SECTION VII.

PASTORAL PRODUCTION.

§ I. 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 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 Common-wealth 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 graph as given hereinafter :—

During the forty-six years covered by the table on the next page the live stock of the Commonwealth increased considerably, horses by 309 per cent., cattle 136 per cent., sheep 316 per cent., and pigs 132 per cent. The annual increases which these aggregates represent are as follows:—Horses, 3.11 per cent. per annum; cattle, 1.89 per cent.; sheep, 3.15 per cent.; and pigs, 1.84 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	815,770
1885				1,143,064	7,397,947	67,491,976	748,908
890				1,521,588	10,299,913	97,881,221	891,138
.895				1,680,419	11,767,488	90,689,727	822,750
.900				1,609,654	8,640,225	70,602,995	950,349
901	•••			1,620,420	8,493,678	72,040,211	931,309
1902				1,524,601	7,067,242	53,668,347	777,289
903		•••		1,546,054	7,254,258	56,932,705	837,368
904				1,595,256	7,849,520	65,823,918	1,062,703
905	•••	••••		1,673,805	8,525,025	74,403,704	1,014,859
906]	1,765,186	9,349,409	83,687,655	813,569

COMMONWEALTH LIVE STOCK, 1860 TO 1906.

4. Fluctuations.—These increases, 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, and in 1902. The last-mentioned 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 four years from 1902 to 1906, horses increased by 240,585, cattle by 2,282,167, and sheep by 30,019,308, the corresponding increases per cent. being horses 15.78 per cent., cattle 32.29 per cent., and sheep 55.93 per cent.

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-six years in the manner shewn in the succeeding table :--

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.		Horses.	Cattle.	Sheep.	Pigs.
860 865 870 875 880 885 890 895	$\begin{array}{c} 0.38\\ 0.41\\ 0.43\\ 0.44\\ 0.48\\ 0.42\\ 0.48\\ 0.48\\ 0.48\\ \end{array}$	3.45 2.68 2.60 3.37 3.37 2.75 3.27 3.36	$\begin{array}{c} 17.58\\ 21.25\\ 25.24\\ 27.99\\ 27.87\\ 25.05\\ 31.06\\ 25.93 \end{array}$	$\begin{array}{c} 0.31 \\ 0.25 \\ 0.33 \\ 0.29 \\ 0.37 \\ 0.28 \\ 0.28 \\ 0.24 \end{array}$	1900 1901 1902 1903 1904 1905 1906	···· ··· ···	$\begin{array}{c} 0.43 \\ 0.42 \\ 0.39 \\ 0.39 \\ 0.40 \\ 0.41 \\ 0.43 \end{array}$	2.29 2.22 1.82 1.85 1.97 2.10 2.27	$18.75 \\ 18.83 \\ 13.82 \\ 14.50 \\ 16.52 \\ 18.36 \\ 20.31 \\ 18.10 \\ 100 \\ $	0.25 0.24 0.20 0.21 0.27 0.25 0.20

NUMBER OF LIVE STOCK PER HEAD OF POPULATION, 1860-1906.

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-six 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, 0.20 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, 1906, were as follows:—

State.			Horses.	Cattle.	Sheep.	Pigs.
New South Wales Victoria Queensland South Australia Western Australia Tasmania			$1.73 \\ 4.63 \\ 0.68 \\ 0.25 \\ 0.11 \\ 1.46$	8.22 20.53 5.09 0.75 0.71 0.81	$\begin{array}{r} 142.19 \\ \cdot \ 147.21 \\ 22.20 \\ 7.37 \\ 3.42 \\ 65.97 \end{array}$	$\begin{array}{c} 0.78 \\ 2.51 \\ 0.21 \\ 0.12 \\ 0.06 \\ 1.64 \end{array}$
Commonwealth			0.59	3.14	28.13	0.27

NUMBER OF LIVE STOCK PER SQUARE MILE, 31st DECEMBER, 1906.

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 1901 to 1906 are as follows :---

QUANTITIES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS OF THE COMMONWEALTH, 1901 to 1936.

Products.	Unit of Quan- tity.	1901.	1902.	1903.	1904.	1905.	1906.
Annimals (living)—Cattle Horses Sheep Bones Hoofs Horns Meats—Frozen Beef Frozen Mutton † Skins—Hides Tallow Wool-Greasy Scoured	cwt. " lb. No. cwt.	2,299 32,228 11,541 13,921 24,027 90,707,274 66.288,326 111,826 571,680 385,087,467 66,358,262	$\begin{array}{c} 1,560\\ 17,249\\ -23,358\\ 13,186\\ 21,085\\ 77,510,532\\ 42,535.383\\ 206,469\\ 3\\ 328,289\\ 286,499,002\\ 49,362,423\end{array}$	59,999,559 34,965,939 86.724 6,537,308 241,286	$\begin{array}{c} 625\\ 12,812\\ 5,132\\ (4,719\\ 16,952\\ 37,072,455\\ 46,472,597\\ 38,200\\ 4,164,063\\ 512,684\\ 339,137,226\\ 55,897,173\end{array}$	8,745	391 10,346 6,477 1,570 4,897 41,561,252 90,684,899 1,556 7,696,930 683,178 415,141,982 415,141,982 64,882,802

* Quantity not available. † Including lamb.

Note.-(-) Signifies net imports.

The values of the net exports for the same six years are :---

VALUES OF NET EXPORTS OF PRINCIPAL PASTORAL PRODUCTS OF THE COMMONWEALTH, 1901 to 1906.

