	61,410	49,868	4,435	27,541	-56,975	-22,327	
	ŕ	, i	,	,		•	

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6. Sheep Slaughtered.—The numbers of sheep slaughtered in the several States during the past eight years are as follows:—

SHEEP (INCLUDING LAMBS) SLAUGHTERED,	LAMB5)	SLAUGHTERED.	1901	ιυ	1900.
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Year.	n.s.w.	Victoria.	Q'land.	Sth. Aust.	West Aust.	Tasmania.º	C'wealth.
1901	4,519,133	2,469,797	554,705	678,000	428,534	322,000	8,972,169
1902 1903	4,635,850 3,277,120	2,827,938	715,443 453,666	681,000 684.000	482,882 412,549	325,000 332,000	9,668,113 7,811,904
1904	3,058,536	2,305,729	400,688	691,000	499,585	334,000	7,289,538
1905	4,283,631	2,576,316	587,406	700,000 710,000	476,010 468,759	335,000 335,000	8,958,363 9,271,505
1906 1907	4,482,055 5,185,057	2,826,144 3,226,141	449,547 642,740	1,020,355	465,196	336,000	10,875,489
1908	5,201,426	3,359,487	70 5,776	1,213,168	470,000 ²	336,000	11,285,857

1. Estimated for years 1901 to 1906.

2. Estimated.

For Hobart and Launceston only the figures for the years 1901 to 1908 were respectively:—101,627, 114,900, 122,223, 109,992, 101,863, 104,081, 107,859, and 115,560.

7. Exports of Frozen Mutton and Lamb.—Australia's export trade in mutton and lamb preserved by cold process is one which has, in recent years, advanced rapidly, and at the present time amounts to more than £1,200,000 per annum. 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 customers in this trade are the United Kingdom and South Africa, while in Egypt and Canada a demand for Australian frozen mutton and lamb has developed in recent years, the exports to Canada for 1907 reaching a total of over \$30,000. A regular, though not very extensive, trade is also done with the Philippine Islands. The quantities exported to various countries are as follows:—

QUANTITY OF FROZEN MUTTON AND LAMB EXPORTED FROM AUSTRALIA,
1904 TO 1908.

Total for Country to which Exported. 1904. 1905. 1906. 1907. 1908. 5 years. lbs. lbs. lbs. lbs. lbs. • lbs United Kingdom 35,069,929 62,767,593 14,011,235 67,251,672 88,676,913 336,107,238 6.980.584 13.349.876 4,854,974 468,628 50,235,527 19,999,761 Natal 11,038,858 Cape of Good Hope 3,625,294 6,524,229 5,974,671 3,406,939 Canada 196,331 969,352 2,215,533 719,336 4,100 552 Philippine Islands 749,378 677,221 744,377 791,154 589,210 673,867 610,269 3,443,853 3,255,627 552 233 • • • • 186,348 1.125,423 Malta 763,909 659,171 864,062 ,774,728 487,586 Straits Settlements 243,508 511,813 270,325 382,101 471,634 1,609,056 Hong Kong ... 161,535 302,077 166,059 285,510 151,549 220,586 319,382 1.219.378 76,396 Gibraltar 225,659 168,453 172,504 756,018 119,684 156,291 Cevlon 145.078 745,106 Hawaiian Islands ... 196,505 234,412 651.503 120 223,511 11,284 86,612 35,690 89,805 ••• ••• Mauritius 90.545 58.651 149,196 Other Countries 39,810 315,334 289,798 180,299 153,337 978.578 Total 86,858,344 90,692,385 109,227,757 91.607.614 426,249,632 354 SHEEP.

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

VALUES OF FROZEN MUTTON AND LAMB EXPORTED FROM AUSTRALIA,
1904 to 1908.

Country to which Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 years.
	£	£	£	£	£	£
United Kingdom	 488,830	834,629	839,360	1,141,718	1,115,908	4,420,445
Natal	 91,388	156,950	142,031	119,667	50,218	560,254
Cape of Good Hope	 50,037	79,294	65,801	39,631	5,075	239,838
Canada	 •••	2,792	12,260	30,216	10,257	55,525
Philippine Islands	 9,680	7,442	6,309	8,674	8,056	40,161
Egypt	 2,144	8,580	12,674	7,760	7,801	38,959
Malta	 8,741	7,276		9,437	5,526	30,980
Straits Settlements	 	4,514	2,579	5,711	5,261	18,065
Hong Kong	 2,234	3,473	1,906	3,011	3,487	14,111
Gibraltar	 955	2,765	2,974	1,955		8,649
Ceylon	 1,613	1,774	1,713	2,802	1,722	[9,624]
Hawaiian Islands	 		3,282	3,275	2,927	9,484
Japan	 2	132	917	384	891	2,326
Mauritius	 1,214	672				1,886
Other Countries	 523	1,676	3,314	3,261	1,978	10,752
						l
Total	 657,361	1,111,969	1,095,120	1,377,502	1,219,107	5,461,059

