

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 Développement.**—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, 1,694,834 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 at quinquennial intervals from 1860 to 1900, 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-nine years covered by the table the live stock of the Commonwealth increased considerably, horses by 369 per cent., cattle 179 per cent., sheep 355 per cent., and pigs 118 per cent. The average annual increases which these aggregates represent are as follows:—Horses, 3.20 per cent. per annum; cattle, 2.12 per cent.; sheep, 3.14 per cent.; and pigs, 1.60 per cent.

COMMONWEALTH LIVE STOCK, 1860 to 1909.

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	10,547,679	87,043,266	695,689
1909	2,022,917	11,040,391	91,676,281	765,137

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 seven years from 1902 to 1909, horses increased by 498,308, cattle by 3,977,626, and sheep by 37,993,034, the corresponding increases per cent. per annum being horses 4.12 per cent., cattle 6.59 per cent., and sheep 7.95 per cent.

The number of horses in the Commonwealth at the end of 1909 was higher than for any previous year. The number of cattle was higher than for any year since 1896, and the number of sheep higher than for any year since 1894. The years in which the numbers of live stock attained their maxima are as follows:—Horses, 1909, 2,022,909; 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-nine years in the manner shewn in the succeeding table:—

NUMBER OF LIVE STOCK PER HEAD OF POPULATION, 1860 to 1909.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860	0.38	3.45	17.58	0.31	1901	0.42	2.22	18.83	0.24
1865	0.41	2.68	21.25	0.25	1902	0.39	1.82	13.82	0.20
1870	0.43	2.60	25.24	0.33	1903	0.39	1.85	14.50	0.21
1875	0.44	3.37	27.99	0.29	1904	0.40	1.97	16.52	0.27
1880	0.48	3.37	27.87	0.37	1905	0.41	2.10	18.36	0.25
1885	0.42	2.75	25.05	0.28	1906	0.43	2.27	20.31	0.20
1890	0.48	3.27	31.06	0.28	1907	0.45	2.41	20.88	0.18
1895	0.48	3.36	25.93	0.24	1908	0.45	2.47	20.36	0.16
1900	0.43	2.29	18.75	0.25	1909	0.46	2.52	20.94	0.17

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-nine 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, 1909, were as follows:—

NUMBER OF LIVE STOCK PER SQUARE MILE, 31st DECEMBER, 1909.

State.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales	1.95	9.76	148.86	0.77
Victoria	5.04	17.63	147.22	2.48
Queensland	0.83	7.03	29.22	0.19
South Australia... ..	0.28	0.84	7.17	0.09
Western Australia	0.13	0.81	4.85	0.05
Tasmania	1.54	7.63	66.17	2.12
Commonwealth	0.68	3.71	30.81	0.26

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 1905 to 1909 are as follows:—

QUANTITIES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS
OF THE COMMONWEALTH, 1905 to 1909.

Products.	Unit of Quantity.	1905.	1906.	1907.	1908.	1909.
Animals (living)—						
Cattle	No.	258	391	504	841	894
Horses	"	20,487	10,346	12,116	9,164	6,335
Sheep	"	6,569	6,477	—398	9,001	2,540
Bones	cwt.	8,745	1,570	4,459	11,008	13,070
Glue Pieces and Sinews	"	21,912	19,355	21,941	23,417	20,199
Glycerine	lb.	1,217,175	921,828	592,435	*	*
Hair	"	282,825	328,555	285,478	191,475	190,052
Hoofs	cwt.	*	4,897	6,784	5,972	4,666
Horns	"	19,396	15,973	15,944	*	*
Meats—						
Frozen Beef	lb.	43,460,360	41,561,252	52,050,592	40,707,121	71,130,972
" Mutton †	"	86,764,222	90,684,899	109,227,757	91,607,614	116,914,965
" Rabbits and Hares	pair	8,786,111	11,048,201	10,648,534	7,604,053	9,181,312
" Other... ..	lb.	1,351,791	1,056,902	815,559	659,719	1,114,536
Potted and Extract of	"	*	*	*	*	*
Preserved in Tins, etc.	"	12,986,183	8,581,548	7,820,511	11,979,606	22,877,569
Other... ..	"	1,068,627	141,758	64,370	—120,055	235,479
Sausage Casings	"	*	*	*	*	*
Skins—						
Hides	No.	67,123	1,556	33,623	219,798	286,973
Sheep	"	7,237,303	7,696,930	9,691,688	8,663,034	10,658,776
Rabbit and Hare	cwt.	73,417	105,569	100,802	65,391	62,180
Other, including Undressed Furs	No.	*	*	*	*	*
Tallow	cwt.	693,117	683,178	674,723	586,220	929,157
Wool—Greasy	lb.	380,257,165	415,141,982	512,036,100	471,540,092	528,388,349
Scoured	"	56,758,160	64,882,802	72,295,353	70,883,847	73,569,380
Tops	"	*	*	*	*	496,492

* 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 £149,782,780 for the period, or an average of £29,956,556 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, 1905 to 1909.

Products.	1905.	1906.	1907.	1908.	1909.
Animals (living)—	£	£	£	£	£
Cattle	4,860	-1,389	-1,445	704	3,876
Horses	327,447	206,006	266,325	152,672	84,695
Sheep	-6,834	-2,704	-2,127	5,735	6,030
Bones	3,585	5,503	5,628	5,189	6,041
Glue Pieces and Sinews	11,253	13,948	17,458	12,679	11,800
Glycerine	15,513	9,186	6,983	3,179	2,316
Hair	20,240	28,812	21,086	16,739	22,584
Hoofs	24,262	2,355	2,064	2,024	1,622
Horns	24,262	22,870	18,969	18,270	18,729
Meats—					
Frozen Beef	441,210	434,455	575,732	451,503	733,028
" Mutton and Lamb	1,111,421	1,094,984	1,377,502	1,219,107	1,231,027
" Rabbits and Hares	389,738	491,434	472,816	336,093	423,679
" Other	14,733	13,290	12,814	8,507	18,027
Potted and Extract of	-10,161	-11,477	19,891	22,108	57,061
Preserved in Tins, etc.	232,484	157,432	133,165	213,476	401,606
Other	14,461	1,770	673	-2,890	1,663
Sausage Casings	2,552	1,478	41,122	26,600	52,182
Skins—					
Hides	71,209	-9,764	-10,079	86,310	239,539
Sheep	1,321,021	1,567,579	1,822,604	1,230,878	1,736,464
Rabbit and Hare	297,222	476,972	374,882	304,990	347,244
Other, including Undressed Furs	308,408	445,201	304,130	276,703	607,158
Tallow	783,396	876,748	1,014,870	785,910	1,229,541
Wool—Greasy	15,568,290	17,539,836	22,898,318	18,017,420	20,580,783
Scoured	4,246,634	5,068,195	5,962,599	4,883,805	4,820,092
Tops ... ..	...	...	...	...	58,638
Total Values	25,192,944	28,480,720	35,335,980	28,077,711	32,695,425