Products.	1901.	1902.	1903.	1904.	1905.	1906.
Animals (living)Cattle Horses Bones Horns Meats-Frozen Beef Frozen Mutton* Other Sausage Casings Skins-Hides Sheep Tallow Wool-Greasy Scoured	$\left.\begin{array}{c} \pounds \\ 18,497 \\ -18,647 \\ -30 \\ 418,647 \\ -30 \\ 40,611 \\ 25,934 \\ 1,175,144 \\ 726,296 \\ 451,969 \\ -16,104 \\ 102,941 \\ 102,941 \\ 102,941 \\ 105,552 \\ 662,094 \\ 11,671,203 \\ 3,560,767 \end{array}\right.$	$\begin{array}{c} \pm\\ -30,229\\ 218,386\\ -50,484\\ 4,030\\ 25,525\\ 1,024,098\\ 516,839\\ 431,701\\ 2,614\\ 151,338\\ 1,065,105\\ 454,854\\ 9,593,234\\ 3,146,938\end{array}$	$\begin{array}{c} \pounds \\ -267 \\ 149,946 \\ 14,628 \\ 22,159 \\ 807,072 \\ 479,076 \\ 143,503 \\ 4,321 \\ 35,842 \\ 35,842 \\ 1,650,413 \\ 298,496 \\ 9,595,556 \\ 9,595,556 \\ 4,396,214 \end{array}$	$\begin{array}{c} \pounds \\ -788 \\ 188,542 \\ -1,837 \\ \{ 2,022 \\ 22,468 \\ 442,110 \\ 637,476 \\ 222,384 \\ -8,690 \\ 26,633 \\ 20,319 \\ 549,455 \\ 13,137,837 \\ 3,974,502 \end{array}$	$\begin{array}{c} \pounds \\ 4,860 \\ 327,447 \\ -6,834 \\ 3,585 \\ 24,262 \\ 441,210 \\ 1,111,421 \\ 236,442 \\ 2,552 \\ 71,209 \\ 1,321,021 \\ 783,396 \\ 15,568,290 \\ 4,246,634 \end{array}$	$\begin{array}{c} \pounds \\ -1,386\\ 206,006\\ -2,704\\ 3,503\\ \{ 2,355\\ 92,870\\ 434,455\\ 1,094,984\\ 147,725\\ -1,478\\ -9,764\\ 1,587,579\\ 876,748\\ 17,539,836\\ 5,098,196\\ 5,098,196\\ \end{array}$
Total Values	 19,486,988	16,553,949	16,996,989	20,012,437	24,135,495	27,001,877

* Including lamb.

Note.--(--) Signifies net imports.

HORSES.

§ 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 sadddle 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 1906.

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	566,57
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	481,417	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	450,125	382,317	399,122	179,413	80,158	33,466	1,524,60
1903	458,014	377,357	401,984	192,411	82,747	33,541	1,546,05
1904	482,663	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	537,762	406,840	452,916	224.447	104,922	38,299	1,765,18

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 seven years are as follows :—

PERCENTAGE OF HORSES IN EACH STATE ON TOTAL FOR COMMONWEALTH, 1901-1906.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Common- wealth.
	%	%	%	%	%	%	%
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

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.

HORSES.

4. Export Trade in Horses.—Australia's export trade in horses is a fairly considerable, though somewhat fluctuating one. During the past six years it has varied in number between 9527 for the year 1903 and 32,474 in 1901, and in value between $\pounds 164,224$ and $\pounds 438,248$ respectively for the same two years. The numbers exported to the principal countries concerned in this trade are as follows:—

Country to Which Exported.	1901.	1902.	1903.	1904,	1905.	1906.	Total for Six Years.
	 No.	No.	No.	No.	No.	No.	No.
India	 5,391	5,590	5,894	8,801	7,706	7,931	41,313
Natal	 10,939	7,078	684	141	232	413	19,487
Cape Colony	 14,054	3,382	42	367	58	51	17,954
Hong Kong	 54	71	1	34	8,248	6	8,414
Straits Settlements	 923	530	416	592	702	903	4,066
Mauritius	 109	120	708	1,207	56	127	2,327
Java	 104	272	308	587	326	501	2,098
Japan	 2	—	25	69	1,754	51	1,901
New Zealand	 276	96	556	659	184	80	1,851
Philippine Islands	 19	13	290	165	773	118	1,378
China	 219	102	22	38	112	298	791
Other Countries	 384	183	581	442	657	293	2,540
•							
Total	 32,474	17,437	9,527	13,102	20,808	10,772	104,120
Total	 32,474	17,437	9,527	13,102	20,808	10,772	104

NUMBER AND DESTINATION OF HORSES EXPORTED, 1901 TO 1906.

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

VALUE OF HORSES EXPORTED FROM THE COMMONWEALTH, 1901-1906.

Country to which Exported.	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
	£	£	£	£	£	£	£
India	76,485	78,867	81,251	141,682	144,802	185,254	708,341
Natal	161,028	99,714	14,555	3,303	6,550	8,193	293,343
Cape Colony	159,094	37,413	2,610	3,830	1,190	1,030	205,167
Hong Kong	775	1,765	14	1,023	119,504	160	123,241
Straits Settlements	15,513	7,530	8,618	11,195	15,107	18,022	75,985
Mauritius	1,034	2,400	5,195	7,786	1,140	1,791	19,346
Java	2,105	5,745	6,330	11,373	4,440	12,296	42,289
Japan	100		715	8,095	30,215	1,990	41,115
New Zealand	6,934	2,786	22,051	19,310	13,206	8,261	72,548
Philippine Islands	190	369	8,087	3,827	10,151	2,603	25,227
China	4,460	2,330	440	851	2,671	5,942	16,694
Other Countries	10,530	3,747	14,358	13,505	17,754	12,714	72,608
Total	438,248	242,666	164,224	225,780	366,730	258,256	1,695,904

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 six years under review, but that the particulars for some of the other countries specified exhibit marked fluctuations. Thus in the case of Natal and Cape Colony a large export trade took place in 1901 and 1902, which, on the cessation of the South African war, dropped to comparative insignificance. The exports to Hong Kong and Japan also were exceptionally large in 1905.

