

## CHAPTER XVI.

## PASTORAL PRODUCTION.

## § 1. Initiation and Growth of Pastoral Industry.

1. **Early Statistics.**—In earlier issues of the Year Book will be found a brief reference to the pastoral industry in Australia prior to the year 1860. (See Year Book No. 6, page 330.)

2. **Subsequent Statistics.**—While the statistical records of live stock in Australia prior to the year 1860 are somewhat defective, from that year onwards fairly complete particulars are available for 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, these particulars were not collected in South Australia, and similar gaps occur on the Victorian records for the periods 1895 to 1899 inclusive, and 1901 to 1903. In order to obtain totals for Australia 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 Live Stock.**—Particulars concerning the numbers of each of the principal kinds of live stock in Australia at decennial intervals from 1860 to 1920, and from 1925 onwards in single years, are given in the following table, and are shown continuously in the graphs hereinafter.

During the sixty-nine years covered by the table the live stock of Australia increased considerably, horses 328 per cent., cattle 183 per cent., sheep 419 per cent., and pigs 190 per cent. The average annual increases which these aggregates represent are as follow :—Horses, 2.12 per cent. ; cattle, 1.52 per cent. ; sheep, 2.42 per cent. ; and pigs, 1.56 per cent.

## LIVE STOCK.—AUSTRALIA, 1860 TO 1929.

31st December.	Horses.	Cattle.	Sheep.(a)	Pigs.
1860 .. .. .	431,525	3,957,915	20,135,286	351,096
1870 .. .. .	716,772	4,276,326	41,593,612	543,388
1880 .. .. .	1,068,774	7,527,142	62,184,252	815,776
1890 .. .. .	1,521,598	10,299,816	97,881,221	891,138
1900 .. .. .	1,609,654	8,640,225	70,602,995	950,349
1910 .. .. .	2,165,866	11,744,714	98,066,046	1,025,850
1920 .. .. .	2,415,510	13,499,737	81,795,727	764,406
1925 .. .. .	2,250,361	13,279,785	103,563,218	1,128,374
1926 .. .. .	2,122,516	11,963,278	104,267,101	989,009
1927 .. .. .	2,040,691	11,617,056	100,827,476	878,207
1928 .. .. .	1,942,753	11,300,757	103,430,773	910,181
1929 .. .. .	1,845,614	11,202,134	104,558,342	1,018,324

(a) See note to Table in § 4, 2 hereinafter.

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 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914-15, 1918, 1919, 1922-23, 1925-26, and 1927-28, in which latter years Central and Northern Queensland experienced one of the driest periods on record with a heavy mortality of stock.

The years in which the numbers of live stock attained their maxima are as follows:—Horses, 1918, 2,527,149; cattle, 1921, 14,441,309; sheep, 1891, 106,421,068; and pigs, 1917, 1,169,365.

5. Live Stock in Relation to Population.—The number of each kind of live stock per head of the population of Australia has varied during the past sixty-nine years in the manner shown in the succeeding table:—

LIVE STOCK PER HEAD OF POPULATION.—AUSTRALIA, 1860 TO 1929.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860	0.38	3.45	17.58	0.31	1920	0.44	2.49	15.11	0.14
1870	0.43	2.60	25.24	0.33	1925	0.38	2.22	17.28	0.19
1880	0.48	3.37	27.87	0.37	1926	0.35	1.96	17.06	0.16
1890	0.48	3.17	31.06	0.28	1927	0.33	1.86	16.14	0.14
1900	0.43	2.29	18.75	0.25	1928	0.31	1.78	16.32	0.14
1910	0.49	2.65	22.16	0.23	1929	0.29	1.75	16.30	0.16

6. Live Stock in Relation to Area.—The numbers of live stock per square mile in the several States and Territories of Australia are given in the following table:—

LIVE STOCK PER SQUARE MILE, 1929.

States and Territories.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales (a)	1.73	8.68	157.45	1.05
Victoria	4.47	15.19	198.30	3.03
Queensland	0.75	7.76	30.31	0.35
South Australia	0.50	0.54	16.28	0.20
Western Australia	0.16	0.86	9.79	0.07
Tasmania	1.31	8.19	79.77	2.02
Northern Territory	0.06	1.36	0.02	0.00
Federal Capital Territory (a)	0.99	5.06	255.79	0.13
Total	0.62	3.77	35.15	0.34

(a) 30th June, 1930.

7. Minor Classes of Live Stock.—The numbers of minor classes of live stock returned for 1929 were as follows:—Goats, 131,869; camels, 6,252; mules and donkeys, 13,871; and ostriches, 136. Of these, goats were most numerous in Queensland; camels, mules and donkeys in Western Australia; and ostriches in South Australia. In the raising of goats, attention has in recent years been devoted to the angora goat and its product (mohair), and 6,489 angora goats are included in the total of 131,869 goats shown above. Of these, 1,468 were in New South Wales, 1,007 in Tasmania, 1,228 in Western Australia, 554 in South Australia, and 2,215 in Queensland, while the quantity of mohair produced in the latter State in 1929 was set down at 1,425 lbs., and the number of skins placed on the market was returned as 360.

8. Net Exports of Principal Pastoral Products.—The quantities by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1925-26 to 1929-30 were as follows:—

NET EXPORTS OF PASTORAL PRODUCTS.—AUSTRALIA, 1925-26 TO 1929-30.

Products.	Unit of Quantity.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
QUANTITIES.						
Animals (living)—						
Cattle .. .. .	No.	9,898	10,093	11,131	8,452	6,191
Horses .. .. .	"	5,255	5,276	5,627	5,356	5,969
Sheep .. .. .	"	20,331	26,218	30,871	29,545	38,764
Bones .. .. .	cwt.	27,329	18,394	14,486	14,060	10,503
Glue-pieces and Sinews .. .. .	"	-8,757	-12,840	-13,469	-18,420	-20,176
Glycerine .. .. .	lb.	-603,485	-553,950	-571,266	-388,800	-703,682
Hair .. .. .	"	(a)	(a)	(a)	(a)	(a)
Hoofs .. .. .	cwt.	20,510	8,371	13,543	9,852	11,273
Horns .. .. .	"	(a)	(a)	(a)	(a)	(a)
Meats—						
Frozen Beef .. .. .	lb.	214,058,586	112,124,913	169,094,472	189,090,102	156,748,365
Frozen Mutton and Lamb .. .. .	"	85,679,850	93,514,533	46,359,146	84,905,335	100,410,980
Frozen Rabbits and Hares .. .. .	pair	4,043,511	3,298,372	3,433,098	3,598,075	3,873,337
Frozen, Other .. .. .	lb.	8,935,456	3,893,937	7,592,372	7,127,553	6,115,445
Potted, and Extract of .. .. .	"	(a)	(a)	(a)	(a)	(a)
Preserved in Tins, etc. .. .. .	lb.	10,209,971	8,674,251	3,760,147	3,168,759	3,381,248
Other (excluding Bacon and Ham) .. .. .	"	211,403	106,537	322,117	447,495	434,050
Sausage Casings .. .. .	cwt.	24,119	24,222	22,714	31,489	30,984
Skins—						
Hides .. .. .	No.	699,080	720,065	1,034,317	816,980	702,135
Sheep .. .. .	"	8,007,249	8,487,652	11,315,072	11,026,291	12,944,781
Rabbit and Hare .. .. .	cwt.	134,024	126,745	112,547	100,655	77,566
Other (including Undressed Furs) .. .. .	"	(a)	(a)	(a)	(a)	(a)
Tallow .. .. .	cwt.	824,974	833,330	648,502	768,314	592,231
Wool—						
Greasy .. .. .	lb.	767,812,768	709,438,954	682,913,332	759,443,979	696,578,126
Scoured .. .. .	"	49,972,194	52,110,342	55,397,621	46,019,959	44,195,688
Tops .. .. .	"	5,219,085	4,519,357	2,559,159	872,774	552,152

NOTE.—The minus sign — signifies net imports. (a) Quantity not available.

The values of the net exports for the same five years are furnished in the next table, and amount to no less a total than £358,167,689 for the period, or an average of £71,633,538 per annum, of which wool represents 79.82 per cent. Skins, meat and tallow rank next in order of importance.

NET EXPORTS OF PASTORAL PRODUCTS.—AUSTRALIA, 1925-26 TO 1929-30.