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, STATES AND COMMONWEALTH, 1860 to 1909.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	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	157,915	34,568	25,267	1,068,402
1885 ...	344,697	304,098	260,207	171,060	34,392	25,610	1,143,064
1890 ...	444,163	436,459	365,812	199,605	44,384	31,165	1,521,588
1895 ...	499,943	424,995	468,743	196,652	58,506	31,580	1,680,419
1900 ...	481,417	392,237	456,788	179,352	68,253	31,607	1,609,654
1901 ...	486,716	387,277	462,119	178,199	73,710	32,399	1,620,420
1902 ...	450,125	382,317	399,122	179,413	80,158	33,466	1,524,601
1903 ...	458,014	377,357	401,984	192,411	82,747	33,541	1,546,054
1904 ...	482,663	372,397	413,165	200,241	90,225	36,565	1,595,256
1905 ...	506,884	385,513	430,565	216,345	97,397	37,101	1,673,805
1906 ...	537,762	406,840	452,916	224,447	104,922	38,299	1,765,186
1907 ...	578,326	424,648	488,486	226,532	113,330	40,392	1,871,714
1908 ...	591,045	424,903	519,969	235,136	116,795	39,883	1,927,731
1909 ...	604,784	442,829	555,613	253,884	125,315	40,492	2,022,917

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 ten years are as follows:—

PERCENTAGE OF HORSES IN EACH STATE ON TOTAL FOR COMMONWEALTH,

1900 TO 1909.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.
	%	%	%	%	%	%	%
1900 ...	29.91	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
1909 ...	29.90	21.89	27.47	12.55	6.19	2.00	100.00

During the period under review, the proportions in South Australia and Western Australia have increased, those in Victoria and Queensland have diminished, while in the case of New South Wales and Tasmania the proportion in 1909 was practically identical with that in 1900.

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 7807 in 1909, and in value between £366,730 and £173,012 respectively for the same two years. The total number of horses exported during the five years amounted to 61,687, an average of 12,337 per annum. The total value of the exports for the period was £1,341,686, or £268,337 per annum.

The average export value per head for the period was £21 15s. The numbers exported to the principal countries concerned in this trade are as follows:—

**NUMBER AND DESTINATION OF HORSES EXPORTED FROM THE COMMONWEALTH,
1905 TO 1909.**

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 years.
	No.	No.	No.	No.	No.	No.
India	7,706	7,931	9,136	6,276	6,079	37,128
Hong Kong	8,248	6	5	15	29	8,303
Straits Settlements	702	903	991	651	353	3,600
Java	326	501	954	605	594	2,980
Japan	1,754	51	284	227	1	2,317
Philippine Islands	773	118	295	708.	315	2,209
Natal	232	413	165	16	1	827
Fiji	446	103	57	88	114	808
China	112	298	178	38	19	645
German S.W. Africa ... ..	...	...	...	622	...	622
Ceylon ... ..	...	40	199	165	97	501
New Zealand	184	80	75	52	31	422
Mauritius	56	127	...	103	70	356
Burma	95	50	32	20	57	254
Cape of Good Hope	58	51	2	3	2	116
Other Countries	116	100	259	79	45	599
Total	20,808	10,772	12,632	9,668	7,807	61,687

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

VALUE OF HORSES EXPORTED FROM THE COMMONWEALTH, 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 years.
	£	£	£	£	£	£
India	144,802	185,254	224,341	137,708	125,631	817,736
Hong Kong	119,504	160	205	545	888	121,302
Straits Settlements	15,107	18,022	26,952	15,491	10,339	85,911
Java	4,440	12,296	25,502	16,457	19,598	78,293
Japan	30,215	1,990	11,715	12,234	60	56,214
Philippine Islands	10,151	2,603	4,949	12,134	5,303	35,140
Natal	6,550	8,193	4,026	856	100	19,725
Fiji	11,189	2,855	1,142	2,356	2,982	20,524
China	2,671	5,942	3,299	892	295	13,099
German S.W. Africa ... ..	...	...	...	13,255	...	13,255
Ceylon ... ..	...	4,335	4,886	3,418	2,201	14,840
New Zealand	13,206	8,261	4,020	3,436	2,847	31,770
Mauritius	1,140	1,791	...	2,385	480	5,796
Burma	2,625	1,500	960	360	1,055	6,500
Cape of Good Hope	1,190	1,030	70	75	80	2,445
Other Countries	3,940	4,024	7,403	2,616	1,153	19,136
Total	366,730	258,256	319,470	224,218	173,012	1,341,686

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 £94 Os. 6d., as compared with £21 15s. per head for the exports for the same period. The average number imported per annum was, however, only 648, and the average annual value £60,908. The following table furnishes a comparison of imports and exports of horses during the five years 1905 to 1909:—

COMMONWEALTH IMPORTS AND EXPORTS OF HORSES, 1905 to 1909.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
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
1909	1,472	88,317	7,807	173,012	6,335	84,695
Total for 5 years	3,239	304,541	61,687	1,341,686	58,448	1,037,145

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 1909 it will be seen that the only States shewing an excess of exports over imports were Queensland and Tasmania:—

INTERSTATE TRADE IN HORSES, 1909.

State.	Imports from other States of the Commonwealth.		Exports to other States of the Commonwealth.		Net Interstate Exports.	
	Number.	Value.	Number.	Value.	Number.	Value.
New South Wales	11,307	£ 276,438	8,489	£ 325,836	—2,818	£ 49,398
Victoria	5,997	291,412	5,223	273,070	—774	—18,342
Queensland	2,456	59,668	9,118	113,956	6,662	54,288
South Australia ...	3,517	96,673	1,321	44,438	—2,196	—52,235
Western Australia	961	42,921	23	1,693	—938	—41,228
Tasmania... ..	405	13,369	469	21,488	64	8,119

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:—

**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 ...	1908	29,048,888	Sweden ...	1907	566,227
Utd. States America	1908	20,640,000	Bulgaria ...	1905	538,273
Argentine Republic	1908	7,531,376	Denmark ...	1903	486,935
Germany ...	1907	4,345,043	Uruguay ...	1905	450,151
Austria-Hungary ² ...	1895 & 1902	3,849,388	Spain ...	1908	445,776
France ³ ...	1907	3,094,698	New Zealand ...	1907-8	352,832
Canada ⁴ ...	1908	2,118,165	Netherlands ...	1904	295,277
United Kingdom ⁵ ...	1908	2,088,713	Cape of Good Hope	1904	255,060
Australia ...	1909	2,022,917	Belgium ...	1907	249,831
Japan ⁶ ...	1907	1,495,252	Algeria ...	1907	221,453
British India ⁷ ...	1907	1,308,027	Norway ...	1900	172,999
Italy ...	1908	955,051	Servia ...	1905	172,281
Rumania ...	1900	864,324	Switzerland ...	1906	135,372
Mexico ...	1902	859,217	Orange River Col'ny	1907	127,579

1. Preliminary figures. 2. Austria, 1902; Hungary, 1895. 3. Employed on farms. 4. Exclusive of British Columbia. 5. Agricultural horses, unbroken horses, and breeding mares only. 6. Exclusive of Formosa. 7. Exclusive of Bengal.