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

CATTLE.

Country.	Date.	Number of Horses.	Country.		Date.	Number of Horses.
Russian Empire Utd. States America Argentine Republic Germany Austria-Hungary France ² United Kingdom ³ Australia		$\begin{array}{c} 29,111,784\\ 18,718,578\\ 4,446,859\\ 4,267,403\\ 4,024,945\\ 3,138,507\\ 2,116,800\\ 1,765,186\end{array}$	Canada Japan British India ⁴ Rumania Mexico Italy Uruguay Sweden	· · · · · · · · · · · · ·	1901 1902 1905 1900 1902 1900 1901 1904	$\begin{array}{c} 1,577,493\\ 1,515,373\\ 1,280,679\\ 864,324\\ 859,217\\ 741,739\\ 575,361\\ 546,943\end{array}$

 Austria, 1900; Hungary, 1895.
 Used for agriculture.
 Agricultural horses, unbroken horses, and breeding mares only.
 Return said to be incomplete.

6. 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. Particulars for the past seven years are as follows :—

NUMBER OF HORSES PER HEAD OF POPULATION, COMMONWEALTH AND STATES, 1901-1906.

	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

7. 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, 1906 :—

VALUE OF HORSES IN AUSTRALIA, 31st DECEMBER, 1906.

State	N.S.W.	Victoria.	Q'nsland.	S. Aust.	W. Aust.	Tas.	C'wealth.
Value	£	£	£	£	£	£	£
	5,380,000	4,480,000	3,620,000	2,240,000	1,260,000	420,000	17,400,000

§ 3. Cattle.

1. Purposes for which Raised.—In all the States of the Commonwealth cattleraising is carried out on a more or less extensive scale, the main object in certain 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.

CATTLE.

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 three years, however, a rapid improvement has taken place, and the total reached on 31st December, 1906, was more than 3,400,000.

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

Year.	N.S.W.	Victoria.	Queensland.	S. Aust.	W. Aust,	Tasmania	C'wealth.
1860 1865 1870 1875 1880 1885 1890 1895 1900	2,408,586 1,961,905 2,195,096 3,134,086 2,580,040 1,317,315 2,091,229 2,150,057 1,983,116	722,332 621,337 721,096 1,054,598 1,286,267 1,290,790 1,782,978 1,795,314 1,602,384	$\begin{array}{r} 432,890\\848,346\\1,076,630\\1,812,576\\3,162,752\\4,162,652\\5,558,264\\6,822,401\\4,078,191\end{array}$	278,265 158,057 136,832 219,240 307,177 418,140 574,032 636,824 472,428	32,476 45,148 45,213 50,416 63,719 70,408 130,970 200,091 338,590	$\begin{array}{r} 83,366\\90,020\\101,459\\118,694\\127,187\\138,642\\162,440\\162,801\\165,516\end{array}$	3,957,915 3,724,813 4,276,326 6,389,610 7,527,142 7,397,947 10,299,913 11,767,488 8,640,225
1901 1902 1903 1904 1905 1906	2,047,454 1,741,226 1,880,578 2,149,129 2,337,973 2,549,944	$1,625,532 \\1,648,680 \\1,671,828 \\1,694,976 \\1,737,690 \\1,804,323$	$\begin{array}{c} 3,772,707\\ 2,543,471\\ 2,481,717\\ 2,722,340\\ 2,963,695\\ 3,413,919\end{array}$	480,777 519,163 536,580 520,379 647,631 680,095	398,547 437,136 497,617 561,490 631,825 690,011	$\begin{array}{c} 168,661\\ 177,566\\ 185,938\\ 201,206\\ 206,211\\ 211,117\\ \end{array}$	8,493,678 7,067,242 7,254,258 7,849,520 8,525,025 9,349,409

NUMBER OF CATTLE IN STATES AND COMMONWEALTH, 1860 to 1906.

3. Proportion in each State.—During the period elapsing between 1900 and 1906 the proportion of cattle in the several States has varied considerably, as shewn hereunder :---

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		24.10	19.14	44.42	5.66	4.69	1.99	100.00
1902	•••	24.64	23.33	35.99	7.35	6.18	2.51	100.00
1903 '	•••	25.92	23.05	34.21	7.40	6.86	2.56	100.00
1904	•••	27.38	21.59	34.68	6.63	7.15	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

PERCENTAGE OF CATTLE IN EACH STATE ON TOTAL FOR COMMON-WEALTH, 1901-1906.

A comparison of the positions of the several States in 1900 and 1906 shews that, while Queensland's proportion of the Commonwealth herds has suffered a marked diminution, the proportions for Victoria and Tasmania were 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 7.38% in 1906.

CATTLE.

4. 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 numbers and values of those exported during the past six years are as follows :—

Year	1901.	1902.	1903.	1904.	1905.	1906.	Total for six years.
Number	2,413	4,489	939	770	1,280	552	10,443
Value	£22,088	£19,002	£9,302	£7,115	£15,451	£5,373	£78,831

NUMBER AND VALUE OF CATTLE EXPORTED FROM AUSTRALIA, 1901-1906.

The comparatively large figures for 1901 and 1902 were due to exports to Natal and Cape Colony.