Products.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
VALUES.					
Animals (living)—					
Cattle .. .. .	£ 32,632	£ 43,663	£ 41,352	£ 21,205	£ -19,814
Horses .. .. .	-8,655	35,313	65,285	79,257	85,178
Sheep .. .. .	27,958	15,390	40,512	43,447	35,681
Bones .. .. .	22,407	11,783	8,932	10,775	8,015
Glue-pieces and Sinews .. .. .	3,071	-6,442	-2,503	-6,956	-13,577
Glycerine .. .. .	-15,380	-21,284	-15,097	-35,060	-15,167
Hair .. .. .	-63,981	-44,354	-43,054	-35,660	-47,591
Hoofs .. .. .	10,459	4,765	7,826	6,162	7,128
Horns .. .. .	36,102	21,291	25,488	24,385	22,626
Meats—					
Frozen Beef .. .. .	3,263,859	1,626,640	2,377,871	2,888,284	2,569,782
Frozen Mutton and Lamb .. .. .	2,430,430	2,057,443	1,158,388	2,165,321	2,386,175
Frozen Rabbits and Hares .. .. .	399,039	305,752	309,149	331,456	339,917
Frozen, Other .. .. .	166,538	75,956	142,475	180,422	152,310
Potted, and Extract of .. .. .	-30,580	-25,673	-60,662	-76,328	-52,491
Preserved in Tins, etc. .. .. .	328,888	273,167	100,110	84,029	118,513
Other (excluding Bacon and Ham) .. .. .	3,083	1,671	6,243	11,086	8,695
Sausage Casings .. .. .	259,209	179,434	136,567	144,063	245,246
Skins—					
Hides .. .. .	713,589	605,600	1,401,029	886,430	459,192
Sheep .. .. .	3,413,800	3,320,745	4,385,138	4,526,170	3,123,282
Rabbit and Hare .. .. .	2,874,582	2,832,128	2,490,709	2,624,253	1,507,142
Other (including Undressed Furs) .. .. .	569,744	1,026,667	831,042	277,477	586,842
Tallow .. .. .	1,584,405	1,402,020	1,043,311	1,366,341	981,454
Wool—					
Greasy .. .. .	56,429,712	53,224,169	58,295,914	55,592,624	32,775,631
Scoured .. .. .	5,537,671	5,726,308	6,621,937	5,519,161	3,563,207
Tops .. .. .	1,035,107	822,713	488,109	166,957	87,781
<b>Total Values</b> .. .. .	<b>79,023,942</b>	<b>73,518,868</b>	<b>79,886,161</b>	<b>76,823,552</b>	<b>48,915,166</b>

NOTE.—The minus sign — signifies net imports.

9. Value of Pastoral Production.—Details of the quantities and values of the items included in the value of pastoral production for the year 1929-30 are shown in the following table:—

## PASTORAL PRODUCTION.—AUSTRALIA, 1929-30.

Item.	Quantity.	Value.
		£
Wool .. .. .	lb. 937,596,816	44,222,000
Meats—		
Beef—		
Local Consumption (including Factories) .. .. .	„ 675,804,596	17,148,542
Exports of Carcasses .. .. .	„ 156,748,665	2,569,788
Mutton and Lamb—		
Local Consumption (including Factories) .. .. .	„ 505,219,696	8,520,062
Exports of Carcasses .. .. .	„ 100,411,243	2,386,186
Rabbits and Hares (Export only) .. .. .	pair 3,873,337	339,917
Other Meats, frozen and other (Export only) .. .. .	.. (a)	165,922
Sausage Casings (Export only) .. .. .	cwt. 44,930	426,415
Skins—		
Exports—		
Cattle and Calf .. .. .	No. 1,036,243	857,360
Sheep .. .. .	„ 13,235,605	1,050,145
Rabbit and Hare .. .. .	cwt. 78,241	1,525,117
Other Furred .. .. .	.. (a)	1,041,326
Other Skins .. .. .	.. (a)	3,838
Consumption in Factories .. .. .	.. (a)	1,859,360
Tallow—		
Exports .. .. .	cwt. 598,533	991,592
Local Consumption .. .. .	„ 485,301	804,144
Hair, Horns, &c. (Export only) .. .. .	.. (a)	81,350
Net Exports of Live Stock .. .. .	.. .. .	41,655
Increase in Live Stock—		
Sheep .. .. .	No. 1,127,569	528,332
Cattle .. .. .	„ .. .	..
Horses .. .. .	„ .. .	..
		84,563,051

(a) Not available.

10. Consumption of Meats.—Particulars of the per capita consumption of meat in Australia are shown in the following table, together with returns for certain other countries. The figures have in each case been obtained from official sources, although it is not definitely known that they are all on a similar basis.

While the average consumption in Australia is considerably below that of New Zealand, it is greatly in excess of that of Canada, Great Britain and the United States. The deficiency in these countries is partly counterbalanced by the large consumption of pork, the average of which is greatly in excess of that recorded for Australia and New Zealand.

## MEATS.—PER CAPITA CONSUMPTION.—AUSTRALIA AND OTHER COUNTRIES.

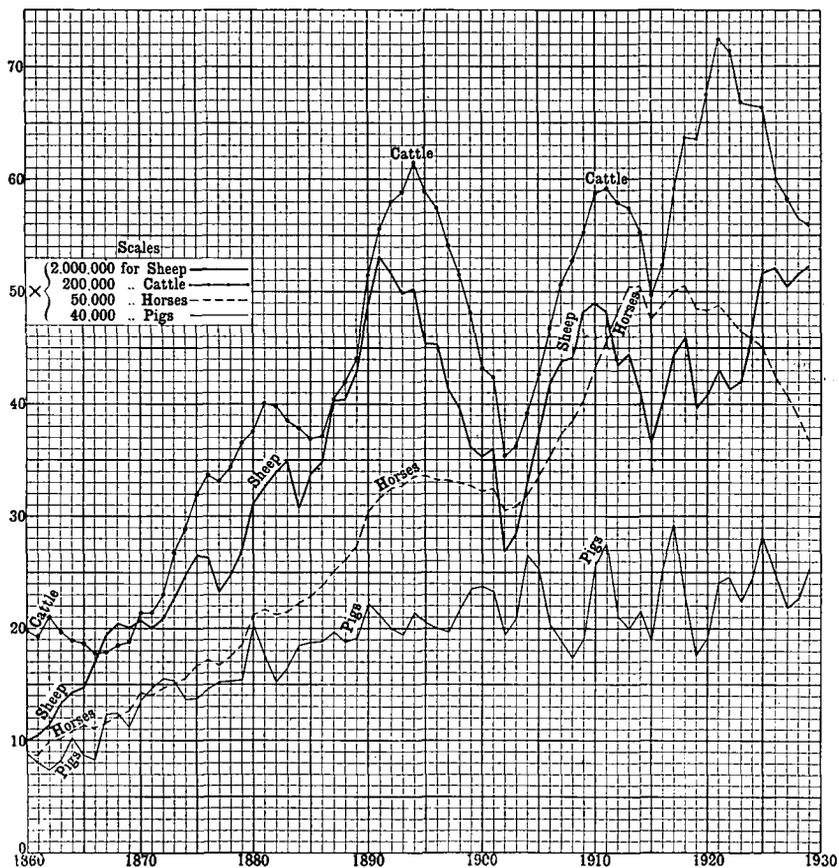
Description.	Australia, 1929-30.	New Zealand, 1929-30.	Great Britain, 1924-27.	Canada, 1928.	United States of America, 1929.
	lb.	lb.	lb.	lb.	lb.
Beef and Veal .. .. .	104.86	155.73	71.40	67.33	58.20
Mutton and Lamb .. .. .	78.60	86.87	26.20	6.46	5.80
Pork .. .. .	6.00	13.11	(b) 46.80	82.48	(c) 72.80
Total .. .. .	189.46	255.71	144.40	156.27	136.80
Bacon and Ham .. .. .	10.73	14.51	(a)	(a)	(a)
Total All Meats .. .. .	200.19	270.22	(b) 144.40	156.27	(c) 136.80

(a) Probably included with Pork.

(b) Including Lard.

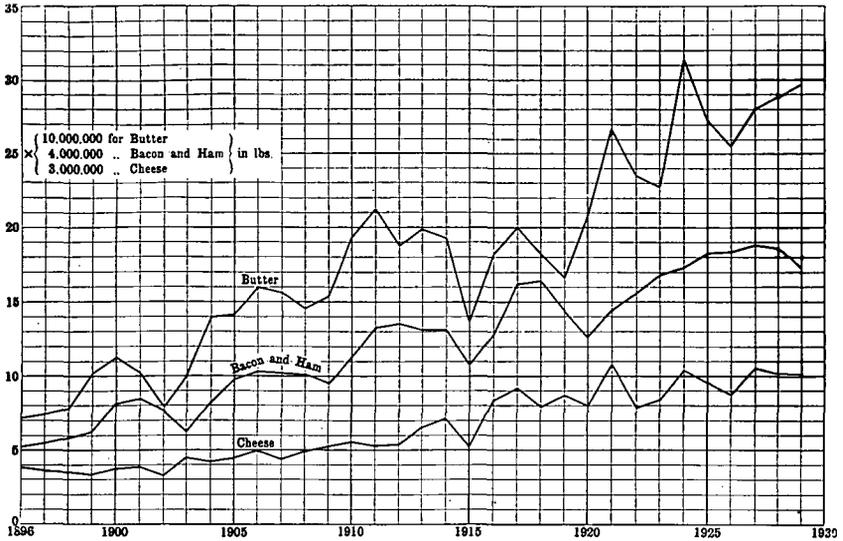
(c) Excluding Lard.

## NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS—AUSTRALIA, 1860 TO 1929.



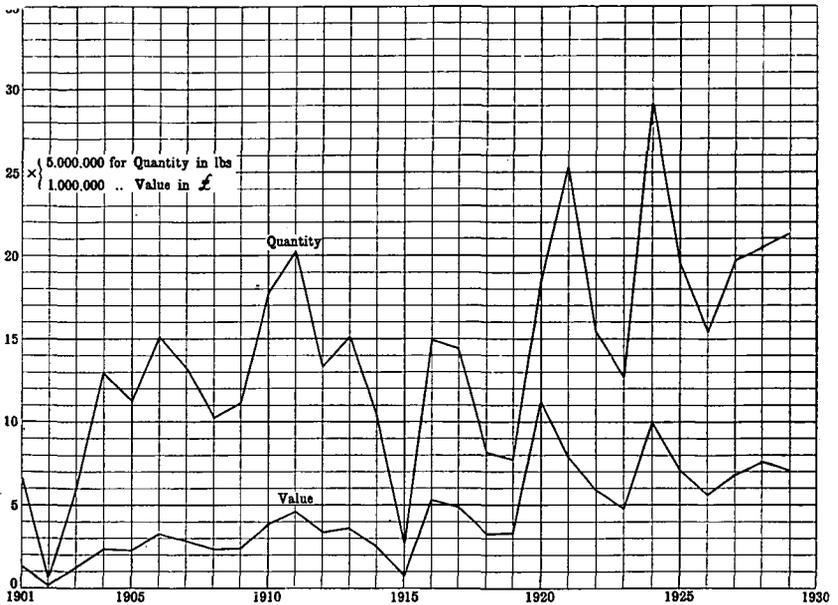
EXPLANATION.—The base of each small square represents an interval of one year, and the vertical side 2,000,000 in the case of sheep, 200,000 for cattle, 50,000 for horses, and 40,000 for pigs.

PRODUCTION OF BUTTER, CHEESE, AND BACON AND HAM—AUSTRALIA,  
1896 TO 1929.



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

QUANTITY AND VALUE OF NET EXPORTS OF BUTTER FROM AUSTRALIA, 1901 TO 1929.



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

## § 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 recognized. By the importation of high-class sires, and the careful selection of breeding mares, these natural advantages are utilized 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. During the war, Australian horses were found to be well adapted for all purposes, especially in Palestine and Sinai, where the rigours of the desert campaign fully tested their powers of endurance.

2. Distribution throughout Australia.—The States of New South Wales, Queensland and Victoria together depasture more than 75 per cent. of the total number of horses in Australia. In the following table figures are given for each State, etc., for each of the last five years :—

HORSES.—NUMBER, 1925 TO 1929.

Year.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	F.C.T. (a)	Total.
1925	649,534	463,051	637,436	244,111	170,563	37,785	46,380	1,501	2,250,361
1926	622,009	447,988	570,600	234,352	166,463	36,830	42,801	1,383	2,122,516
1927	598,377	428,666	547,412	224,027	165,021	35,872	40,108	1,208	2,040,691
1928	567,371	412,867	522,490	205,865	160,876	34,908	37,452	924	1,942,753
1929	534,945	393,015	500,104	189,054	159,528	34,336	33,703	929	1,845,614

(a) 30th June year following.

The number of horses attained its maximum in Australia during 1918, when 2,527,149 were recorded. Since that date, however, a gradual decline has taken place in all divisions of the Commonwealth, except Northern Territory, and the number for 1929 is the lowest recorded since 1906. The decrease for Australia during the period amounted to 681,535.

Particulars regarding the number of horses in Australia from 1860 onwards, may be ascertained from the graph herein.

3. Proportions in the Several States and Territories.—The percentages of the number of horses in the several States and Territories on the total for Australia for the past five years are as follows :—

HORSES.—PERCENTAGE IN EACH STATE, 1925 TO 1929.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	F.C.T.	Total.
	%	%	%	%	%	%	%	%	%
1925 ..	28·86	20·58	28·32	10·85	7·58	1·68	2·06	0·07	100·00
1926 ..	29·30	21·11	26·89	11·04	7·84	1·73	2·02	0·07	100·00
1927 ..	29·32	21·00	26·83	10·98	8·09	1·76	1·97	0·05	100·00
1928 ..	29·20	21·25	26·89	10·60	8·28	1·80	1·93	0·05	100·00
1929 ..	28·98	21·29	27·10	10·24	8·64	1·86	1·83	0·06	100·00

The relative changes in distribution are insignificant, the greatest alteration being a decrease of under 2 per cent. in Queensland.

4. *Relation to Population.*—In proportion to population, horses are much more numerous in the Northern Territory than in any other of the principal divisions of Australia. Queensland is next in order, while Tasmania has the smallest number of horses per head. The number per head of population has declined in all the statistical divisions since 1925. Particulars for the past five years are as follows:—

**HORSES.—NUMBER PER HEAD OF POPULATION, 1925 TO 1929.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	Fed. Cap. Ter.	All States
1925 ..	0·28	0·27	0·74	0·44	0·46	0·17	12·69	0·38	0·38
1926 ..	0·26	0·26	0·65	0·41	0·44	0·17	10·98	0·28	0·35
1927 ..	0·25	0·25	0·61	0·39	0·43	0·17	9·47	0·21	0·33
1928 ..	0·23	0·23	0·57	0·36	0·40	0·16	9·41	0·11	0·31
1929 ..	0·22	0·22	0·54	0·33	0·38	0·16	7·54	0·11	0·29

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

**HORSES.—NUMBER IN PRINCIPAL COUNTRIES.**

Country.	Date.	Number of Horses (,000 omitted).	Country.	Date.	Number of Horses (,000 omitted).
Soviet Republics ..	1929	33,969	Union of South Africa	1926	856
U.S. of America ..	1929	13,440	Cuba ..	1929	758
Argentine Republic ..	1922	9,432	Czechoslovakia ..	1925	740
Brazil ..	1920	5,254	Dutch East Indies ..	1928	706
China ..	1916	4,401	Spain ..	1925	698
Poland ..	1927	4,047	Sweden ..	1928	628
Germany ..	1929	3,611	Lithuania ..	1929	588
Canada ..	1929	3,376	Denmark ..	1929	521
France ..	1928	2,936	Uruguay ..	1924	513
India (British and Native) ..	1928	2,190	Turkey ..	1927	490
Rumania ..	1929	1,959	Bulgaria ..	1926	482
<b>Australia ..</b>	<b>1929</b>	<b>1,846</b>	Irish Free State ..	1929	436
Japan ..	1928	1,494	Finland ..	1929	395
United Kingdom ..	1929	1,246	Latvia ..	1929	360
Jugoslavia ..	1929	1,140	Philippine Islands ..	1928	332
Italy ..	1926	1,050	Chile ..	1925	324
Mexico ..	1926	1,036	New Zealand ..	1929	299
Colombia ..	1927	978	Netherlands ..	1930	297
Hungary ..	1929	892	Paraguay ..	1926	210

6. *World's Totals.*—Several countries do not issue annual statistics of live stock, the information available consisting of censuses or estimates made at varying intervals. It is not possible, therefore, to give world aggregates for the different classes of stock year by year, nor to make a satisfactory comparison between the totals for consecutive years. In order, however, to give some idea of the latest position as regards live stock and the changes that have taken place as compared with pre-war years, the following information has been taken from the Year Book issued by the International Institute of Agriculture. The list of countries included is fairly complete, but China, which possesses large numbers of horses, is omitted, as also are certain parts of Asiatic Russia, together with a few other countries. While for some countries the figures are the result of careful enumeration, in the case of others they are merely approximations. The totals, therefore, can be regarded as a general indication only of the position at the dates shown. The figures for horses are as follow:—

## HORSES.—WORLD'S TOTALS, 1913 AND 1927.

Continents, etc.	Number at the date nearest—		Increase (+) or Decrease (-) in 1927.	
	1913.	1927.	Actual Figures.	Percentages.
	,000	,000	,000	%
Europe (excluding Soviet Republics) ..	22,698	22,863	+ 165	+ 0·7
Union of Socialist Soviet Republics ..	35,522	31,258	- 4,264	-12·0
North and Central America ..	26,134	20,465	- 5,669	-21·7
South America ..	18,162	17,653	- 509	- 2·8
Asia (excluding Soviet Republics) ..	4,914	5,394	+ 480	+ 9·8
Africa ..	1,692	2,079	+ 387	+22·9
Oceania ..	2,976	2,445	- 531	-17·8
Total ..	112,098	102,157	- 9,941	- 8·9

Compared with the pre-war totals reductions have taken place in all the continents, with the exception of Africa, where the number of horses is relatively insignificant. The greatest decrease occurred in North and Central America, viz. :-5,669,000, largely as the result of the decline in the United States.

7. Oversea Trade in Horses.—(i) *Exports.* Australia's export trade in horses has fluctuated considerably since the war, and is now far below that of earlier years. For instance, during the period 1901-5 the average number exported was over 18,000, whereas during the last five years the figure was under 6,000. The total number of horses exported during that period amounted to 29,191, valued at £806,791, or equal to an annual average of 5,878 for £161,358. The average export price for the period was £27 9s. 0d. About 86 per cent. of the horses exported went to India, where they are largely used for remount purposes.

(ii) *Imports.* The number of horses imported into Australia is comparatively small, consisting mainly of valuable animals introduced for breeding purposes, principally from the United Kingdom and New Zealand. The average value per head of the horses imported during the last five years was £323 15s. 6d., as compared with £27 9s. 0d. per head for the exports for the same period. The average number imported per annum was, however, only 340, and the average annual value, £110,083. The following table gives the imports, exports, and net exports of horses during each of the years from 1925-26 to 1929-30 :-

## HORSES.—IMPORTS AND EXPORTS, AUSTRALIA, 1925-26 TO 1929-30.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1925-26 ..	355	135,124	5,610	126,469	5,255	- 8,655
1926-27 ..	343	111,297	5,610	146,610	5,276	35,313
1927-28 ..	300	87,065	5,936	152,350	5,636	65,285
1928-29 ..	339	95,025	5,695	174,282	5,356	79,257
1929-30 ..	362	121,902	6,331	207,080	5,969	85,178

NOTE.—The minus sign (-) signifies net imports.