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 the number of horses per head of population was somewhat higher in 1909 than in 1900. Particulars for the past ten years are as follows:—

NUMBER OF HORSES PER HEAD OF POPULATION, COMMONWEALTH AND STATES,

1900 TO 1909.

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
1909 ...	0.37	0.34	0.97	0.61	0.46	0.22	0.46

§ 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 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 six years, however, a rapid improvement has taken place, and the total reached on 31st December, 1909, was over 4,700,000.

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 1909.

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	135,938	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	2,955,934	1,574,162	4,821,600	748,368	741,788	205,827	10,547,679
1909	3,027,727	1,549,640	4,711,782	758,080	793,217	199,945	11,040,391

3. **Proportion in each State.**—During the period elapsing between 1900 and 1909 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 TO 1909.**

Year.	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
1909 ...	27.42	14.04	42.68	6.87	7.18	1.81	100.00

A comparison of the positions of the several States in 1900 and 1909 shews that, while Queensland's proportion of the Commonwealth herds and those of Victoria and Tasmania suffered diminution, 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 7.18% in 1909.

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 nine years as were imported, the value of imports exceeded the value of exports by no less than £6181. Details are as follows:—

COMMONWEALTH IMPORTS AND EXPORTS OF CATTLE, 1901 to 1909.

Year.	Imports.		Exports.		Net Exports.	
	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	841	704
1909 ...	81	5,710	975	9,586	894	3,876
Total for 9 years...	4,908	114,581	13,058	108,400	8,150	6,181

* — signifies net imports.

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 1909 being no less than 365,198, representing an aggregate value of £2,009,900, or about £5 10s. 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, 1909.

State.	Imports from other States of the Commonwealth.		Exports to other States of the Commonwealth.		Net Interstate Exports.	
	Number.	Value.	Number.	Value.	Number.	Value.
New South Wales	208,422	£ 1,056,830	111,364	£ 690,781	—97,058	—366,049
Victoria ...	90,531	595,511	81,732	365,781	—8,799	—229,780
Queensland ...	41,796	163,481	145,500	844,667	103,704	681,186
South Australia ...	23,721	184,694	26,598	108,635	2,877	—76,059
Western Australia	333	4,205	...	...	—333	—4,205
Tasmania ...	395	5,179	4	36	—391	—5,143

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 1903. 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 1909.

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	46,975	36,000	1,054,833
1909 ...	411,876	287,548	305,026	86,435	49,716	37,000	1,177,601

For Hobart and Launceston only, the figures for the years 1901 to 1909 were, respectively, 8815, 10,193, 9842, 10,708, 12,035, 10,503, 12,037, 11,907, and 10,059.

7. **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 South Africa,

the United Kingdom, and the Philippine Islands. The quantities so exported during the five years 1905 to 1909 are as follows:—

**QUANTITY OF BEEF PRESERVED BY COLD PROCESS EXPORTED FROM
THE COMMONWEALTH, 1905 to 1909.**

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 years.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	1,603,195	1,706,386	8,360,147	12,384,176	52,777,113	76,831,017
Philippine Islands	12,804,318	10,453,286	9,626,173	12,826,444	11,250,779	56,971,000
Natal	18,632,290	8,881,485	8,657,618	2,777,537	1,352,185	40,301,135
Russia ... ..	...	10,247,609	10,551,438	6,821,701	...	27,620,748
Cape of Good Hope	6,117,907	5,419,763	10,635,660	1,538,890	345,861	24,118,021
Egypt	1,372,096	1,979,830	1,540,290	1,707,355	2,525,097	9,162,960
Straits Settlements	719,981	796,796	972,507	841,413	1,052,263	4,362,960
Malta	947,363	...	781,382	752,761	856,599	3,338,105
Gibraltar	119,272	1,247,683	345,374	...	190,703	1,843,032
Hong Kong	338,813	188,873	286,499	354,934	220,919	1,380,038
Mauritius	371,077	391,664	...	...	...	762,741
Japan	29,212	121,963	5,283	408,141	102,723	687,322
Ceylon	69,639	148,300	86,688	87,948	56,508	449,084
Hawaiian Islands ... ..	...	6,681	4,257	...	105,403	116,341
Other countries	399,923	30,933	137,276	210,256	316,141	1,094,529
Total	43,525,086	41,561,252	52,050,592	40,711,516	71,142,295	248,990,741

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, 1905 to 1909.**

Country to which Exported.	1905. *	1906.	1907.	1908.	1909.	Total for 5 years.
	£	£	£	£	£	£
United Kingdom	16,788	15,896	87,903	134,014	533,044	787,645
Philippine Islands	140,350	112,546	108,505	151,076	125,052	637,529
Natal	179,342	83,694	90,884	28,156	14,380	396,456
Russia ... ..	...	105,445	112,098	70,358	...	287,901
Cape of Good Hope	56,220	63,185	125,204	18,025	3,871	266,505
Egypt	16,861	22,027	19,135	19,770	26,747	104,540
Straits Settlements	7,553	8,080	11,515	9,820	11,899	48,867
Malta	10,540	...	8,852	7,987	8,690	36,069
Gibraltar	1,490	12,204	4,432	...	1,157	19,283
Hong Kong	3,737	2,347	3,950	3,873	2,144	16,051
Mauritius	3,296	4,665	...	...	...	7,961
Japan	268	1,501	32	4,494	1,139	7,434
Ceylon	1,027	2,258	1,422	1,507	601	6,815
Hawaiian Islands ... ..	...	84	96	...	1,067	1,247
Other countries	4,453	523	1,704	2,471	3,419	12,570
Total	441,925	434,455	575,732	451,551	733,210	2,636,873

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; Natal, Russia, the Cape of Good Hope and Egypt ranked next in order of importance. The exporting States were Queensland, 68,503,154 lbs., valued at £704,550; Victoria, 1,616,977 lbs., valued at £16,714; and New South Wales, 1,022,164 lbs., valued at £11,946.