5. 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 are not collected at all in South Australia. Estimates for these States have, however, been made, as shewn in the indicated columns of the following table :—

CATTLE (INCLUDING CALVES) SLAUGHTERED, COMMONWEALTH AND STATES, 1901 TO 1906.

	Year.		N.S.W,	Victoria.	Q'land,	S. Aust. ¹	W. Aust.	Tas.'	C'wealth.
1901 1902 1903 1904 1905 1906	···· ··· ··· ···	···· ···· ···	335,823 288,131 275,199 299,089 320,857 340,000 ¹	233,206 235,284 243,937 249,454	377,433 344,731 262,423 210,715 214,462 223,469	72,000 72,000 73,000 73,000 74,000 75,000	39,424 43,882 40,501 44,199 51,758 55,034	34,000 34,000 35,000 35,000 35,000 35,000	$1,110,157\\1,015,950\\921,407\\905,940\\945,531\\989,537$

1. Estimated.

For Hobart and Launceston only, the figures for the years 1901 to 1906 were, respectively, 8815, 10,193, 9842, 10,708, 12,035, and 10,503.

6. 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, and the Philippine Islands. The quantities so exported during the six years 1901 to 1906 are as follows:—

QUANTITY OF FROZEN BEEF EXPORTED FROM AUSTRALIA, 1901-1906.

Country to which Exported.	ı	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
Cape Colony Natal Philippine Islands United Kingdom Bussia Malta Egypt Straits Settlements Gibraltar Mauritius Other countries		Lbs. 27,444,815 8,353,519 11,090,789 40,964,214 944,673 359,977 759,052 790,335	Lbs. 31,452,143 22,096,398 7,154,841 14,258,593 794,414 96,864 1,578,628 166,721 1,495,430 359,216	Lbs. 29,494,957 14,459,823 6,848,594 7,779,859 1,375,152 758,136 19,372 409,058 31,279	Lbs. 16,596,558 6,437,661 7,448,649 3,668,850 1,887,526 392,804 	Lbs. 6,117,907 18,632,290 12,804,318 1,603,195 	Lbs. 5,419,763 8,881,485 10,453,286 1,706,386 10,247,609 1,979,830 736,796 1,247,683 391,664 496,750	Lbs. 116,526,143 78,861,176 55,800,477 69,981,097 10,247,607 5,949,125 4,959,707 3,035,405 2,312,100 3,122,831 2,718,462
Total		90,707,374	79,453,248	61,176,230	37,090,945	43,525,086	41,561,252	353,514,13

CATTLE.

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

Country to which Exported.	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years
Madal	£ 338,207		£ 370,714	£ 220,249	.£ 56,220	£ 63,185	£ 1,470,104
Philippine Islands	116,012 137,540 545,072	102,522	204,007 93,751 123,193	70,593 84,287 35,632	$179,342 \\ 140,350 \\ 16,788$	83,694 112,546 15,896	947,270 670,996 914,960
Malta	12,323 5,132		18,852 10,724	20,318 3,954	10,540 16,861	105,445	105,445 71,977 60,408
Straits Settlements Gibraltar	10,361	$22,716 \\ 2,090$	242	_	7,553 1,490	8,080 12,204	38,349 26,387
Athen constring	10,498	22,350 4,966	5,541 477	4,748 2,656	3,296 9,485	4,665 6,713	40,600 34,795
Total	1,175,145	1,059,828	827,501	442,437	441,925	434,455	4,381,291

VALUE OF FROZEN BEEF EXPORTED FROM AUSTRALIA, 1901-1906.

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

Country.'	Date.	No. of Cattle.	Country.	Date.	No. of Cattle
United States of America Russian Empire Argentine Republic Germany Austria-Hungary France United Kingdon Australia Uruguay Canada Mexico	$1903-4 \\ 1905 \\ 1905 \\ 1905 \\ 1904 \\ 1895 \\ 19003 \\ 1904 \\ 1906 \\ 1906 \\ 1906 \\ 1901 \\ 1901 \\ 1902 \\ 1890$	66,861,522 45,043,804 21,701,526 19,331,568	Rumania Sweden Spain Cape of Good. Hope New Zealand Denmark Belgium Bulgaria Holland Switzerland Japan	1891 1904 1906 1903 1904 1893 1904 1904 1904 1901 1902	$\begin{array}{c} 2,588,526\\ 2,545,553\\ 2,217,659\\ 1,954,390\\ 1,851,750\\ 1,840,466\\ 1,782,290\\ 1,767,974\\ 1,690,463\\ 1,637,886\\ 1,340,375\\ 1,275,382\\ 1,082,204 \end{array}$

HERDS OF CATTLE, VARIOUS COUNTRIES.

1. Exclusive of Bengal. 2. Inclusive of buffaloes. 3. Austria 1900, Hungary 1895.

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

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	1.37	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	1.40	5.22	1.40	2.32	1.12	1.97
1 905			1.57	1.43	5.61	1.71	2.48	1.14	2.10
190 6			1.67	1.46	6.38	1.77	2.64	1.17	2.27

NUMBER OF CATTLE PER HEAD OF POPULATION, 1901 to 1906.

SHEEP.

9. Value of Australian Cattle.—The value of the cattle in the several States of the Commonwealth on the 31st December, 1906, was approximately as follows :—

State.	N.S.W.	Victoria.	Q'sland.	S. Aust.	W. Aust.	Tasmania.	C'wealth.
Value	£	£	£	£	£	£	£
	16,570,000	12,630,000	17,070,000	4,420,000	4,830,000	1,690,000	57,210,000

VALUE OF CATTLE IN AUSTRALIA, 31ST DECEMBER, 1906.