^{8.} 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.
	. 1907 . 1907 a 1907 . 1907 . 1907 . 1905-6	87,043,266 77,581,100 58,510,523 54,631,000 30,011,833 22,449,053 18,029,181 17,461,397	Bulgaria Rumania Orange River Colony Mexico Servia Canada Sweden Norway	1900 1905 1902 1905 1907 1906	6,868,291 5,655,444 4,194,247 3,224,430 3,066,231 2,864,754 1,051,119 998,819
	. 1906 . 1905 . 1905 . 1895 . 1900 . 1906	16,119,051 14,848,795 13,915,796 10,877,000 10,748,707 8,801,117 7,907,173	Denmark Transvaal Natal Falkland Islands Netherlands Belgium Switzerland	1904 1905 1906 1904 1895	876,830 846,939 769,601 702,696 606,785 235,722 209,243

^{1.} Including goats.

^{2.} Exclusive of Bengal.

^{3.} Austria 1900, Hungary 1895.

^{9.} Relation to Population.—The relation of the flocks of the several States to the populations at the end of each of the past nine years is as follows:—

15.34

9.30

20.36

			1	1	ı	1		
Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
		20.40	0.00			10.50	0.74	
•••	•••	29.42	9.06	20.94	14.59	13.53	9.74	18.75
		30.44	8.81	19.83	13.84	13.53	10.28	18.83
		18.99	8.67	14.12	13.43	12.68	9.43	13.82
•••		20.08	8.55	16.28	14.51	11.46	8.90	14.50
		23.69	8.40	20.79	15.76	-11.78	8.64	16.52
		26.48	9.40	23.74	16.40	12.25	8.74	18.36
		28.91	10.50	27.82	17.35	12.76	9.60	20.31
		28.34	11.33	30.90	17.51	14.09	9.48	20.88

NUMBER OF SHEEP PER HEAD OF POPULATION.

1908

10. Value of Australian Sheep.—The total value on the 31st December, 1908, of the sheep in the Commonwealth and its several States is approximately as follows:—

33.22

17.07

9.87

27.25

ESTIMATED VALUE OF AUSTRALIAN SHEEP, 31st DECEMBER, 1908.

State	N.S.W.	Victoria.	Q'nsland.	Sth. Aust.	W. Aust.	Tasmania.	C'wealth.
Value £	21,660,000	7,530,000	9,170,000	3,480,000	2,460,000	1,040,000	45,340,000

§ 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 year 1908 being about £23,000,000. 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 less than 1½ per cent. of the whole clip.
- 2. Greasy and Scoured Wool.—In the returns of imports and exports of wool furnished to the Customs Department the quantities are shewn as "greasy," or as "scoured and washed," but for the purposes 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 usually only about 23 per cent. of the total clip. The ratio of loss of weight in scouring, however, 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 least effect.

3. Total Production.—In the following tables, relative to the production of wool in the several States for the five years 1904 to 1908, wool returned as "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." An allowance has also been made for the quantity of wool exported on sheepskins. On this basis the estimated total production of wool (in the

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grease) in the several States of the Commonwealth for the years 1904 to 1908 may be said to be as in the following table:—

PRODUCTION OF WOOL, ESTIMATED AS "GREASY," COMMONWEALTH AND STATES, 1904 TO 1908.

	State	·.		 1904.	1905.	1906.	1907.	1908.
New South Wales Victoria Queensland South Australia Western Australia Tasmania			 •	 66,843,252 40,207,376	74,746,552 72,323,361 41,221,437 19,523,003	78,258,113	22,013,541	1bs. 344,550,70 93,999,15 115,283,30 52,040,73 22,450,62 13,859,75
Commonwe	alth			 473,598,442	522,062,000	577,673,431	690,139,012	642,184,28

4. Wool Locally Used.—Of this production the quantity used in the local manufactories of the several States of the Commonwealth was approximately as follows:—

LOCALLY USED WOOL, ESTIMATED AS "GREASY," COMMONWEALTH AND STATES 1904 TO 1908.