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:—

NUMBER OF CATTLE IN VARIOUS COUNTRIES.

Country.	Date.	No. of Cattle.	Country.	Date.	No. of Cattle.
United States of America	1908	71,099,000	Cape of Good Hope ...	1904	1,954,390
Russian Empire ...	1907	43,507,101	Denmark ...	1903	1,840,466
British India ¹ ...	1907	52,357,895	Belgium ...	1907	1,812,689
Argentine Republic ...	1908	29,116,625	New Zealand ...	1908	1,773,326
Germany ...	1907	20,630,544	Bulgaria ...	1905	1,695,535
Austria-Hungary ² ...	1895 ²	15,763,622	Netherlands ...	1904	1,690,463
France ...	1907	13,949,722	Switzerland ...	1906	1,498,144
United Kingdom	1908	11,738,792	Japan ⁴ ...	1907	1,237,161
Australia ...	1909	11,040,391	Algeria ...	1907	1,081,734
Canada ³ ...	1908	7,547,582	Ceylon ...	1908	1,054,102
Italy ...	1908	6,190,990	Norway ...	1900	950,201
Uruguay ...	1905	6,028,980	Servia ...	1905	943,946
Mexico ...	1902	5,142,457	Natal ...	1905	783,887
Sweden ...	1907	2,628,982	Egypt ...	1908	737,732
Rumania ...	1900	2,588,526	Transvaal ...	1908	662,388
Spain ...	1908	2,452,197	Orange River Colony	1905	525,372

1. Exclusive of Bengal. 2. Austria 1902, Hungary 1895. 3. Exclusive of British Columbia.
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 ten years are as follows:—

NUMBER OF CATTLE PER HEAD OF POPULATION, 1900 to 1909.

Year.	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
1909 ...	1.87	1.19	8.23	1.82	2.90	1.07	2.52

For the Commonwealth as a whole the ratio of cattle to population is 10 per cent. greater for 1909 than for 1900, and has exhibited a continuous increase from 1902 onwards. The excess of the 1909 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 six years, and that for 1909 is greater than for any year since 1900. In Victoria the ratio for 1909 is 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 and 1903, 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 1909, is as follows:—

NUMBER OF SHEEP, STATES AND COMMONWEALTH, 1860 to 1909.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	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	3,779,303	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	11,749,582	7,227,774	6,179,395	881,861	1,731,723	53,124,209
1880	35,398,121	10,360,285	6,935,967	6,463,897	1,281,717	1,796,715	62,186,702
1885	37,820,906	10,681,887	8,994,322	6,643,565	1,702,719	1,648,627	67,491,976
1890	55,986,431	12,692,843	18,007,234	7,050,544	2,524,913	1,619,256	97,881,221
1895	47,617,687	12,791,084	19,856,959	6,604,319	2,295,832	1,523,846	90,689,727
1900	40,020,506	10,841,790	10,339,185	5,283,247	2,434,311	1,683,956	70,602,995
1901	41,857,099	10,673,265	10,030,971	5,060,540	2,625,855	1,792,481	72,040,211
1902	26,649,424	10,504,741	7,213,985	4,922,662	2,704,880	1,672,655	53,663,347
1903	28,656,501	10,336,216	8,392,044	5,350,258	2,600,633	1,597,053	56,932,705
1904	34,526,894	10,167,691	10,843,470	5,874,979	2,853,424	1,557,460	65,823,918
1905	39,506,764	11,455,115	12,535,231	6,202,330	3,120,703	1,583,561	74,403,704
1906	44,132,421	12,937,440	14,886,438	6,661,217	3,340,745	1,729,394	83,687,655
1907	44,461,839	14,146,734	16,738,047	6,873,869	3,684,974	1,744,800	87,650,263
1908	43,370,797	12,545,742	18,348,851	6,952,499	4,097,324	1,728,053	87,043,266
1909	46,202,578	12,937,983	19,593,791	6,475,431	4,731,737	1,734,761	91,676,281

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 ten years, are as hereunder.

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

**PERCENTAGE OF SHEEP IN EACH STATE ON TOTAL FOR COMMONWEALTH,
1900 TO 1909.**

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
1909 ...	50.40	14.11	21.37	7.07	5.16	1.89	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 nine years :—

COMMONWEALTH IMPORTS AND EXPORTS OF SHEEP, 1901 to 1909.

Year.	Imports.		Exports.		Net Exports.	
	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
1909 ...	2,775	14,213	5,315	20,243	2,540	6,030
Total for 9 years	91,125	251,835	122,013	214,212	30,888	—37,623

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 1909 amounted to a total of 3,753,535, valued at £1,891,907, or an average of about 10s. 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, 1909.

State.	Imports from other States of the Commonwealth.		Exports to other States of the Commonwealth.		Net Interstate Exports.	
	Number.	Value.	Number.	Value.	Number.	Value.
		£		£		£
New South Wales	1,590,402	746,987	1,862,734	951,277	272,332	204,290
Victoria ...	1,649,839	832,595	841,865	440,016	—807,974	—392,579
Queensland ...	178,714	116,339	908,308	382,139	729,594	265,800
South Australia ...	232,106	102,085	135,442	84,743	—96,664	—17,342
Western Australia	41,299	48,704	...	...	—41,299	—48,704
Tasmania ...	61,175	45,197	5,186	33,732	—55,989	—11,465

Note. — signifies net imports.

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

SHEEP (INCLUDING LAMBS) SLAUGHTERED, 1901 to 1909.

Year.	N.S.W.	Victoria.	Q'land.	Sth. Aust. ¹	West Aust.	Tasmania. ²	C'wealth.
1901	4,519,133	2,469,797	554,705	678,000	428,534	322,000	8,972,169
1902	4,635,850	2,827,938	715,443	631,000	482,882	325,000	9,668,113
1903	3,277,120	2,652,569	453,666	684,000	412,549	332,000	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	476,010	335,000	8,958,363
1906	4,482,055	2,826,144	449,547	710,000	468,759	335,000	9,271,505
1907	5,185,057	3,226,141	642,740	1,020,355	465,196	336,000	10,875,489
1908	5,201,492	3,309,865	705,776	1,213,168	423,056	340,000	11,193,357
1909	6,390,486	3,708,512	1,076,718	1,336,037	491,103	344,000	13,346,856

1. Estimated for years 1901 to 1906.

2. Estimated.

For Hobart and Launceston only the figures for the years 1901 to 1909 were respectively:—101,627, 114,900, 122,223, 109,992, 101,863, 104,081, 107,859, 115,560, and 111,445.