§ 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, represented more than half the total for the Commonwealth.

Year.	New South Wales.	Victoria.	Queens- land.	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	3,779,308	445,044	1,752,719	29,539,928
1870	16,308,585	10,761,887	8,163,818	4.400,655	608,892	1,349,775	41,593,612
1875	25,353,924	11,749,532	7,227,774	6,179,395	881,861	1,731,723	53,124,209
1880	35,398,121	10,360,285	6,935,967	6,463,897	1,231,717	1,796,715	62,186,702
1885	37,820,906	10,681,837	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	53,668,347
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

NUMBER OF SHEEP IN AUSTRALIA, 1860 TO 1906.

SHEEP.

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 six years, are as hereunder :—

PERCENTAGE OF SHEEP IN EACH STATE ON TOTAL FOR COMMON-WEALTH, 1901-1906.

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		59.33	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

4. Exports of Sheep.—As in the case of cattle, the 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, Straits Settlements, and New Caledonia. The following are the particulars for the past six years :—

NUMBER AND VALUE OF LIVE SHEEP EXPORTED FROM AUSTRALIA, 1901 TO 1906.

Particulars.	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
Number	12,094	24,296	18,111	7,746	12,090	17,979	92,316
Value	£12,104	£15,558	£24,468	£11,219	£17,429	£48,699	£129,477

5. Sheep Slaughtered.—The numbers of sheep slaughtered in those States for which slaughtering statistics are available, are as follows:

SHEEP (INCLUDING LAMBS) SLAUGHTERED, 1901 TO 1906.

Year.	N.S.W.	Victoria.	Q'sland.	Sth. Aust. ¹	West Aust.	Tasmania.'	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	681,000	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	$4,500,000^{1}$	2,826,144	449,547	710,000	468,759	335,000	9,289,450

1. Estimated.

For Hobart and Launceston only the figures for the years 1901 to 1906 were respectively :-101,627, 114,900, 122,223, 109,992, 101,863 and 104,081.

6. 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 $\pounds1,000,000$ 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

SHEEP.

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. A regular, though not very extensive trade is also done with the Philippine Islands. The quantities exported to various countries are :---

QUANTITY	\mathbf{OF}	FROZEN	MUTTON	AND	LAMB	EXPORTED	FROM
		AUST	RALIA, 1	901 то) 1906.		

Country to which Exported.	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
	 lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	 45,562.565	19,063,120	18,202,206			67,251,672	247,917,085
Natal	 6,250,816	12,667,264	10,350,121	6,980,584	14,011,235	13,349,876	63,609,896
Cape of Good Hope	 11,435,804	9,475,714	4,577,341	3,625,294	6,524,229	5,974,671	41,613,053
Philippine Islands	 1,107,499	870,294	720,284	749,378	677,221	552,233	4,676,879
Malta	 534,439	416,204	1,229,867	763,909	659,171		3,603,590
Egypt	 66,832	160,346	223,483	186,348	744,377	1,125,423	2,506,809
Canada	 124,544	154,000			196,331	969.352	1,444,227
Hong Kong	 358,960	147,056	273,810	161,535	302,077	166,059	1,409,497
Gibraltar	 115,248	118,100	292,138	76,396	225,659	285,510	1,113,051
Ceylon	 281,264	320,492	5,200	119,684	145,078	151,549	1,023,267
Mauritius	 	497,422		90,545	58,651		646,618
Straits Settlements	 				382,101	243,508	625,609
Other Countries	 450,355	215,618	9,453	39,930	164,621	622,532	1,502,509
	·· ·						
Total	 66,288,326	44,105,600	35,883,903	47,863,532	86,858,344	90,692,385	371,692,090

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

VALUES OF FROZEN MUTTON AND LAMB EXPORTED FROM AUSTRALIA, 1901 to 1906.

1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
£	`£	£	£	£	£.	£
467,013	234,385	268,697	488,830	834,629	839,360	3,132,914
80,139	162,032	131,152	91,388	156,950	142,031	763,692
142,027	111,467	58,109	50,037	79,294	65,801	506,735
13,047	10,881	9,199	9,680	7,442	6,309	56,558
6,783	4,143	14,492	8,741	7,276	i —	41,435
993	2,278	2,945	2,144	8,580	12.674	29,614
1,244	965	—		2,792	12,260	17,261
3,022	1,923	3,991	2,234	3,473	1,906	16,549
1,770	1,230	3,273	955	2,765	2,974	12,967
4,706	4,542	70	1,613	1,774		14,418
	6,205	•	1,214	672		8,091
				4,514	2,579	7,093
5,552	3,371	· 186	525	1,808	7.513	18,955
					ŕ	
726,296	543,422	492,114	657,361	1,111,969	1,095,120	4,626,282
	£ 467,013 80,139 142,027 13,047 6,783 993 1,244 3,022 1,770 4,706 5,552	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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

WOOL.