## § 3. Cattle.

1. *Purposes for which Raised.*—In all the States, 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 led to a considerable increase in numbers and improvement in quality of the dairy herds in Victoria, New South Wales, and Southern Queensland in particular, the portion of Australia in the temperate zone being 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, i.e., in the northern parts of Queensland, in the Northern Territory, and in the Kimberley districts in the north of Western Australia.

2. Distribution throughout Australia.—Until 1880, New South Wales occupied the leading position as a cattle-raising State, but in that year Queensland took first place, which it has since maintained. The graph herewith shows a rapid increase in the number of cattle in Australia up to the year 1894, when 12,311,617 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,062,742 in 1902. Following the disastrous drought which terminated in the latter year, the herds were gradually built up, and despite recurring droughts, they continued to increase in recent years until the maximum number of 14,441,309 cattle was attained in 1921. The decline in the frozen beef trade and the droughts of 1922–23 and 1925–26, which particularly affected the beef cattle areas of New South Wales and Queensland, were mainly responsible for the heavy decreases recorded in both these States during recent years.

The number of cattle in the several States and Territories during each of the last five years is as follows :—

CATTLE.—NUMBER, 1925 TO 1929.

Year.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor.Ter.	Fed. Cap. Ter. (a)	Total.
1925	2,931,818	1,513,787	6,436,645	373,597	835,911	212,373	970,342	5,312	13,279,785
1926	2,813,144	1,435,761	5,464,845	340,007	827,303	213,112	863,597	5,509	11,963,278
1927	2,848,654	1,327,077	5,225,804	316,314	846,735	219,894	835,390	6,188	11,617,056
1928	2,784,615	1,304,426	5,128,341	263,016	837,527	208,812	768,751	5,269	11,300,757
1929	2,636,132	1,335,242	5,208,588	204,516	836,616	214,643	711,607	4,760	11,202,134

(a) 30th June year following..

3. Proportion in each State.—Percentages showing the relative importance of the various cattle-breeding States during the years 1925 to 1929 are given hereunder :—

CATTLE.—PERCENTAGE IN EACH STATE, 1925 TO 1929.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Total.
	%	%	%	%	%	%	%	%	%
1925	22·08	11·40	48·47	2·81	6·29	1·60	7·31	0·04	100·00
1926	23·51	12·00	45·63	2·84	6·92	1·78	7·22	0·05	100·00
1927	24·52	11·42	44·98	2·72	7·29	1·82	7·19	0·06	100·00
1928	24·64	11·54	45·38	2·33	7·41	1·85	6·80	0·05	100·00
1929	23·97	11·92	46·50	1·83	7·47	1·92	6·35	0·04	100·00

Queensland contains within its borders nearly one half of the cattle herds of Australia. Despite decreases during recent years the percentage of cattle in Queensland on the total for Australia amounted to 46.50 in 1929. The largest relative gain since 1925 occurred in New South Wales, whilst a slight increase was recorded in Victoria, Western Australia, and Tasmania.

4. Relation to Population.—The number of cattle per head of population varies considerably in the several States, as may be seen from the following table :—

CATTLE.—NUMBER PER HEAD OF POPULATION, 1925 TO 1929.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Cap. Ter.	All States.
1925	1.28	0.90	7.47	0.68	2.24	0.93	265.41	1.35	2.22
1926	1.20	0.84	6.19	0.60	2.18	0.99	221.55	1.12	1.96
1927	1.20	0.76	5.81	0.55	2.16	0.98	191.56	1.08	1.86
1928	1.14	0.74	5.59	0.45	2.06	0.96	193.06	0.65	1.78
1929	1.08	0.75	5.60	0.35	2.01	0.98	159.20	0.57	1.75

5. Comparison with other Countries.—In the following comparisons 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 :—

## CATTLE.—NUMBER IN VARIOUS COUNTRIES.

Country.	Date.	No. of Cattle (,000 omitted).	Country.	Date.	No. of Cattle (,000 omitted).
India (British and Native) .. ..	1928	146,633	Cuba .. ..	1929	4,865
Soviet Republics .. ..	1929	68,069	Siam .. ..	1929	4,808
U.S. of America .. ..	1929	57,967	Czechoslovakia .. ..	1925	4,691
Argentine Republic .. ..	1922	37,065	Dutch East Indies .. ..	1928	4,406
Brazil .. ..	1920	34,271	Rumania .. ..	1929	4,334
Germany .. ..	1929	18,008	Irish Free State .. ..	1929	4,137
China .. ..	1921	15,973	Spain .. ..	1925	3,794
France .. ..	1928	15,005	Jugoslavia .. ..	1929	3,728
Australia .. ..	1929	11,202	Kenya .. ..	1929	3,498
Union of South Africa .. ..	1929	10,518	New Zealand .. ..	1929	3,446
Poland .. ..	1929	9,057	French Equatorial and West Africa .. ..	1928	3,440
Canada .. ..	1929	8,931	Nigeria .. ..	1929	3,105
Uruguay .. ..	1924	8,432	Denmark .. ..	1929	3,031
United Kingdom .. ..	1929	7,891	Paraguay .. ..	1926	2,973
Italy .. ..	1926	7,400	Sweden .. ..	1928	2,898
Turkey .. ..	1927	6,934	Rhodesia .. ..	1928	2,767
Madagascar .. ..	1929	6,841	Netherlands .. ..	1930	2,352
Colombia .. ..	1927	6,727	Venezuela .. ..	1922	2,278
Mexico .. ..	1926	5,584	Austria .. ..	1923	2,162
Tanganyika Territory .. ..	1929	4,867	Bolivia .. ..	1929	1,855

6. World's Totals.—The information in the appended table has been taken from the returns published by the International Institute of Agriculture at Rome. The figures given therein are subject to the limitations previously noted in respect to horses (See § 2, 6 ante).

## CATTLE.—WORLD'S TOTALS, 1913 AND 1927.

Continents, etc.	Number at the date nearest—		Increase (+) or Decrease (-) in 1927.	
	1913.	1927.	Actual Figures.	Percentages.
	,000	,000	,000	%
Europe (excluding the U.S.S.R.) .. ..	98,764	100,339	+ 1,575	+ 1.6
Union of Socialist Soviet Republics .. ..	60,280	67,835	+ 7,555	+ 12.5
North and Central America .. ..	76,485	79,415	+ 2,930	+ 3.8
South America .. ..	86,662	101,053	+ 14,391	+ 16.6
Asia (excluding the U.S.S.R.) .. ..	131,300	143,927	+ 12,627	+ 9.6
Africa .. ..	34,537	51,270	+ 16,733	+ 48.4
Oceania .. ..	13,859	15,476	+ 1,617	+ 11.7
Total .. ..	501,887	559,315	+ 57,428	+ 11.4

The number of cattle has increased in all continents since 1913, the most notable advances being in Africa and South America. In these continents the development of the cattle industry has been most marked, the number of cattle having increased by more than 16 and 14 million head respectively since the pre-war year.

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

## CATTLE.—IMPORTS AND EXPORTS, AUSTRALIA, 1925-26 TO 1929-30.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1925-26 ..	173	15,743	10,071	48,375	9,898	32,632
1926-27 ..	103	4,412	10,196	48,075	10,093	43,663
1927-28 ..	89	3,553	11,220	44,905	11,131	41,352
1928-29 ..	96	17,761	8,548	33,966	8,452	21,205
1929-30 ..	193	44,309	6,384	24,495	6,191	-19,814

Note.—The minus sign (—) signifies net imports.

The average value of the cattle imported during the last five years was £131 3s. 2d. per head, while the average value of the cattle exported during the same period was £4 8s. 3d. As previously stated, the imported cattle were required principally for stud purposes.

8. Cattle Slaughtered.—The number of cattle slaughtered during each of the years 1925 to 1929 is given hereunder:—

## CATTLE (INCLUDING CALVES) SLAUGHTERED, 1925 TO 1929.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N. Ter.	Fed. Cap. Ter. (a)	Total.
1925	825,628	523,960	778,060	157,210	110,286	36,824	2,000	456	2,434,424
1926	809,810	499,519	567,640	143,747	101,948	32,989	1,369	2,784	2,159,806
1927	694,527	469,610	739,995	142,557	101,146	36,249	1,854	2,924	2,188,862
1928	778,994	466,576	685,196	127,627	100,982	36,264	2,065	2,074	2,199,778
1929	680,316	387,662	630,620	117,806	91,195	35,278	1,531	2,143	1,946,551

(a) For year ended 30th June of year following.

9. Production and Consumption of Beef.—The production of beef in Australia during the year 1929-30 was estimated at 832,553,000 lbs. The requirements of the local market absorbed 672,600,589 lbs., approximately 81 per cent., leaving a balance of 19 per cent., which was exported as frozen and canned beef. (See also § 1, 10 *ante*.)