7. **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, 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 mutton and lamb has developed in recent years. 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 MUTTON AND LAMB PRESERVED BY COLD PROCESS EXPORTED FROM THE COMMONWEALTH, 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 years.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	62,767,593	67,251,672	88,676,913	82,341,131	110,138,905	411,176,214
Natal	14,011,235	13,349,876	11,038,858	4,854,974	2,329,085	45,584,028
Cape of Good Hope	6,524,229	5,974,671	3,406,939	468,628	128,944	16,503,411
Canada	196,331	969,352	2,215,533	719,336	1,138,974	5,239,526
Egypt	744,377	1,125,423	589,210	610,259	455,599	3,524,878
Philippine Islands	677,221	552,233	791,154	673,867	682,116	3,376,591
Malta	659,171	...	864,062	487,586	630,313	2,641,132
Straits Settlements... ..	382,101	243,508	511,813	471,634	563,684	2,177,740
Hong Kong	302,077	166,059	270,325	319,382	323,113	1,380,956
Hawaiian Islands ... ..	...	220,586	196,505	234,412	255,051	906,554
Gibraltar	225,659	285,510	168,453	...	67,190	746,812
Ceylon	145,078	151,549	172,504	156,291	117,141	742,563
Japan	11,284	86,612	35,690	89,805	22,789	246,180
Other Countries	211,988	315,334	289,798	180,299	57,735	1,055,154
Total	86,858,344	90,692,385	109,227,757	191,607,614	116,915,639	495,301,739

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

VALUES OF FROZEN MUTTON AND LAMB EXPORTED FROM THE COMMONWEALTH,

1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 years.
	£	£	£	£	£	£
United Kingdom ...	834,629	839,360	1,141,718	1,115,908	1,161,475	5,098,090
Natal ...	156,950	142,031	119,667	50,218	22,338	491,204
Cape of Good Hope ...	79,294	65,801	39,631	5,075	1,240	191,041
Canada ...	2,792	12,260	30,216	10,257	14,646	70,171
Egypt ...	8,580	12,674	7,760	7,801	4,987	41,802
Philippine Islands ...	7,442	6,309	8,674	8,056	6,059	36,540
Malta ...	7,276	...	9,437	5,526	6,262	28,501
Straits Settlements ...	4,514	2,579	5,711	5,261	5,488	23,553
Hong Kong ...	3,473	1,906	3,011	3,487	2,997	14,874
Hawaiian Islands ...	...	3,282	3,275	2,927	2,994	12,478
Gibraltar ...	2,765	2,974	1,955	...	700	8,394
Ceylon ...	1,774	1,713	2,802	1,722	1,096	9,107
Japan ...	132	917	384	891	195	2,519
Other Countries ...	2,348	3,314	3,261	1,978	558	11,459
Total ...	1,111,969	1,095,120	1,377,502	1,219,107	1,231,035	6,034,733

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.
Australia ...	1909	91,676,281	Germany ...	1907	7,703,710
Argentine Republic ...	1908	67,211,754	Rumania ...	1900	5,655,444
Russian Empire ¹ ...	1908	58,378,005	Mexico ...	1902	3,424,430
United States of America ...	1908	56,084,000	Servia ...	1905	3,066,231
United Kingdom ...	1908	31,332,400	Canada ⁴ ...	1908	2,831,404
New Zealand ...	1909	23,792,947	Transvaal ...	1908	2,810,053
British India ² ...	1907	18,029,800	British East Africa ...	1904	2,100,000
France ...	1907	17,460,284	Sweden ...	1907	1,021,727
Cape of Good Hope ...	1907	17,153,013	Norway ...	1900	998,819
Spain ...	1908	16,119,051	Denmark ...	1903	876,830
Uruguay ...	1905	13,915,796	Natal ...	1905	769,601
Italy ...	1908	11,160,420	Falkland Islands ...	1907	695,747
Austria-Hungary ³ ...	1895 | 1902 |	10,925,027	Netherlands ...	1904	606,785
Algeria ...	1907	9,314,515	Iceland ...	1904	495,190
Bulgaria ...	1905	8,131,004	Uganda ...	1907	457,600
Orange River Colony	1907	8,020,308	Belgium ...	1895	235,722
			Switzerland ...	1906	209,997

1. Including goats.
of British Columbia.

2. Exclusive of Bengal.

3. Austria 1902, Hungary 1895.

4. Exclusive

9. **Relation to Population.**—The relation of the flocks of the several States to the populations at the end of each of the past ten years is as follows:—

NUMBER OF SHEEP PER HEAD OF POPULATION.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
1900	29.42	9.06	20.94	14.59	13.53	9.74	18.75
1901	30.44	8.81	19.83	13.84	13.53	10.28	18.83
1902	18.99	8.67	14.12	13.43	12.68	9.43	13.82
1903	20.08	8.55	16.28	14.51	11.46	8.90	14.50
1904	23.69	8.40	20.79	15.76	11.78	8.64	16.52
1905	26.48	9.40	23.74	16.40	12.25	8.74	18.36
1906	28.91	10.50	27.82	17.35	12.76	9.60	20.31
1907	28.34	11.33	30.90	17.51	14.09	9.48	20.88
1908	27.25	9.87	33.22	17.07	15.34	9.30	20.36
1909	28.49	9.93	34.22	15.56	17.30	9.28	20.96

§ 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 1909 being about £28,000,000. 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 usually 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 on the average somewhat less than 25 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 least effect.

3. **Total Production.**—In the following tables, relative to the production of wool in the several States for the five years 1905 to 1909, 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 grease) in the several States of the Commonwealth for the years 1905 to 1909 may be said to be as in the following table:—

**PRODUCTION OF WOOL, ESTIMATED AS "GREASY," COMMONWEALTH AND STATES,
1905 TO 1909.**

State.	1905.	1906.	1907.	1908.	1909.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales	302,494,870	332,380,646	375,224,448	344,550,707	379,388,356
Victoria	74,746,552	78,258,113	120,017,787	93,999,156	112,102,445
Queensland	72,323,361	88,068,089	104,173,964	115,283,309	127,531,834
South Australia	41,221,437	48,928,116	57,830,794	52,040,731	56,415,539
Western Australia	19,523,003	17,437,645	22,013,541	22,450,624	30,048,360
Tasmania... ..	11,752,777	12,600,822	10,878,478	13,859,755	12,550,598
Commonwealth	522,062,000	577,673,431	690,139,012	642,184,282	718,037,132

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,
1905 TO 1909.**

State.	1905.	1906.	1907.	1908.	1909.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales	729,470	836,730	963,408	1,020,456	1,095,136
Victoria	4,493,041	4,765,687	5,660,873	6,152,250	5,239,806
Queensland	224,860	253,842	211,362	224,460	301,078
South Australia	376,615	387,264	603,848	672,112	634,250
Western Australia ... ..	...	...	...	...	...
Tasmania	1,067,050	1,005,628	929,572	1,244,379	991,388
Commonwealth	6,891,036	7,249,151	8,309,063	9,314,157	8,261,658

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 which may be paid in any one year is £10,000. 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, while in 1909-10 the amount so distributed was £4933. The quantities of wool on which these amounts were paid were 52,085 and 789,216 lbs. respectively.