	State		1904.	1905.	1906.	1907.	1908.
New South Wales Victoria Queensland South Australia Western Australia Tasmania		 	 1bs. 726,900 4,027,080 185,802 311,469 811,500	1bs. 729,470 4,493,041 224,860 376,615 1,067,050	lbs. 836,730 4,765,687 253,842 387,264 1,005,628	1bs. 963,408 5,600,873 211,362 603,848 929,572	lbs. 1,020,456 6,152,250 224,460 672,112 1,244,879
Commonweal	lth	 •••	 6,062,751	6,891,036	7,249,151	8,309,063	9,314,157

5. Exports of Wool.—Nearly half of the exports of wool from the Commonwealth are despatched to the United Kingdom, the other leading consignees being France, Germany, Belgium, and the United States of America. The following table shews for the years 1904 to 1908, the quantities of "greasy" wool exported from the Commonwealth to the principal countries of destination:—

COMMONWEALTH EXPORTS OF WOOL IN THE GREASE, 1904 to 1908.

Country to which	Exported	. 1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
United Kingdom France Germany Belgium United States of A Japan Italy India Canada New Zealand Other Countries		2,245,207 96,736 53,513 101,029	1bs. 167.675.702 95,812,717 62,727,286 35,213,749 14,996,174 453,645 3,085,474 91,431 138,416 197,948 27,882	1bs. 193,740,722 85,755,279 56,479,224 53,972,671 21,090,888 2,465,742 1,184,080 162,724 173,944 183,845 144,471	1bs. 227,246,663 130,937,517 71,423,340 56,605,510 18,401,395 5,905,962 1,546,395 212,759 264,513 55,208 157,633	1bs. 225,336,019 104,210,690 80,073,180 37,557,258 20,430,274 1,972,449 1,548,760 394,236 254,300 62,775 6,168	
Total		. 339,394,650	380,420,424	415,353,590	512,756,895	471,846,109	2,119,771,668

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

COMMONWEALTH EXPORTS OF "SCOURED AND WASHED WOOL," 1904 to 1908.

Country to which	Exporte	ed.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
			lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom			30,108,654	28,469,808	35,301,652	38,037,138	46,401,114	178,318,366
France			8,578,307	13,816,332	11,290,425	13,607,538	9,383,368	56,675,970
Germany			8,682,885	6,897,390	6,905,930	8,649,996	9,104,503	40,240,704
Belgium			3,992,454	5,556,547	9,098,036	9,288,704	5,157,465	33,093,206
United States of A	merica		335				645	980
Japan		!	4,235,144	1,579,164	2,106,820	2,490,953	722,217	11,134,298
Italy			40,651	168,444	99,663	85,937	65,361	460,056
India			85,199	64,198	68,007	151,851	70,828	440,083
Canada			5,841	781				6,622
New Zealand			19,631	6,266	18,624	1,770	5,871	52,162
Other Countries	•••	•••	161,945	216,493	138	4,178	4,122	386,876
Total			55,911,046	56,775,423	64,889,295	72,318,065	70,915,494	320,809,323

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, 1904 to 1908.

Country to which	h Exporte	d.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
			£	£	£	£	£	£
United Kingdom			8,498,648	8.750.240	10.706.181	12.933.800	12,022,541	52,911,410
France '			3,419,045	5.053.870	4.577.034	7.004.581	4,407,940	24.462.470
Germany			2,569,677	3.143.614	2.962.586	4.117.394	3,632,708	16,425,979
Belgium		.,,	1.390.564	1.905.822	3,113,778	3,417,193	1.742.639	11,569,996
United States of Am	erica	(784,022	647,296	912,679	815,254	881,172	4,040,423
Japan	•••		332,602	140,704	279,860	481,771	125,408	1,360,345
Italy	•••		94,268	143,995	58,971	77,413	67,021	441,668
India			10,518	7,928	12,084	20,115	21,708	72,353
Canada		[2,620	5,459	8,215	11,903	10,873	39,070
New Zealand			4,992	5,218	8,565	2,860	1,669	23,304
Other Countries			15,314	18,070	5,816	9,546	557	49,303
		1		·			<u> </u>	
Total			17,122,270	19,822,216	22,645,769	28,891,830	22,914,236	111,396,321