10. Export of Frozen Beef.—The establishment of the frozen meat export trade about the year 1882 provided an outlet for the surplus stock of Australia, and since that date the trade in frozen beef has grown to large proportions, the quantities and values exported during the past five years being as follows, viz.:—1925-26, 214,089,981 lbs., £3,264,920; 1926-27, 112,198,096 lbs., £1,627,998; 1927-28, 169,098,425 lbs., £2,377,967; 1928-29, 189,090,357 lbs., £2,888,287 and 1929-30, 156,748,665 lbs., £2,569,788. (See Table § 1 No. 8.) The largest purchaser of Australian beef is the United Kingdom, which during the year 1929-30 took £1,278,665 worth, or about 50 per cent., of the total shipments. Other importing countries in order of importance were Belgium, Germany, Philippine Islands, Italy, Japan, and Egypt. These countries, together with the United Kingdom, accounted for 91 per cent. of the total exports.

## § 4. Sheep.

1. Initiation of the 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, while 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 Australia.—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 the lead in sheep-raising which naturally attached to it as the portion of Australia in which settlement was first effected. Within its borders is contained generally one half of the flocks of Australia, and in the returns for the years 1924 to 1926 even this high percentage was exceeded.

Fluctuations in the number of sheep recorded for each year in Australia from 1860 onwards may be seen from the graph accompanying this chapter. Five marked periods of decline depleted the numbers at successive intervals, but these gaps were quickly restored. Since 1925 the sheep flocks have exceeded 100 millions, reaching 104,558,342 in 1929, and an estimated number of 105,895,894 in 1930. At no previous period have such large numbers been depastured continuously. This development in spite of the annual slaughter of some ten to fifteen million sheep and lambs for the mutton and lamb trade is a striking commentary on the soundness of the sheep and wool industry in Australia.

The number of sheep in the several States and Territories for each year from 1926 to 1929 with an estimate for the year 1930 is as follows :—

## SHEEP.—NUMBER, 1926 TO 1930.

Year.	New South Wales. (a)	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Nor. Ter.	Fed. Cap. Ter. (a)	Total.
1926	55,705,923	14,919,653	16,800,772	7,283,945	7,458,766	1,807,558	6,407	224,077	104,267,101
1927	50,510,000	15,557,067	16,642,385	7,542,345	8,447,480	1,904,955	9,585	218,659	100,827,476
1928	50,184,950	16,498,222	18,509,201	7,079,947	8,943,002	2,000,605	7,635	207,211	103,430,773
1929	48,720,000	17,427,203	20,324,303	6,186,252	9,556,823	2,091,113	12,203	240,445	104,558,342
1930 <sup>b</sup>	49,870,000	16,477,995	21,795,899	5,500,000	10,000,000	2,000,000	12,000	240,000	105,895,894

(a) 30th June year following.

(b) Estimate as at 31st December, 1930.

3. Proportion in the Several States and Territories.—Particulars concerning the relative positions of the several States and Territories with respect to the total flocks of Australia during the years 1925 to 1929 are given hereunder :—

## SHEEP.—PERCENTAGE IN EACH STATE, 1925 TO 1929.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	Fed. Cap. Ter.	Total.
	%	%	%	%	%	%	%	%	%
1925	51.84	13.27	19.95	6.58	6.62	1.56	0.01	-0.17	100.00
1926	53.43	14.31	16.17	6.99	7.15	1.73	0.01	0.21	100.00
1927	49.99	15.46	16.54	7.50	8.40	1.89	0.01	-0.21	100.00
1928	48.52	15.95	17.90	6.84	8.65	1.93	0.01	0.20	100.00
1929	46.60	16.67	19.44	5.92	9.14	2.00	0.00	0.23	100.00

Apart from the effect of drought the percentage of sheep depastured in the different States shows little change. The most noteworthy alteration was a loss of 1.92 per cent. in New South Wales and a gain of 1.54 per cent. in Queensland during 1929 as compared with the previous year.

4. Relation to Population.—The relation of the flocks of the several States and Territories to the population at the end of each year from 1925 to 1929 is as follows :—

## SHEEP.—NUMBER PER HEAD OF POPULATION, 1925 TO 1929.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	Fed. Cap. Ter.	Total.
1925	23.36	8.16	23.99	12.35	18.44	7.46	2.20	43.76	17.28
1926	23.73	8.72	19.11	12.86	19.69	8.42	1.64	45.53	17.06
1927	20.95	8.93	18.51	13.10	21.53	8.82	2.20	37.25	16.14
1928	20.52	9.37	20.19	12.22	22.03	9.24	1.92	25.62	16.32
1929	19.66	9.81	21.83	10.66	22.93	9.55	2.73	29.03	16.30

5. **Comparison with other Countries.**—As regards the size of its flocks, and the quantity and quality of wool produced, Australia has long occupied a leading position amongst the sheep-raising countries of the world. The following comparison taken mainly from the Year Book of the International Institute of Agriculture gives the latest figures relative to the number of sheep in the principal wool-producing countries. The leading position, so long held by Australia, is now occupied by the United Socialist Soviet Republics. This interchange of positions is due to the fact that figures regarding the number of sheep have been revised, and now include those depastured in Europe and Asia. Efforts are being made by the Soviet Government to improve the quality of the wool and the quantity shorn per fleece, and to this end merino sheep were imported from America and Germany in 1927. In 1928-29, and 1929-30, 2,031 and 5,006 sheep valued at £6,017 and £13,606, respectively were exported from Australia to Russia for breeding purposes. The production of wool, however, amounted to about 384 million lbs. only during the year 1929.

#### SHEEP.—NUMBER IN VARIOUS COUNTRIES.

Country.	Date.	No. of Sheep (,000 omitted).	Country.	Date.	No. of Sheep (,000 omitted).
Soviet Republics ..	1929	147,158	Jugoslavia ..	1929	7,736
Australia ..	1930	105,896	Greece ..	1928	6,920
U.S. of America ..	1929	48,913	Algeria ..	1929	6,196
Union of South Africa ..	1929	45,012	French Equatorial and West Africa ..	1928	5,730
Argentine Republic ..	1922	36,209	Bolivia ..	1929	5,552
India (British and Native) ..	1928	35,505	Iraq (a) ..	1926	5,055
New Zealand ..	1929	29,051	Chile ..	1925	4,095
United Kingdom ..	1929	24,316	Canada ..	1929	3,728
Uruguay ..	1927	22,500	Portugal ..	1925	3,721
China ..	1916	22,232	Germany ..	1929	3,475
Spain ..	1925	20,067	Irish Free State ..	1929	3,375
Rumania ..	1929	12,406	Kenya ..	1929	2,905
Italy ..	1926	12,350	Mexico ..	1926	2,698
Turkey ..	1926	11,702	Poland ..	1929	2,523
Peru ..	1922	11,335	Sudan (Anglo-Egyptian) ..	1929	2,200
France ..	1928	10,445	Basutoland ..	1929	2,150
French Morocco ..	1929	8,848	Tanganyika Territory ..	1929	2,135
Bulgaria ..	1926	8,739			
Brazil ..	1920	7,933			

(a) Including goats.

6. **World's Totals.**—The number of sheep in the various great divisions of the world has been estimated by the International Institute of Agriculture, and a comparison has been made with pre-war estimates. In the table below the results are shown, the totals being subject to the limitations noted for other classes of live stock. (See § 2, 6 *ante*.)

#### SHEEP.—WORLD'S TOTALS, 1913 AND 1927.

Continents, etc.	Number at the date nearest—		Increase (+) or Decrease (-) in 1927.	
	1913.	1927.	Actual Figures.	Percentages.
	,000	,000	,000	%
Europe (excluding the U.S.S.R.) ..	126,999	129,733	+ 2,734	+ 2.2
United Socialist Soviet Republics ..	111,051	120,237	+ 9,186	+ 8.3
North and Central America ..	43,148	51,097	+ 7,949	+ 18.4
South America ..	100,392	89,642	- 10,750	- 10.7
Asia (excluding the U.S.S.R.) ..	41,802	43,994	+ 2,192	+ 5.2
Africa ..	76,583	84,118	+ 7,535	+ 9.8
Oceania ..	109,331	129,947	+ 20,616	+ 18.9
<b>Total ..</b>	<b>609,306</b>	<b>648,768</b>	<b>+ 39,462</b>	<b>+ 6.5</b>

7. **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. During the past five years the principal consignments of ordinary sheep have been made to Malaya (British) from the State of Western Australia. The purchases by South African and Japanese buyers at the Australian Stud Sheep Sales during recent years have opened up a regular export trade with these two countries in stud sheep, the bulk of which has been secured from the leading flocks of New South Wales, Victoria and South Australia. Other countries purchasing stud sheep during 1929-30 were Russia and New Zealand. The following are particulars of the imports and exports for the years 1925-26 to 1929-30 :—

**SHEEP.—IMPORTS AND EXPORTS, AUSTRALIA, 1925-26 TO 1929-30.**

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1925-26 ..	2,375	13,873	22,706	41,831	20,331	27,958
1926-27 ..	6,951	34,595	33,169	49,985	26,218	15,390
1927-28 ..	3,045	12,417	33,916	52,929	30,871	40,512
1928-29 ..	3,764	17,797	33,309	61,244	29,545	43,447
1829-30 ..	2,908	23,278	41,672	58,959	38,764	35,681

8. **Sheep Slaughtered.**—The number of sheep slaughtered in the several States during each of the years from 1925 to 1929 was as follows :—

**SHEEP (INCLUDING LAMBS) SLAUGHTERED, 1925 TO 1929.**

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Nor. Ter.	Fed. Cap. Ter.(a)	Total.
1925 ..	4,244,497	4,194,572	635,335	1,028,533	613,935	286,691	..	7,908	11,011,471
1926 ..	5,600,083	4,528,113	679,266	1,000,756	712,647	310,425	..	19,319	12,940,612
1927 ..	5,009,511	4,732,494	669,742	1,209,608	784,349	323,671	..	22,507	12,756,882
1928 ..	4,967,875	5,286,642	805,461	1,263,352	807,510	331,820	..	30,384	13,483,004
1929 ..	6,326,925	6,024,702	1,089,978	1,242,835	861,785	341,527	644	23,026	15,011,422

(a) Year ended 30th June year following.