6. **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 1905 to 1909, the quantities of "greasy" wool exported from the Commonwealth to the principal countries of destination:—

COMMONWEALTH EXPORTS OF WOOL IN THE GREASE, 1905 TO 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	167,675,702	193,740,722	227,246,663	225,336,019	210,353,060	1,024,352,166
France	95,812,717	85,755,279	130,937,517	104,210,690	128,402,229	545,118,432
Germany	62,727,286	56,479,224	71,423,340	80,073,180	102,160,121	372,863,151
Belgium	35,213,749	53,972,671	56,605,510	37,557,258	47,381,739	230,730,927
United States of America	14,996,174	21,030,888	18,401,395	20,430,274	32,846,145	107,764,876
Japan	453,645	2,465,742	5,905,962	1,972,449	5,320,455	16,118,253
Italy	3,085,474	1,184,080	1,546,395	1,548,760	1,915,544	9,280,253
India	91,431	162,724	212,759	394,236	271,030	1,132,180
Canada	138,416	173,944	264,513	254,300	157,263	968,436
New Zealand	197,948	183,845	55,208	62,775	135,954	635,730
Other Countries	27,682	144,471	157,633	6,168	76,673	412,527
Total... ..	380,420,424	415,353,590	512,756,895	471,846,109	529,020,213	2,309,397,231

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

COMMONWEALTH EXPORTS OF "SCOURED AND WASHED WOOL," 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	28,469,808	35,301,652	38,037,138	46,401,114	34,168,844	182,378,556
France	13,816,332	11,290,425	13,607,538	9,383,368	16,651,577	64,749,240
Germany	6,897,390	6,905,930	8,649,996	9,104,503	14,583,296	46,141,115
Belgium	5,556,547	9,098,036	9,288,704	5,157,465	7,661,482	36,762,234
United States of America ... ..	...	...	...	645	151,309	151,954
Japan	1,579,164	2,106,820	2,490,953	722,217	635,722	7,534,876
Italy... ..	165,444	99,663	85,937	65,361	148,695	568,100
India	64,198	68,007	151,851	70,828	74,876	429,760
Canada	781	...	...	...	...	781
New Zealand	6,266	18,624	1,770	5,871	3,972	36,503
Other Countries	216,493	138	4,178	4,122	2,646	227,577
Total... ..	56,775,423	64,869,295	72,318,065	70,915,494	74,082,419	338,980,696

The figures for 1909 include for the first time an export of tops, amounting to 496,492 lbs. and valued at £58,638. This has been included in the above tables with scoured and washed wool.

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, 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	8,750,240	10,706,181	12,933,800	12,022,541	10,562,929	54,975,691
France	5,053,870	4,577,034	7,004,581	4,407,940	5,594,983	26,638,408
Germany	3,143,614	2,962,586	4,117,394	3,632,708	5,006,623	18,862,928
Belgium	1,905,822	3,113,778	3,417,193	1,742,639	2,230,206	12,409,638
United States of America... ..	647,296	912,679	815,254	881,172	1,691,389	4,947,790
Japan	140,704	279,860	481,771	125,408	264,630	1,292,373
Italy	143,995	58,971	77,413	67,021	97,756	445,156
India	7,928	12,084	20,115	21,708	16,657	78,492
Canada	5,459	8,215	11,903	10,873	7,748	44,198
New Zealand	5,218	8,565	2,860	1,669	6,637	24,949
Other Countries	18,070	5,816	9,546	557	3,552	37,541
Total	19,822,216	22,645,769	28,891,830	22,914,236	25,483,110	119,757,161

7. 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.

Similar circumstances have operated to make the 1909 clip somewhat higher and the 1910 clip somewhat lower than would have been the case had the interval between shearings been exactly a year.

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.

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
1909	2,296,000	380,000	571,000	3,247,000

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.

9. **England's Importation of Wool.**—The quantity and value of wool imported into the United Kingdom during the year 1909 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, 1909.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	lbs.	£		lbs.	£
Australia	312,710,067	13,668,466	Germany	2,917,594	115,177
New Zealand	176,457,150	6,935,431	Peru	2,537,886	100,719
Cape of Good Hope	87,467,251	3,279,816	Egypt	3,161,964	85,788
Argentine Republic	42,208,120	1,630,611	Portugal	2,798,673	79,850
British India	56,225,193	1,516,123	China	2,225,447	76,036
France	26,956,677	1,506,593	Italy	1,530,586	50,641
Natal	28,429,347	955,438	Netherlands	1,290,548	48,281
Chile	23,083,341	723,226	Persia	1,187,780	34,817
Turkey	9,727,855	259,492	Spain	537,205	20,820
Belgium	5,559,329	228,591	U.S. of America	518,881	17,202
Uruguay	4,370,784	173,738	Other Countries	2,008,927	65,884
Falkland Islands	4,555,541	157,179			
Russia	4,966,402	156,456	Total	3,038,432,548	31,886,375

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.

10. **The Wool Market.**—About 85 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 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.

During the sales of 1909-10 the prices realised for greasy merino wool ranged up to 21d. per lb. for a few lines of extra super. Western District (Victoria) wool, super. to 17½d., good to 14½d., average to 13d., and inferior from 6½d. to 9½d. Amongst other classes of wool extra super. comebacks brought as high as 18½d., and super. to 16½d. Super. crossbreds sold up to 16d., fine to 14½d., medium to 11d., and coarse to 10½d. Scoured wool ranged from 17d. to 25½d.

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

EXPORT VALUE PER LB. OF AUSTRALIAN GREASY WOOL, 1901 to 1909.