- 6. Care needed in Comparing Clips.—The Customs returns, from which statistics of wool production are usually compiled, 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. An instance of this occurred in some portions of the Commonwealth in connection with the clips of 1906 and 1907. The shearing in the former case was somewhat late, while in the latter it took place at the usual time, the result being that the 1906 clip was above and that of 1907 below the normal.
- 7. Wool-producing countries in Southern Hemisphere.— The next table, compiled by Messrs. Helmath Schwartze and Co., the well-known firm of English wool

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brokers, furnishes interesting evidence of the relative importance of the three great woolproducing countries of the Southern Hemisphere. The figures given represent for the respective years the imports of wool into Europe and North America:—

IMPORTS	0F	WOOL	INTO	EUROPE	AND	NORTH	AMERICA.

	Year.				Commonwealth and New Zealand.	Cape of Good Hope.	River Plate.	Total
			Bales.	Bales.	Bales.	Bales.		
1901	•••		1,745,000	217,000	532,000	2,494,000		
1902			1,699,000	234,000	512,000	2,445,000		
1903			1,451,000	234,000	558,000	2,243,000		
1904			1,371,000	201,000	476,000	2,048,000		
1905			1,633,000	209,000	488,000	2,330,000		
1906			1.833,000	238,000	487,000	2,558,000		
1907			2,103,000	287,000	478,000	2,868,000		
1908	•••		2,072,000	276,000	484,000	2,832,000		

It will be seen that of the total importations shewn in this table, the Commonwealth of Australia and the Dominion of New Zealand account for about 70 per cent.

8. England's Importation of Wool.—The quantity and value of wool imported into the United Kingdom during the year 1908 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, 1908.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	lbs.	£		lbs.	£
Australia	321,054,777	13,412,254	Peru	2,310,011	94,534
New Zealand	159,699,422	5,941,765	Germany	1,641,799	69,901
Cape of Good Hope	61,296,459	2,253,975	Russia	2,002,669	68,097
Argentine Republic	43,178,045	1,680,061	China	2,343,835	67,625
France	17,421,889	990,838	Egypt	2,253,941	60,273
British India	34,371,806	980,960	Portugal	1,212,084	35,766
Chile	21,783,856	707,051	Netherlands	694,867	25,156
Natal	19,273,488	638,546	Denmark & Faro	е	
Uruguay	6,858,581	273,732	Islands	. 709,239	23,256
Belgium	5,065,131	204,773	Italy	554,599	19,186
Turkey	5,705,671	149,663	Other Countries	1,519,888	47,255
Falkland Islands	4,021,634	138,619		ļ	
U.S. of America	4,071,190	114,042	Total	. 719,044,881	27.997.328

It will be seen that of the total importations of wool into the United Kingdom, Australian wool represented about 44 per cent. of both quantity and value.

9. The Wool Market.—More than eighty per cent. of the wool grown in Australia is now disposed of at the local sales held in Sydney, Melbourne, Geelong, Brisbane, Adelaide, Fremantle, Hobart and Launceston. These sales are attended by buyers from England and America, as well as by representatives of the principal European manufacturing countries. 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 has opened favourably and prices are exhibiting a distinctly upward tendency.

During the sales of 1908-9 the prices realised for greasy merino wool ranged up to 19d. per 1b. for a few lines of extra super. Western District (Victoria) wool, super. to 17d., good to 14½d., average to 11d., and inferior from 7½d. to 8½d. Amongst other classes of wool extra super. comebacks brought as high as 16d., super. to 14½d., good to 12d., and average 9½d. to 10½d. Super. crossbreds sold up to 13¼d. and good from 8½d. to 9½d. Scoured wool ranged from 16½d. to 23d.

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

EXPORT VALUE PER LB. OF AUSTRALIAN GREASY WOOL, 1901 to 1908.

Year	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
Average value per lb.	d. 7.27	d. 8.04	d. 8.75	d. 9.30	d. 9.83	d. 10.14	10.73	d. 9.17

§ 6. Hides and Sheepskins.

- 1. Extent of Trade.—In addition to the hides and sheepskins locally 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 eight years 1901 to 1908 being no less a sum than £11,174,050, or an average of nearly £1,400,000 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 1904 to 1908 are as follows:—

COMMONWEALTH EXPORTS OF SHEEPSKINS WITH WOOL, 1904 to 1908.