9. **Production and Consumption of Mutton and Lamb.**—The annual production of mutton and lamb during the year 1929-30 amounted to 605,631,000 lbs., of which 504,151,694 lbs., or 83 per cent., was consumed locally, leaving a balance of 17 per cent. for exportation. See also § 1, No. 10.

10. **Exports of Frozen Mutton and Lamb.**—The export trade in mutton and lamb preserved by cold process grew rapidly until in 1913, the year immediately before the war, the value of the shipments amounted to nearly £3,000,000. The exports fell away considerably during the war years, but a record shipment of 246,971,346 lbs., valued at £5,482,564, was made in 1919-20, and another large consignment, valued at £4,321,917, was dispatched in 1922-23. Climatic conditions have since favoured a considerable output, and shipments have responded accordingly.

The quantity and value of the shipments during each of the past five years were as follows :—1925-26, 85,681,970 lbs., £2,430,465 ; 1926-27, 93,520,154 lbs., £2,057,607 ; 1927-28, 46,362,954 lbs., £1,188,506 ; 1928-29, 84,929,176 lbs., £2,166,043 ; 1929-30, 100,411,243 lbs., £2,386,186. See Table § 1 No. 8.

As in the case of frozen beef, the principal customer in this trade is the United Kingdom, which absorbed 88 per cent. of the total quantity exported from Australia during the year 1929-30, while the balance was shipped mainly to Canada, Belgium and Malaya (British).

## § 5. Wool.

1. *General.*—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep Australia produced in 1928-29, 25 per cent., or one-quarter of the world's supply. Her contribution was even more important as it represented one-half of the world's production of fine quality merino wool. The bulk of the production is exported, but with the greater activity of Australian woollen mills the quantity used locally is increasing, nevertheless the amount so used represents under 6 per cent. of the total production.

2. *Value.*—Wool is the chief factor in the pastoral wealth of Australia and the nation's prosperity is largely dependent upon the satisfactory sale of its annual wool clip. The severity of the decline in the price of wool during the season 1929-30 and its effect upon the national income are reflected in the following figures. Based upon the export values of the produce of the various States the output for the season 1929-30 was valued at £44,222,000 compared with £70,833,000 in the previous year, £81,430,000 in the record price year 1924-25, and £64,350,000 the average of the previous five seasons. The average export price of greasy wool declined from 17.58d. per lb. in 1928-29 to 11.30d. per lb. in 1929-30, a fall of more than 35 per cent. During the period 1925-26 to 1929-30 the export of wool averaged 44 per cent. of the value of the total shipments of merchandise from Australia, and during 1929-30 the ratio was 37.6 per cent.

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

The quantity of Australian greasy wool which was scoured and washed before export during the last five years has been on the average about 17 per cent. of the total export in terms of greasy wool. The loss of weight in scouring varies largely with season, locality, breed, and condition. It seems preferable to express "scoured and washed" wool in terms of "greasy" rather than vice versa, since the absolute error arising from uncertainty as to average loss of weight is thereby minimized.

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

4. *Production.*—(i) *Quantity.* The annual shearing of the live sheep provides the main source of Australia's wool supply, the resultant clip forming about 90 per cent. of the total production. A small quantity, approximately 6 per cent. of the total output is obtained by fellmongering, or removing wool from skins of slaughtered sheep, while the remaining 4 per cent. represents the estimated quantity of wool exported on sheepskins. Statistics of wool production are compiled from data received from

growers, fellmongers, etc. The following table furnishes figures for each State and the Commonwealth during the past five seasons :—

**WOOL.—TOTAL PRODUCTION, 1925-26 TO 1929-30.**

State.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales(a) ..	402,490,000	499,322,000	443,860,000	484,753,597	461,852,890
Victoria ..	139,076,017	151,624,526	148,503,795	179,854,306	160,662,578
Queensland ..	158,744,544	129,435,804	136,544,333	150,108,044	161,087,873
South Australia ..	69,007,266	72,365,200	78,369,918	74,616,004	67,300,881
Western Australia ..	51,827,080	59,300,023	67,549,734	63,890,984	72,562,594
Tasmania ..	12,564,000	12,333,000	13,272,000	14,900,000	14,100,000
Northern Territory(b)	30,000	30,000	30,000	30,000	30,000
<b>Total ..</b>	<b>833,738,907</b>	<b>924,410,553</b>	<b>888,129,780</b>	<b>968,152,935</b>	<b>937,596,816</b>

(a) Including Federal Capital Territory. (b) Approximate figures.

(ii) *Estimate for 1930-31.* Although the returns are not yet complete, the total wool production of the Commonwealth during 1930-31 is estimated at 910,000,000 lbs., valued at approximately £34,719,000 or 9d. per lb. in Australian currency.

5. *Care Needed in Comparing Clips.*—In comparing successive clips, allowance must be made for the circumstance that, 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.

6. *World's Wool Production.*—The following table compiled by the Textile Division of the United States Department of Commerce shows the importance of Australia as a wool-producing country. Out of a total production of 3,748 million lbs. in 1930, Australia's contribution amounted to over 937 million lbs., or more than 25 per cent. of the world's supply.

**WOOL(a).—WORLD'S PRODUCTION, 1909 TO 1930.**

Countries.	Average Annual Pre-War Production.(b)	Production.	
		1929.	1930.(c)
North America—	lbs.	lbs.	lbs.
United States .. ..	314,110,000	363,447,000	397,907,000
Canada .. ..	11,210,000	21,420,000	21,207,000
Mexico .. ..	7,000,000	1,320,000	12,400,000
<b>Total .. ..</b>	<b>332,320,000</b>	<b>386,187,000</b>	<b>431,514,000</b>
Central America and West Indies .. ..	1,000,000	..	..
South America—			
Argentina Republic .. ..	358,688,000	323,400,000	333,336,000
Brazil .. ..	35,000,000	24,200,000	24,200,000
Chile .. ..	17,430,000	32,600,000	30,000,000
Peru .. ..	9,940,000	10,300,000	10,300,000
Uruguay .. ..	156,968,000	135,000,000	140,000,000
All other .. ..	9,324,000	19,847,000	8,097,000
<b>Total .. ..</b>	<b>587,350,000</b>	<b>545,247,000</b>	<b>545,933,000</b>

(a) Computed on "greasy" basis. (b) Average for years 1909 to 1913 inclusive. (c) Where 1930 figures were not obtainable, an earlier figure or an unofficial estimate has been inserted. (d) As returned.

## WOOL(a).—WORLD'S PRODUCTION 1909 TO 1930—continued.

Countries.	Average Annual Pre-War Production.(b)	Production.	
		1929.	1930.(c)
	lbs.	lbs.	lbs.
Europe—			
Austria .. .. .	15,360,000	860,000	820,000
Belgium .. .. .	1,060,000	775,000	775,000
Bulgaria .. .. .	23,700,000	22,887,000	22,036,000
Czechoslovakia .. .. .		3,290,000	3,290,000
Denmark .. .. .	3,508,000	2,959,000	2,646,000
Estonia .. .. .		1,499,000	1,499,000
Finland .. .. .		4,250,000	4,501,000
France .. .. .	80,688,000	44,000,000	46,297,000
Germany .. .. .	52,000,000	34,750,000	35,000,000
Greece .. .. .	14,000,000	16,625,000	19,000,000
Hungary .. .. .	17,637,000	6,150,000	6,150,000
Iceland .. .. .	1,980,000	(d)	(d)
Italy .. .. .	55,000,000	37,500,000	33,000,000
Jugoslavia .. .. .	25,446,000	30,000,000	30,000,000
Netherlands .. .. .	3,556,000	4,400,000	3,520,000
Norway .. .. .	8,160,000	5,515,000	5,515,000
Poland .. .. .	7,100,000	8,818,000	9,921,000
Portugal .. .. .	10,000,000	5,105,000	6,616,000
Rumania .. .. .	13,228,000	55,000,000	53,000,000
Russia .. .. .	320,000,000	384,252,000	384,252,000
Spain .. .. .	72,000,000	99,000,000	75,000,000
Sweden .. .. .	2,875,000	1,250,000	1,295,000
Switzerland .. .. .	1,049,000	850,000	850,000
Turkey .. .. .	28,000,000		
United Kingdom .. .. .	134,000,000	117,869,000	152,644,000
Irish Free State .. .. .		14,461,000	14,747,000
All other .. .. .		9,886,000	9,495,000
Total .. .. .	890,347,000	911,951,000	921,869,000
Asia—			
British India .. .. .	60,000,000	70,000,000	70,000,000
China .. .. .	50,000,000	55,505,000	55,500,000
Persia .. .. .	12,146,000	45,000,000	45,000,000
Russia in Asia .. .. .	60,000,000	(e)	(e)
Turkey in Asia .. .. .	90,000,000	7,700,000	9,900,000
All other .. .. .	1,000,000	51,594,000	52,050,000
Total .. .. .	273,146,000	229,799,000	232,450,000
Africa—			
Algeria .. .. .	35,221,000	43,000,000	48,000,000
British South Africa .. .. .	165,888,000	311,967,000	337,000,000
Tunis .. .. .	3,735,000	3,801,000	8,787,000
Morocco .. .. .	14,850,000	21,657,000	23,148,000
All other .. .. .	30,000,000	19,538,000	20,409,000
Total .. .. .	249,694,000	399,963,000	437,344,000
Oceania—			
Australia .. .. .	741,377,000	968,153,000	937,597,000
New Zealand .. .. .	198,474,000	222,491,000	241,770,000
Total .. .. .	939,851,000	1,190,644,000	1,179,367,000
Total all other Countries .. .. .	13,000,000		
GRAND TOTAL .. .. .	3,286,708,000	3,663,791,000	3,748,477,000