Year ...	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
Average value per lb. ...	d. 7.27	d. 8.04	d. 8.75	d. 9.30	d. 9.83	d. 10.14	d. 10.73	d. 9.17	d. 9.35

§ 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 five years 1905 to 1909 being no less a sum than £9,071,345, or an average of £1,814,269 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 1905 to 1909 are as follows:—

COMMONWEALTH EXPORTS OF SHEEPSKINS WITH WOOL, 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
France ...	2,319,157	2,742,973	3,561,771	3,265,111	3,140,764	15,029,776
United Kingdom	2,399,848	2,369,247	2,711,846	3,522,791	3,968,494	14,971,726
Belgium ...	474,327	675,051	957,819	710,902	1,100,023	3,918,122
Germany ...	65,945	48,683	57,909	124,465	57,041	354,043
U.S. of America...	70,424	16,228	27,833	11,041	86,664	212,190
Italy ...	12,338	5,771	6,906	44,083	27,565	96,663
Canada ...	11,615	1,450	4,268	...	...	17,333
New Zealand ...	...	1,469	...	225	...	1,694
Other Countries ...	135	65	152	...	234	586
Total ...	5,353,789	5,860,937	7,328,004	7,678,618	8,380,785	34,602,133

The next table furnishes corresponding particulars as to value :—

**VALUE OF SHEEPSKINS WITH WOOL EXPORTED FROM THE COMMONWEALTH,
1905 to 1909.**

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	£	£	£	£	£	£
France ...	514,091	655,044	760,421	508,477	598,172	3,036,205
United Kingdom	530,562	537,648	628,318	515,937	737,592	3,000,057
Belgium ...	129,151	206,037	243,988	123,456	274,823	977,455
Germany ...	15,242	7,890	10,446	23,338	9,566	66,482
U.S. of America...	17,084	2,740	5,981	1,058	9,836	36,699
Italy ...	1,252	2,583	2,244	10,621	10,244	26,944
Canada...	1,653	335	634	...	...	2,622
New Zealand ...	...	542	...	25	...	567
Other Countries ...	29	18	26	...	63	131
Total ...	1,209,064	1,462,832	1,652,058	1,182,912	1,640,296	7,147,162

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, 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
United Kingdom ...	982,304	1,374,208	2,370,759	1,086,103	1,140,338	6,953,712
United States of America	1,080,072	708,518	219,296	167,460	1,285,946	3,461,292
France ...	...	...	2,804	101,767	3,315	107,886
New Zealand ...	1,104	66	2,522	5,040	9,840	18,572
Canada ...	11,496	...	600	...	1,068	13,164
Germany ...	378	3,160	684	2,812	...	7,034
Belgium ...	...	...	1,080	...	...	1,080
Italy ...	...	...	72	...	...	72
Other Countries	...	132	1,020	475	...	1,627
Total ...	2,075,354	2,086,084	2,598,837	1,363,657	2,440,507	10,564,439

Corresponding details concerning value are given hereunder :—

**VALUE OF SHEEPSKINS WITHOUT WOOL EXPORTED FROM THE COMMONWEALTH,
1905 TO 1909.**

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom ...	58,605	101,030	176,484	62,605	50,077	448,801
United States of America	67,911	50,155	19,191	7,390	57,795	202,442
France ...	...	...	210	7,477	312	7,999
New Zealand ...	66	9	248	272	422	1,017
Canada ...	650	...	37	...	50	737
Germany ...	27	426	22	184	...	659
Belgium ...	...	...	103	...	...	103
Italy ...	...	...	8	...	...	8
Other Countries	...	11	72	38	...	121
Total ...	127,259	151,631	196,375	77,966	108,656	661,887

4. **Hides.**—The Commonwealth trade in hides has now assumed considerable proportions, and during 1909 the total value of hides exported amounted to £412,790. The exports took place principally to the United Kingdom, Belgium, the United States of America, Germany 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 1909 was £173,251.

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

COMMONWEALTH EXPORTS OF HIDES FROM 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	No.	No.	No.	No.	No.	No.
United Kingdom	44,436	30,162	78,603	152,107	196,827	508,135
Belgium ...	33,071	33,551	52,507	63,377	79,977	262,483
Germany ...	27,360	30,721	22,098	99,745	47,335	227,259
Italy ...	27,717	26,378	36,749	43,156	11,316	146,316
U.S. of America...	12,922	7,575	10,118	15,012	56,131	101,758
France ...	6,650	6,675	2,841	20,971	20,546	57,683
Japan ...	8,410	3,507	5,867	1,670	6,598	26,052
Canada ...	5,500	3,080	4,586	1,050	3,737	17,953
Austria-Hungary	...	1,534	3,363	5,998	515	11,410
Cape of Good Hope	61	...	100	50	200	411
Other Countries ...	62	1,875	469	24	166	2,596
Total ...	166,189	151,058	217,301	403,160	423,348	1,361,056

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

VALUE OF HIDES EXPORTED FROM THE COMMONWEALTH FROM 1905 to 1909.

Country to which Exported.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
	£	£	£	£	£	£
United Kingdom	49,008	40,106	72,693	106,619	177,738	446,164
Belgium ...	39,131	44,662	57,242	54,674	89,547	285,256
Germany ...	28,907	27,789	21,251	68,413	42,710	189,070
Italy ...	24,163	26,361	28,702	24,891	8,333	112,450
U.S. of America...	13,734	8,614	7,969	12,079	56,639	99,085
France ...	6,944	7,434	2,782	15,205	22,805	55,170
Japan ...	12,427	5,650	11,327	2,235	10,315	41,954
Canada ...	5,368	3,959	4,795	1,127	3,591	18,840
Austria-Hungary	...	1,795	3,137	5,360	627	10,919
Cape of Good Hope	44	...	100	42	260	446
Other Countries ...	70	2,127	497	23	225	2,942
Total ...	179,846	168,497	210,495	290,668	412,790	1,262,296

The number and value of hides imported into the Commonwealth during the five years 1905 to 1909 are as follows:—

HIDES IMPORTED INTO THE COMMONWEALTH, 1905 to 1909.

Year.	1905.	1906.	1907.	1908.	1909.	Total for 5 Years.
No. ...	99,066	149,502	183,678	183,362	136,375	751,983
Value ...	£ 108,637	178,261	220,574	204,358	173,251	885,081

§ 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 359, covers the period from 1860 to 1909.