	-					
Country.		Date.	No. of Sheep	Country.	Date.	No.of Sheep.
Australia Argentine Republic Russian Empire' United States of Amer United Kingdom New Zealand British India France Uruguay Spain Cape of Good Hope Austria-Hungary		1906 1895 1905 1905 1906 1904 1904 1904 1901 1891 1904 1891 1905 1900 1903	$\begin{array}{c} 83,687,655\\74,379,562\\64,697,663\\50,631,619\\29,076,777\\20,108,471\\17,904,748\\17,800,965\\17,624,548\\13,359,473\\11,818,829\\10,743,707\\\end{array}$	Bulgaria Rumania Mexico Orange River Colony Servia Canada Sweden Norway Denmark Transvaal Falkland Islands Netherlands	1893 1900 1902 1904 1900 1901 1904 1900 1903 1904 1904 1904	$\begin{array}{c} 6,868,291\\ 5,655,444\\ 3,424,430\\ 3,145,685\\ 3,013,644\\ 2,510,239\\ 1,105,903\\ 998,819\\ 876,830\\ 846,939\\ 726,752\\ 702,444\\ 606,785\\ \end{array}$
Algeria Germany		1903	8,958,537 7,907,173	Belgium Switzerland	1001	235,722 219,438
Italy		1890	6,900,000			
	1		·		·	<u> </u>

NUMBER OF SHEEP IN VARIOUS COUNTRIES.

1. Including goats.

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

	Year.	 N.S.W.	Vic	Q'land.	S. Aust.	W. Aust.	Tas.	Total 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

NUMBER OF SHEEP PER HEAD OF POPULATION.

9. Value of Australian Sheep.—The total value on 31st December, 1906, of the sheep in the Commonwealth and its several States is approximately as follows :—

ESTIMATED VALUE OF AUSTRALIAN SHEEP, 31st DECEMBER, 1906.

State	N.S.W.	Victoria.	Q'nsland.	Sth. Aust.	W. Aust.	Tasmania.	C'wealth.
Value a	24,273,000	7,116,000	7,815,000	3,664,000	2,004,000	1,038,000	45,910,000

§ 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 1906 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 $1\frac{1}{2}$ 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

WOOL.

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 25 per cent. of the total clip. The ratio of loss of weight in scouring, however, varies largely with season, locality, and breed; hence it seems preferable to express "scoured and washed" wool in terms of "greasy" rather than vice versa, the absolute error arising from any uncertainty as to the average loss of weight having thus the least effect.

3. Total Production.—In the following tables, relative to the production of wool in the several States for the six years 1901 to 1906, 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." On this basis the estimated total production of wool (in the grease) in the several States of the Commonwealth for the years 1901 to 1906 may be said to be as in the following table:—

PRODUCTION OF WOOL, ESTIMATED AS "GREASY," COMMONWEALTH AND STATES, 1901 TO 1906.

State.	1901.	1902.	1903.	1904.	1905.	1906.
N.S.W Victoria Queensland South Aust. West. Aust. Tasmania	lbs. 311,318,648 81,227,029 70,872,670 40,415,378 14,290,156 9,805,154	lbs. 218,505,670 71,109,528 42,100,238 37,285,621 13,380,181 9,167,911	lbs. 228,173,045 55,044,659 53,908,667 37,766,673 13,812,326 5,731,783	lbs. 252,194,736 80,036,363 66,037,701 36,727,324 12,513,185 11,589,735	lbs. 298,490,955 66,118,195 70,393,840 37,262,504 17,732,597 10,666,430	lbs. 326,999,426 67,426,109 86,363,630 44,602,680 15,405,132 11,359,760
C'wealth	527,929,035	391,549,149	393,937,153	459,049,044	500,664,521	552,156,737

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:—

QUANTITY	\mathbf{OF}	WOOL,	ESTIMATED	AS	"GREASY,"	USED	IN	COMMON-
		WEA	ALTH FACTOR	RIES	, 1901 то 190	6.		

State.	1901.	1902.	1903.	1904.	1905.	1906.
N.S.W Victoria Queensland South Aust. West. Aust. Tasmania	lbs. 1,343,070 3,408,526 312,000 184,846 776,000	lbs. 1,358,920 3,473,835 219,292 201,657 	lbs. 1,293,600 3,772,390 164,234 271,285 812,000	lbs. 726,900 4,027,080 185,802 311,469 	lbs. 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
C'wealth	6,024,442	6,033,704	6,313,509	6,062,751	6,891,036	7,249,151

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 1901 to 1906, the quantities of "greasy" wool exported from the Commonwealth to the principal countries of destination :---

Country to which Exported.'	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
United Kingdom France Germany Helgium U.S. of America Italy Japan New Zealand India Canada Other Countries	$\begin{array}{c} 33,176,804\\ 8,162,316\\ 2,674,495\\ 157,514\\ 483,844\\ 62,157\\ \ldots\end{array}$	$\begin{array}{c} 1 bs. \\ 171,255,911 \\ 48,207,243 \\ 40,659,728 \\ 20,302,265 \\ 4,439,461 \\ 1,312,711 \\ 162,607 \\ 84,827 \\ 156,659 \\ \end{array}$	$\begin{array}{c} 1 bs. \\ 131,981,041 \\ 52,700,279 \\ 45,946,327 \\ 21,579,126 \\ 8,461,508 \\ 2,208,104 \\ 266,398 \\ 101,880 \\ 275,637 \\ 24,000 \\ 2,352 \end{array}$	101,029 96,736 53,513	95,812,717 62,727,286 35,213,749 14,996,174 3,085,474 453,665 197,948 91,431 138,416	53,972,671 21,090,888 1,184,080 2,465,742 183,845 162,724 173,944	
Total	385,280,424	286,621,569	263,546,652	339,394,650	380,420,424	415,353,590	2,070,617,309

COMMONWEALTH WOOL EXPORTED IN THE GREASE, 1901 TO 1906.