(a) Computed on "greasy" basis. (b) Average for years 1909 to 1913 inclusive. (c) Where 1930 figures were not obtainable, an earlier figure or an unofficial estimate has been inserted. (d) Included with Denmark. (e) Included with Russia in Europe.

7. Wool Locally Used.—The quantity of wool used in the woollen and tweed mills of the various States during the past five years was approximately as follows; the total shown for 1929-30 includes 464,546 lbs. (as in the grease) of wool used in the manufacture of hats :—

**WOOL.—GREASY, USED IN LOCAL WOOLLEN, TWEED, AND TOP MILLS, 1925-26 TO 1929-30.**

State.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales .. ..	15,332,166	15,394,828	12,038,830	14,796,906	12,671,342
Victoria .. ..	17,642,326	29,020,842	24,075,102	23,372,872	23,644,398
Queensland .. ..	} 2,192,482	3,373,800	3,589,730	3,116,009	2,266,052
South Australia .. ..					
Western Australia .. ..					
Tasmania .. ..	3,321,213	4,337,881	4,400,698	5,862,862	6,829,858
Total .. ..	38,488,187	52,127,351	44,104,360	47,148,649	45,411,650

8. Exports of Wool.—(i) *Greasy—Quantities.* Of the total weight of wool expressed in terms of “greasy” shipped overseas during the past five years slightly more than 29 per cent. was sent to the United Kingdom, as compared with 38 per cent. dispatched in pre-war years. The other leading consignees since 1926-27 were France, Japan, Germany, Belgium, United States of America, and Italy, the principal continental countries taking 52.6 per cent., and America and Japan 16.4 per cent. of the total shipments. The following table shows for the years 1926-27 to 1929-30 in addition to the average for the five years, 1909-13, and the five yearly period ending 1929-30, the quantities of “greasy” wool exported, and the principal countries of destination :—

**WOOL IN THE GREASE.—EXPORTS, AUSTRALIA, 1909-13 TO 1929-30.**

Country to which Exported.	Average, Five Years, 1909-13.	1926-27.	1927-28.	1928-29.	1929-30.	Average for Five Years ending 1929-30.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom .. ..	212,004,088	211,874,803	196,106,241	212,035,141	202,438,310	215,706,558
France .. ..	149,835,946	174,426,470	140,913,531	172,006,450	172,783,716	176,836,623
Japan .. ..	7,262,683	78,913,977	106,399,417	101,092,258	83,243,431	85,848,876
Germany .. ..	106,344,696	97,808,703	95,402,154	99,933,251	94,962,530	90,781,866
Belgium .. ..	55,143,706	76,891,243	76,032,767	99,695,826	80,764,804	79,597,425
United States of America	15,486,447	41,446,243	27,089,377	19,154,235	19,346,569	33,670,880
Italy .. ..	4,381,197	28,185,823	34,691,092	40,104,242	35,582,700	34,547,528
Netherlands .. ..	(a)	1,090,882	100,604	296,051	770,940	740,130
India .. ..	425,547	448,275	778,328	1,404,506	948,394	754,577
Canada .. ..	126,653	338,045	177,208	270,921	310,185	311,615
Other Countries .. ..	5,830,377	925,744	11,157,204	17,346,556	8,249,325	7,806,445
Total .. ..	556,841,340	712,350,208	688,847,983	763,339,527	699,400,904	726,608,523

(a) Included in Other Countries.

(ii) *Scoured and Washed—Quantities.* Similar particulars concerning the exports of "scoured and washed" wool were as follow:—

**WOOL, SCOURED AND WASHED(a).—EXPORTS, AUSTRALIA, 1909-13 TO 1929-30.**

Country to which Exported.	Average Five Years 1909-13.	1926-27.	1927-28.	1928-29.	1929-30.	Average for Five Years ending 1929-30.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom ..	32,032,577	30,113,626	19,242,933	24,818,010	26,859,655	26,703,129
France ..	16,068,910	10,078,090	9,193,140	5,463,934	6,331,892	8,104,104
Japan ..	1,888,161	5,002,337	3,179,822	1,972,525	1,333,763	3,594,603
Belgium ..	7,528,058	5,739,607	6,266,931	6,987,612	4,382,722	5,334,513
Germany ..	12,310,967	5,344,667	7,004,132	3,534,812	3,964,028	4,325,727
United States of America	66,156	305,374	796,867	875,775	585,993	730,367
Canada ..	(b)	320,900	288,396	614,677	440,097	434,136
Italy ..	265,442	294,957	395,277	544,585	336,770	375,981
Netherlands ..	(b)	..	23,653	12,718	12,590	15,486
India ..	59,684	1,816	17,310	174,272	354,569	111,272
Other Countries	127,155	534,329	7,454,477	2,202,143	342,720	2,226,986
<b>Total ..</b>	<b>70,347,110</b>	<b>57,736,693</b>	<b>53,862,938</b>	<b>47,201,063</b>	<b>44,944,799</b>	<b>51,956,304</b>

(a) Including "tops." (b) Included with Other Countries.

The figures for "scoured and washed wool" include tops, amounting in 1925-26, to 5,953,442 lbs., valued at £1,162,877; in 1926-27, 4,519,357 lbs., valued at £822,713; in 1927-28, 2,559,159 lbs., valued at £488,199; in 1928-29, 872,774 lbs., valued at £166,957, and in 1929-30, 552,152 lbs., valued at £87,781. See also § 1 No. 8. The total exports of wool tops during the last five years amounted to 14,456,884 lbs., valued at £2,728,527, of which 12,774,875 lbs., or more than 88 per cent., were shipped to Japan.

(iii) *Total Value of Exports.* The total value of the wool exported from Australia to the principal countries during the periods under review was as follows:—

**WOOL EXPORTS.—TOTAL VALUE, AUSTRALIA, 1909-13 TO 1929-30.**

Country to which Exported.	Average Five Years 1909-13.	1926-27.	1927-28.	1928-29.	1929-30.	Average for Five Years ending 1929-30.
	£	£	£	£	£	£
United Kingdom ..	10,603,967	19,013,978	10,093,795	19,947,694	12,648,045	18,959,780
France ..	6,494,832	13,164,721	11,960,477	11,865,744	8,975,006	12,177,566
Japan ..	516,528	7,868,883	10,310,846	8,693,195	4,434,746	7,438,728
United States of America	795,328	4,050,960	3,105,212	1,888,155	1,154,433	3,259,955
Germany ..	5,131,282	7,920,677	9,080,643	7,773,780	4,626,041	6,887,148
Belgium ..	2,546,915	5,507,034	6,180,070	6,434,323	3,316,902	5,133,195
Italy ..	202,434	2,156,454	2,944,103	3,019,802	1,641,166	2,457,013
Netherlands ..	(a)	89,078	13,527	27,411	44,061	58,297
Canada ..	6,765	69,695	79,137	113,926	82,850	93,393
India ..	22,308	23,670	53,026	110,802	74,292	55,337
Other Countries	267,283	159,210	2,364,282	1,745,413	502,968	997,010
<b>Total ..</b>	<b>26,592,642</b>	<b>60,054,360</b>	<b>66,097,118</b>	<b>61,615,245</b>	<b>36,600,510</b>	<b>57,515,422</b>

(a) Included with Other Countries.

9. *Average Export Value.*—The average values per pound of Australian wool according to the export returns for the periods indicated were as follow:—

**AUSTRALIAN WOOL.—EXPORT VALUE PER POUND, 1909-13 TO 1930-31.**

Description.	Average Five Years 1909-13.	Average Five Years 1923-27.	1927-28.	1928-29.	1929-30.	1930-31.
	d.	d.	d.	d.	d.	d.
Greasy ..	9.40	20.42	20.49	17.58	11.30	9.16
Scoured ..	16.36	30.12	31.87	28.72	19.36	13.57

10. **Exports and Local Sales of Wool.**—Wool selling in Australia has been developed to such a stage that approximately 90 per cent. of the wool grown is now disposed of locally prior to export. Buyers from the United Kingdom, France, Belgium, Germany, and other European countries, also from America, Japan, China, and India, attend the sales conducted in Sydney, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart, and Launceston. Particulars regarding exports and local sales, as well as quantities and ratios of the various descriptions of wool marketed in each State, were inserted in preceding issues of the Official Year Book, but considerations of space preclude the inclusion of similar matter in the present volume. Detailed tables, however, will be found in the Production Bulletins issued by this Bureau.