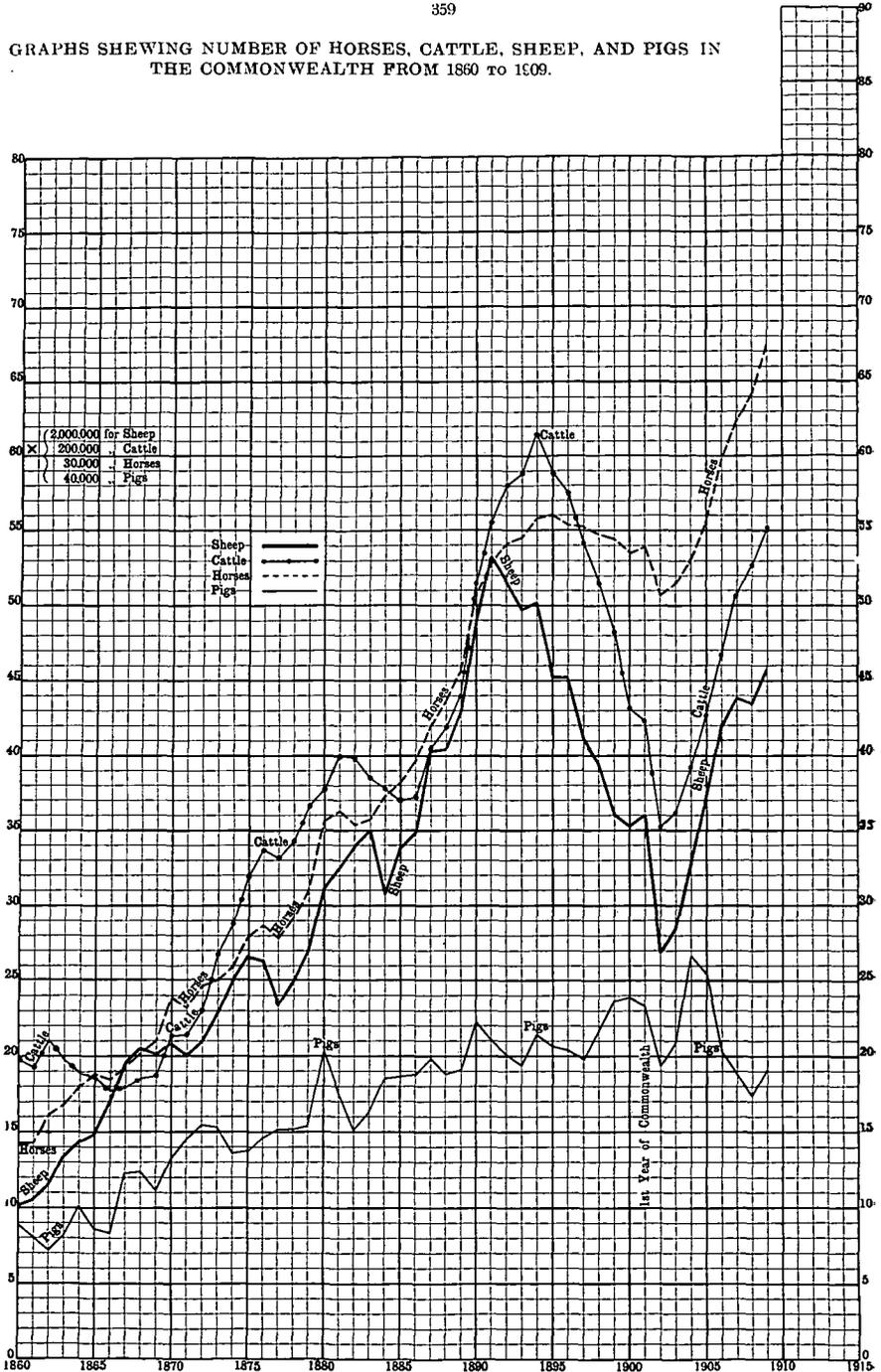
2. **Horses.**—With relatively unimportant fluctuations the number of horses in the Commonwealth increased at a fairly consistent rate until 1895, when a decline set in culminating in the losses of the disastrous drought of 1902. At this latter point the number is practically identical with that for 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 1909 corresponds with that existing at the middle of the year 1897, 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, and a rapid advance in 1909. The point now reached corresponds approximately with that which obtained in the latter portion of 1895.

5. **Pigs.**—The graph for pigs exhibits more numerous fluctuations than that for either 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, the total for that year being higher than for either of the two preceding years.

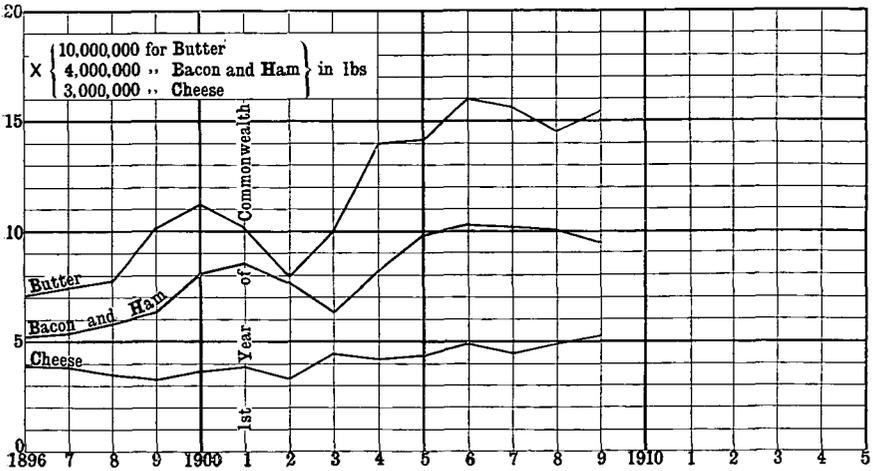
GRAPHS SHEWING NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS IN THE COMMONWEALTH FROM 1860 TO 1909.



(See pages 338, 342, 347, and 450.)

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.

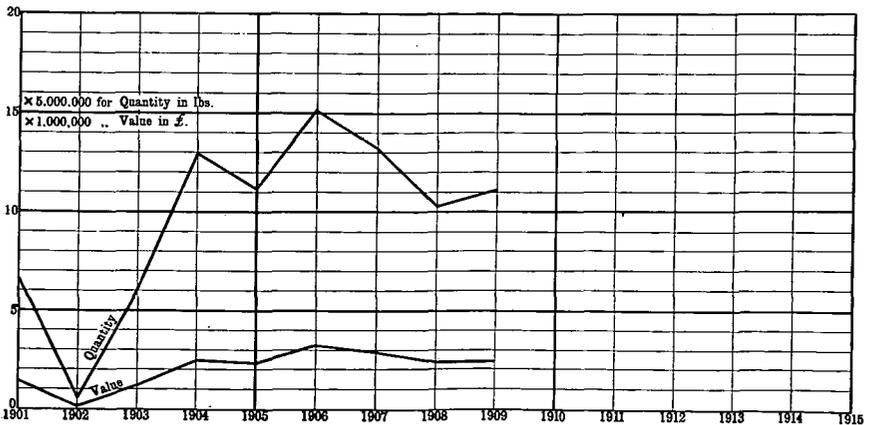
GRAPHS SHEWING THE PRODUCTION OF BUTTER AND CHEESE, AND BACON AND HAM, IN THE COMMONWEALTH, FROM 1896 TO 1909.



(See pages 447 and 450.)

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 1909.



(See page 448.)

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.