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

COMMONWEALTH EXPORTS OF "SCOURED AND WASHED WOOL,"

1901 TO 1906.

Country to which Exported.	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
United Kingdom France Germany Belgium Japan Italy Italy New Zealand Canada Other Countries	$\begin{array}{c} 1 \text{bs.} \\ \textbf{49,176,041} \\ \textbf{7,321,775} \\ \textbf{5,606,254} \\ \textbf{3.175,954} \\ \textbf{776,322} \\ \textbf{187,276} \\ \textbf{81,262} \\ \textbf{21,870} \\ \hline \\ \\ \textbf{22,101} \end{array}$	lbs. 31,387,903 7,229,229 5,325,117 4,512,655 765,866 68,176 85,531 	$\begin{array}{c} 1 \text{bs.} \\ 38,789,131 \\ 10,354,637 \\ 7,531,339 \\ 3,431,979 \\ 827,041 \\ 82,359 \\ 108,804 \\ 4,560 \\ 12,750 \\ 720 \end{array}$	$\begin{array}{c} 1\mathrm{bs.}\\ 30,108,654\\ 8,578,307\\ 8,682,885\\ 3,992,454\\ 4,235,144\\ 40,651\\ 85,199\\ 19,631\\ 5,841\\ 162,280\end{array}$	$\begin{array}{c} 1bs.\\ 28,469,608\\ 13,816,332\\ 6,897,390\\ 5,556,547\\ 1,579,164\\ 168,444\\ 64,198\\ 6,266\\ 781\\ 216,493 \end{array}$	lbs. 35,301,652 11,290,425 6,905,930 9,098,036 2,106,820 99,663 68,007 18,624 138	$\begin{array}{c} 1 bs. \\ 213,233,189 \\ 58,590,705 \\ 40,948,915 \\ 29,767,625 \\ 10,290,357 \\ 646,569 \\ 499,001 \\ 70,951 \\ 19,372 \\ 401,732 \end{array}$
Total	66,368,855	49,374,477	61,143,320	55,911,046	56,775,423	64,889,295	354,462,416

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

TOTAL VALUE OF WOOL EXPORTED FROM THE COMMONWEALTH,

1901 то 1906.

Country to which Exported.	1901.	1902.	1903.	1904.	1905.	1906.	Total for Six Years.
)						
	£	£	£	£	ŧ	£	£
United Kingdom	9,797,001	7,610,114	7,366,423	8,498,648	8,750,240	10,706,181	52,728,607
France	2,003,197	2,133,975	2,676,582	3,419,045	5,053,870	4,577,034	19,863,703
Germany	1,852,053	1,755,053	2,342,619	2,569,677	3,143,614	2,962,586	14,625,602
Belgium	1,146,349	924,447	1,044,297	1.390.564	1,905,822	3,113,778	9,525,257
United States of America	273,933	198,588	388.247	783.998	647,296	912.679	3,204,741
Italy	90,842	55,367	92,377	94,268	143.995	58,971	535,820
*	19 659	55,802	71,582	332,602	140,704	279,860	929,203
÷	5 015	6,483	13.671	10,518	7,928	12.084	56,599
Mary Realand	1 17 461	3,784	3,950	4,992	5,218	8,565	43,970
	11,401			2,620		8,215	
Canada	1 10000		1,756		5,459		18,050
Other Countries	2,050	850	95	15,338	18,070	5,816	42,219
Total	15,237,454	12,744,463	14,001,599	17,122,270	19,822,216	22,645,769	101,573.771

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 elimatic or other conditions the time of shearing is 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. To what extent the 1907 clip was affected by this cause cannot be stated as the wool statistics for that clip are not yet available.

7. 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 woolproducing countries of the Southern Hemisphere. The figures given represent for the respective years the imports of wool into Europe and North America:—

Year.		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	

IMPORTS OF WOOL INTO EUROPE AND NORTH AMERICA.

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 1906 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, 1906.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
Australia	lbs. 250,279,245	£ 11.514.733	Egypt	lbs. 3,764,450	£ 103,607
	146,759,673	6.959.836	China	3,649,813	99,367
Cape of Good Hope		1,876,660	Falkland Islands	3,558,536	125,244
British India 🐪	10 000 000	1,478,815	Uruguay		126,833
Argentine Republic	29,984,152	1,199,963	U.S. of America	2,326,896	91,620
France	23,854,610	1,078,409	Peru		90,242
Chile	1 1 000 000	593,278	Portugal		65,700
Natal	13,273,277	397,555	Other Countries	4,624,450	167,419
Turkey	12,560,051	417,265			
Russia	8,442,134	302,391	1		
Belgium	6,999,458	289,748	Total	639,342,939	27,146,133
Germany	1 1 0 - 0 - 0 0	167,448			

WOOL.

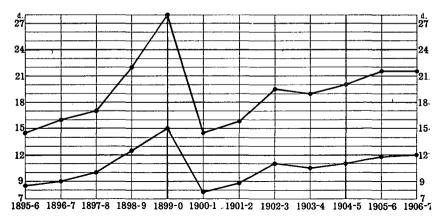
9. The Wool Market.—The clip of 1906 was an exceptional one from two points of view, the number of bales of wool exceeded 2,000,000 for the first time in the history of Australia, and the prices realised were on the average considerably higher than have been touched for many years, with the result that the wool season of 1906-7 was one of the most prosperous experienced in the Commonwealth.