11. **The Wool Market.**—(i) *The 1929-30 Season.* The 1929-30 wool-selling season proved an exceedingly difficult one. Prices which declined towards the end of the 1928-29 season showed a further decline at the opening sales of 1929-30 and the fall continued during the whole of the selling season. The average export price of greasy wool in 1928-29 was 17.58d. per lb., but in 1929-30 the average was 11.30d. per lb., representing a fall of over 35 per cent. The estimated value of the total wool production for the season 1929-30 amounted to £44,222,000 as compared with £70,833,000 in 1928-29, and £81,430,000 during the record year of 1924-25. The 1929-30 clip was grown under drought conditions and the quality of the wool was in consequence inferior to that of the previous season.

During the year the sales figures amounted to 2,553,321 bales, compared with 2,645,695 bales the previous year. Values depreciated considerably during the season, the average bale realizing £8 6s. 1d. less than the previous year, while the aggregate sales amounted to £33,924,062 as against £57,122,056 in 1928-29.

(ii) *Wool Realization Scheme.* The British Australian Wool Realization Association Ltd. ("B.A.W.R.A.") was formed on the 27th January, 1921, for the purpose of realizing the large stock of wool remaining at the close of the Imperial Wool Purchase Scheme, which covered part of the 1916-17 clip and the complete clips of the three following seasons. Detailed information in connexion with procedure is contained in the previous Official Year Books (see No. 22, p. 666). The whole of the wool controlled by B.A.W.R.A. was sold in three and a half years, and passed into consumption together with the current clips of the wool-growing countries.

A summary of the amounts distributed by the Central Wool Committee and B.A.W.R.A. will be found in previous issues of the Official Year Book (see No. 23, p. 469). The liquidation of this Association is now almost completed and it is expected that the final dividend will be paid in March, 1932.

12. **United Kingdom Importation of Wool.**—The appended statement of the quantity and value of wool imported into the United Kingdom during the year 1929 from the principal wool-producing countries shows the important position which Australia occupies in the supply of wool to the mother country :—

WOOL(a).—IMPORTS, UNITED KINGDOM, 1929.

Country from which imported.	Quantity.	Value.	Country from which imported.	Quantity.	Value.
	lbs.	£		lbs.	£
Australia ..	269,907,400	21,755,610	United States of America ..	917,200	64,855
New Zealand ..	193,986,000	13,035,623	Peru ..	2,329,200	175,591
Union of South Africa ..	167,420,800	12,719,929	Belgium ..	2,717,700	283,615
Argentina Re-public ..	51,294,400	3,486,806	Falkland Islands	1,890,500	148,767
India ..	53,713,700	2,982,022	Other British Possessions ..	2,768,900	190,572
Chile ..	15,953,000	1,207,296	Germany ..	1,947,800	120,161
France ..	19,784,600	1,852,414	Other Countries	12,967,300	803,189
Uruguay ..	9,129,300	704,211			
Irish Free State	8,923,400	532,385			
			<b>Total ..</b>	<b>815,651,200</b>	<b>60,063,046</b>

(a) Greasy, Scoured, and Tops.

Of the importations of wool into the United Kingdom, Australian wool represented 33 per cent. of quantity and 36 per cent. of value, and New Zealand 24 per cent. of quantity and 22 per cent. of value. It is interesting to note that 698,610,700 lbs., valued at £51,364,908, were received from British Possessions, being 86 per cent. of the total weight and 86 per cent. of the total value imported.

### § 6. Trade in Hides and Skins.

1. **Extent of Trade.**—In addition to the hides and skins treated in the tanneries of the several States, a very considerable export trade is carried on, the value of Australian cattle and horse hides and sheep and other skins exported during the five years 1925-26 to 1929-30 amounting to £42,642,996, or an average of £8,528,599 per annum.

2. **Sheepskins with Wool.**—By far the largest item included in the amount mentioned in the preceding sub-section arises from the value of sheepskins with wool—the exports of which during the five years aggregated £18,978,248. During the year 1929-30 France was the largest purchaser, taking 57.6 per cent. of the total consignments, while United Kingdom ranked next with 25.3 per cent., and the remaining 17 per cent. was shipped principally to the United States of America, Belgium, and Germany. The exports of sheepskins with wool during each of the years from 1925-26 to 1929-30 were as follow :—

#### SHEEPSKINS WITH WOOL.—EXPORTS, AUSTRALIA, 1925-26 TO 1929-30.

Particulars.	1925-26.	1926-27.	1927-28.	1928-29.	1929 30.	Total for 5 years.
Sheepskins (with wool) .. No.	8,585,054	9,152,287	10,829,913	10,910,516	12,562,384	52,040,154
Value .. £	3,509,328	3,409,833	4,410,702	4,544,827	3,103,558	18,978,248

3. **Sheepskins without Wool.**—In the case of sheepskins without wool the principal countries of consignment are the United States of America and the United Kingdom. These two countries were responsible for 95 per cent. of the exports during the past five years, the purchases of the United States of America alone amounting to 60 per cent. of the total shipments. Particulars concerning exports are as follow :—

#### SHEEPSKINS WITHOUT WOOL.—EXPORTS, AUSTRALIA, 1925 26 TO 1929 30.

Particulars.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	Total for 5 years.
Sheepskins (with-out wool) .. No.	89,860	217,102	553,170	514,302	673,221	2,047,655
Value .. £	13,858	30,228	42,447	44,001	53,415	183,949

4. **Hides.**—(i) *Exports.* The export trade in Australian cattle hides, which fell away during the war years, has again become important. Considerable quantities were shipped oversea during each of the last five years: the United States of America took 20 per cent. of the total shipments during that period, followed by Italy 19 per cent., the United Kingdom 18 per cent., Germany 16 per cent., and Finland 7 per cent.

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

**CATTLE HIDES.—EXPORTS, AUSTRALIA, 1925-26 TO 1929-30.**

Particulars.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	Total for 5 years.
Cattle Hides .. No.	916,956	889,746	1,003,220	829,780	754,846	4,394,548
Value .. .. £	1,105,540	998,981	1,690,908	1,331,486	794,991	5,921,906

Calfskins exported during the years 1925-26 to 1929 30 numbered 1,423,677, valued at £410,775, and were shipped mainly to the United States of America, the value of the skins taken by that country averaging 52 per cent. of the total exports during the past five years. The annual export of horse hides is very small, and averaged only 6,807 hides, valued at £5,228.

(ii) *Imports.* The import trade in cattle hides and calfskins is fairly considerable, the number annually imported on the average during the past five years amounting to 375,533, with an average value of £453,310. New Zealand supplies the great bulk of these importations, and shipments of limited quantities are also obtained from the Pacific Islands, France, and Italy. The number and value of cattle hides, including calfskins, imported into Australia during the five years 1925-26 to 1929-30 were as follow :—

**CATTLE HIDES.—IMPORTS, AUSTRALIA, 1925-26 TO 1929-30.**

Particulars.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	Total for 5 years.
Cattle Hides .. No.	474,342	371,868	327,903	363,400	340,150	1,877,663
Value .. .. £	462,066	437,932	419,345	570,416	401,793	2,291,552

The number of horse hides imported into Australia is unimportant. Imports during the last five years averaged 425 valued at £286.

5. *Other Skins.*—The exports of skins other than those mentioned in the preceding sub-sections are valued as follow :—

**OTHER SKINS.—EXPORTS, AUSTRALIA, 1925-26 TO 1929-30.**

Particulars.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	Average for Five Years ending 1929-30.
	£	£	£	£	£	£
Rabbit and Hare	2,880,360	2,837,663	2,492,522	2,630,295	1,526,242	2,473,416
Opossum ..	362,406	921,833	540,735	166,059	681,472	534,501
Kangaroo ..	154,476	137,994	200,781	207,532	193,385	178,834
Fox ..	112,986	103,683	140,301	132,771	115,241	120,996
Wallaby ..	74,464	46,655	42,184	87,299	38,714	57,863
Other ..	13,320	26,400	214,085	20,839	19,281	58,785
<b>Total ..</b>	<b>3,598,012</b>	<b>4,074,228</b>	<b>3,630,608</b>	<b>3,244,795</b>	<b>2,574,335</b>	<b>3,424,395</b>

The United States of America and the United Kingdom took nearly all these skins, as shown below :—

**OTHER SKINS.—AVERAGE EXPORTS TO UNITED STATES AND UNITED KINGDOM.  
1925-26 TO 1929-30.**

Particulars.	United Kingdom.	United States of America.
	£	£
Rabbit and Hare .. .. .	831,017	1,445,462
Opossum .. .. .	337,361	203,155
Kangaroo .. .. .	24,997	151,915
Fox .. .. .	94,214	16,630
Wallaby .. .. .	49,082	7,551
Other .. .. .	10,881	40,595
Total .. .. .	1,347,552	1,865,308