Country to which Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
France	1,464,545	2,319,157	2,742,973	3,561,771	3,265,111	13,353,557
United Kingdom	2,015,173	2,399,848	2,369,247	2,711,346	3,522,791	13,018,405
Belgium	524,823	474,327	675,051	957,819	710,902	3,342,922
Germany	108,407	65,945	48,683	57,909	124,465	405,409
U.S. of America	86,180	70,424	16,228	27,833	11,041	211,706
Italy		12,338	5,771	6,906	44,083	69,098
Canada		11,615	1,450	4,268		17,333
New Zealand	431		1,469		225	2,125
Other Countries	1,120	135	65	152	•••	1,472
•						
Total	4,200,679	5,353,789	5,860,937	7,328,004	7,678,618	30,422,027

The next table furnishes corresponding particulars as to value:-

VALUE OF SHEEPSKINS WITH WOOL EXPORTED FROM THE COMMONWEALTH, 1904 to 1908.

Country to which Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
	£	£	£	£	£	£
France	299,487	514,091	655,044	760,421	508,477	2,737,520
United Kingdom	397,043	530,562	587,648	628,318	515,937	2,659,508
Belgium	98,532	129,151	206,037	243,988	123,456	801,164
Germany	20,026	15,242	7,890	10,446	23,338	76,942
U.S. of America	16,394	17,084	2,740	5,981	1,058	43,257
Italy		1,252	2,583	2,244	10,621	16,700
Canada		1,653	335	634		2,622
New Zealand	114		542		25	681
Other Countries	111	29	13	26		179
]						
Total	831,707	1,209,064	1,462,832	1,652,058	1,182,912	6,338,573

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, 1904 to 1908.

Country to which Exported.		đ.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
		-	No.	No.	No.	No.	No.	No.
United Kingd	\mathbf{om}		73,928	982,304	1,374,208	2,370,759	1,086,103	5,887,302
United States	of Ameri	ca	154,589	1,080,072	708,518	219,296	167,460	2,329,935
France			8,340			2,804	101,767	112,911
Germany	•••		7,948	378	3,160	684	2,812	14,982
Canada		\	420	11,496		600		12,516
New Zealand			•••	1,104	66	2,522	5,040	8,732
Belgium						1,080		1,080
Italy				١		72		72
Other Countri	es	•••	•••		132	1,020	475	1,627
Total			245,225	2,075,354	2,086,084	2,598,837	1,363,657	8,369,157

Corresponding details concerning value are given hereunder:—

VALUE OF SHEEPSKINS WITHOUT WOOL EXPORTED FROM THE COMMONWEALTH, 1904 TO 1908.

Country to which Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	5,290	58,605	101,030	176,484	62,605	404,014
United States of America	8,058	67,911	50,155	19,191	7,390	152,705
France	1,868			210	7,477	9,555
Germany	344	27	426	22	184	1,003
Canada	21	650		37	•••	708
New Zealand		66	. 9	248	272	595
Belgium				103	•••	103
Italy	Ì			8	•••	8
Other Countries		•••	11	72	38	121
-						
Total	15,581	127,259	151,631	196,375	77,966	568,812

4. Hides.—The Commonwealth trade in hides has now assumed considerable proportions, and during 1908 the total value of hides exported amounted to £290,668. The exports took place principally to the United Kingdom, Belgium, Germany and Italy. A large number of hides are also imported into the Commonwealth, mainly from New Zealand. The total value of hides imported during 1908 was £204,358.

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

COMMONWEALTH	EVDADTE	AF BIDEC	TRAN	1004 TO	1000
CUMUNIUM W.C.A.L.	CAPHRIA	OF BIDES	H-95-48-791	19014 111	I WIIX.

Country to which Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
United Kingdom	31,959	44,436	36,162	78,603	152,107	343,267
Belgium	27,599	33,071	33,551	52,507	63,377	210,105
Germany	7,579	27,360	30,721	22,098	99,745	187,503
Italy	23,150	27,717	26,378	36,749	43,156	157,150
U.S. of America	4,441	12,922	7,575	10,118	15,012	50,068
Japan	2,633	8,410	3,507	5,867	1,670	22,087
France		6,650	6,675	2,841	20,971	37,137
Canada	- 29	5,500	3,080	4,586	1,050	14,245
Austria-Hungary		·	1,534	3,363	5,998	10,895
Cape of Good Hope		61		100	50	211
Other Countries	3,211	62	1,875	469	24	5,641
Total	100,601	166,189	151,058	217,301	403,160	1,038,309

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

VALUE OF HIDES EXPORTED FROM THE COMMONWEALTH FROM 1904 TO 1908.