The following particulars concerning the prices of greasy Merino wool which ruled in the Australian markets during the wool season 1906-7 are taken from Dalgety's *Review* for July, 1907 :---

Class of Wool.		. State.						
		N.S.W.	Victoria.	Qucensland.	South Aust.	Tasmania.		
Super Good Inferior		· ··· ···	 	$\begin{array}{c} d \\ 11\frac{3}{2} - 12\frac{3}{4} \\ 10\frac{1}{2} - 11\frac{1}{2} \\ 7\frac{1}{2} - 8\frac{3}{4} \end{array}$	$\begin{array}{c} \text{d.} \\ 15\frac{1}{2} - 16\frac{1}{2} \\ 12 - 13 \\ 10\frac{1}{2} - 11\frac{1}{2} \end{array}$	$\begin{array}{c} d.\\ 11\frac{1}{2}-12\\ 10\frac{1}{2}-11\frac{1}{2}\\ 7\frac{1}{2}-8\frac{3}{4}\end{array}$	$\begin{array}{c} d.\\ 11\frac{1}{2}-14\\ 9\frac{1}{2}-11\\ 6\frac{1}{2}-8\end{array}$	$ \begin{array}{c} \text{d.} \\ 13\frac{1}{2} - 14 \\ 11\frac{1}{2} - 12\frac{1}{2} \\ 9 - 10\frac{1}{2} \end{array} $

GREASY MERINO WOOL, 1906-7.

The fluctuations in the prices of greasy and scoured wool of good average quality from 1895-6 to 1906-7, shewn by the graphs hereinunder, are in agreement with the results given in Dalgety's *Review* for 1907 :---

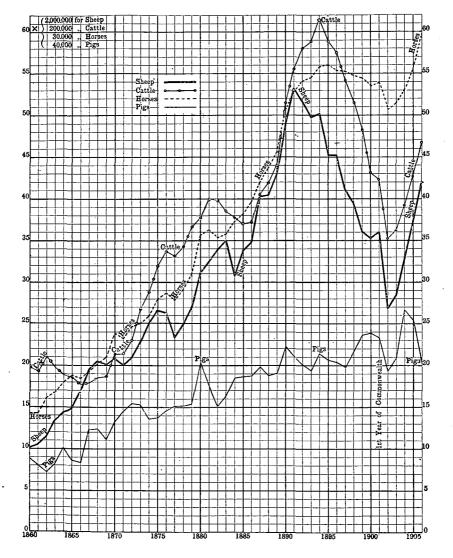


AVERAGE PRICES OF AUSTRALIAN WOOL, 1895-6 TO 1906-7.

The upper line and lower line shew respectively the average prices of scoured and greasy. Merino fleece of good average quality.

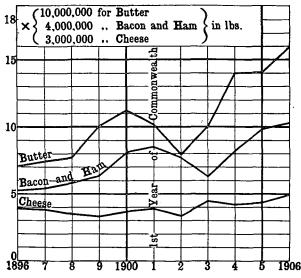
§ 5. Graphical Representation of Pastoral Production.

1. **General.**—(*See graphs page* 295).—The figures for the total number of horses, cattle, sheep and pigs being known with considerable accuracy only from 1860 onwards, the graphs are restricted to the period indicated. It will be observed on a general survey of these that up to 1890 there was a fairly uniform increase in the number of each class of animals, or, more exactly, the number of horses increased up to 1895, of cattle to 1894, of sheep to 1891, of pigs say up to 1904. This, however, was followed by diminutions, a small one of horses till 1902—followed by a rapid recovery, and enormous ones also till 1902 in the number of cattle and sheep—again followed by very rapid recovery.



GRAPHS SHEWING NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS IN AUSTRALIA FROM 1860 to 1906.

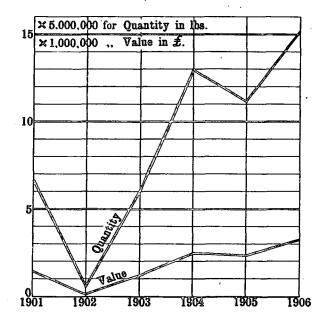
EXPLANATION OF GRAPH.—The base of each small square represents an interval of one year. The total of the sheep, cattle, horses, and pigs for the Commonwealth is indicated by the several curves or graphs, the vertical side of a small square representing 2,000,000 in the case of sheep; 200,000 for cattle; 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 1906.

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 1906.





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 $\pounds1,000,000$ in value.

GRAPHICAL REPRESENTATION OF PASTORAL PRODUCTION.

It is worthy of notice that the rate of recovery is very satisfactory. There has never been a triennium in Australian history when the number of sheep increased as it did from 1903 to 1906; the increases of cattle and of horses for the same period are similar to the very remarkable increases between 1889 and 1892 and 1888 and 1891 respectively. The year 1902 shews a great falling-off in all four classes, due to the prolonged drought-conditions which culminated in that year. It is remarkable too, that after so prolonged an adverse condition the numbers should increase as rapidly as they have, a fact which points to the elasticity of the natural resources of Australia, and its great recuperative power.

2. Graph for Cattle.—For the Commonwealth, the number of cattle declined from 1862 to 1866, from 1881 to 1885, and again from 1894 to 1901, but increased very rapidly for the intermediate periods and since. Among the States the increases for Queensland are the most remarkable, and the figures for that State have a predominating influence on the result.

3. Graph for Horses.—For the Commonwealth, the graph shews that the number of horses increased with considerable regularity practically from 1860 to 1895, and then again from 1902 onwards. No one State's figures have a predominating influence on the curve for the Commonwealth, since the largest, viz., those for New South Wales, Queensland, and Victoria, are all comparable in magnitude.

4. Graph for Sheep.—For the Commonwealth, the figures for the total number of sheep shew a fairly steady and rapid progression from 1860 to 1891, a decline from 1891 to 1902, and again a rapid progression from that last date onwards. The figures for New South Wales have a predominating influence.

5. Graph for Pigs.—The curve for the Commonwealth, while shewing marked fluctuations every two or three years, shews also a steady increase on the whole. The form of this curve is profoundly influenced by the numbers for New South Wales and Victoria.