Country to which Exported.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	30,921	49,008	40,106	72,693	106,619	299,347
Belgium	29,132	39,131	44,662	57,242	54,674	224,841
Germany	7,235	28,907	27,789	21,251	68,413	153,595
Italy	21,111	24,163	26,361	28,702	24,891	125,228
U.S. of America	4,617	13,784	8,614	7,969	12,079	47,063
Japan	2,597	12,427	5,650	11,327	2,235	34,236
France		6,944	7,434	2,782	15,205	32,365
Canada	16	5,368	3,959	4,795	1,127	15,265
Austria-Hungary		·	1,795	3,137	5,360	10,292
Cape of Good Hope		44	i	100	42	186
Other Countries	2,724	70	2,127	497	23	5,441
Total	98,353	179,846	168,497	210,495	290,668	947,859

The number and value of hides imported into the Commonwealth during the five years 1904 to 1908 are as follows:—

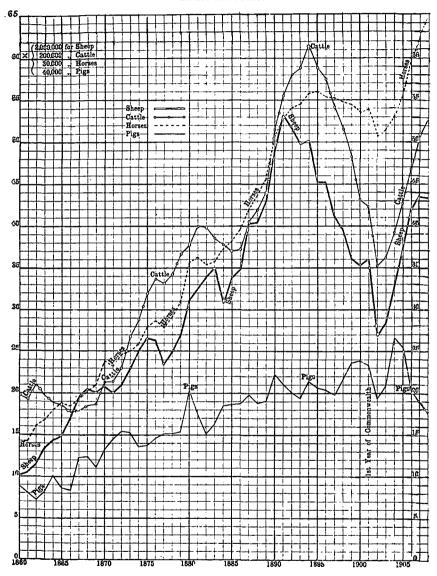
HIDES IMPORTED INTO THE COMMONWEALTH, 1904 TO 1908.

Year.	1904.	1905.	1906.	1907.	1908.	Total for 5 Years.
No	62,401	99,066	149,502	183,678	183,362	678,009
Value £	71,720	108,637	178,261	220,574	204,358	783,550

§ 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 363, covers the period from 1860 to 1908.
- 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 is practically identical with that for 1890. From 1902 onwards a rapid improvement has been experienced, and in 1906 the previous maximum attained in 1895 was passed. Previous periods of decline were experienced in 1866, 1871, 1877 and 1882.
- 2. Cattle.—The graph for cattle furnishes evidence of rapid increases 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. Since 1902 a rapid recovery has been effected, and the total for 1908 corresponds with that existing at the middle of the year 1898, though still considerably short of the maximum attained in 1894.
- 4. Sheep.—In the case of sheep the graph furnishes evidence of four 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, and the fourth, by far the most serious, between 1891 and 1902. From 1902 to 1907 a rapid increase took place, succeeded by a slight decline in 1908.
- 5. Pigs.—The graph for pigs exhibits more numerous fluctuations than that for either of the other classes of live stock represented, and since 1904 has furnished evidence of a persistent decline.

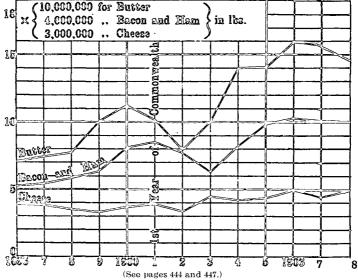
GRAPHS SHEWING NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS IN AUSTRALIA FROM 1860 to 1908.



(See pages 342, 346, 351, and 447.)

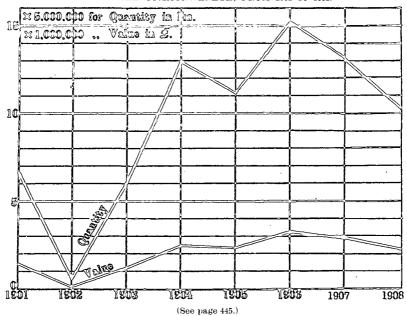
EXPLANATION OF GRAPH.—The base of each small square represents an interval of one year, The total of the sheep, cattle, horses, and pigs for the Commonwealth is indicated by the several curves or graphs, the vertical side of a small square representing 2,000,000 in the case of sheep; 200,000 for cattle; 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 1908.



EXPLANATION OF GRAPH.—The base of each small rectangle represents an interval of one year, and the vertical height of each 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 1908.



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.