

## CHAPTER XVII.

## 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 in 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 1926 onwards in single years, are given in the following table, and are shown continuously in the graphs hereinafter.

During the seventy-one years covered by the table the live stock of Australia increased considerably, horses 311 per cent., cattle 210 per cent., sheep 449 per cent., and pigs 233 per cent. The average annual increases which these aggregates represent are as follow :—Horses, 2.01 per cent. ; cattle, 1.61 per cent. ; sheep, 2.43 per cent. ; and pigs, 1.71 per cent.

## LIVE STOCK.—AUSTRALIA.

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
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
1930 .. .. .	1,792,734	11,720,916	110,568,279	1,071,679
1931 .. .. .	1,775,550	12,260,955	110,618,893	1,167,845

(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 the 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 follow :—Horses, 1918, 2,527,149; cattle, 1921, 14,441,309; sheep, 1931, 110,618,893; 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 seventy-one years in the manner shown in the succeeding table :—

## LIVE STOCK PER HEAD OF POPULATION.—AUSTRALIA.

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	1927	0.33	1.86	16.14	0.14
1880	0.48	3.37	27.87	0.37	1928	0.31	1.78	16.32	0.14
1890	0.48	3.17	31.06	0.28	1929	0.29	1.75	16.30	0.16
1900	0.43	2.29	18.75	0.25	1930	0.28	1.81	17.07	0.17
1910	0.49	2.65	22.16	0.23	1931	0.27	1.88	16.95	0.18

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, 1931.

States and Territories.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales	1.70	9.67	171.24	1.25
Victoria	4.27	18.63	186.33	3.26
Queensland	0.70	8.28	33.29	0.33
South Australia	0.49	0.70	17.39	0.29
Western Australia	0.16	0.85	10.35	0.12
Tasmania	1.17	8.87	76.75	1.58
Northern Territory	0.06	1.43	0.04	0.00
Federal Capital Territory	0.98	5.74	206.80	0.11
Total	0.60	4.12	37.19	0.39

7. Minor Classes of Live Stock.—The numbers of minor classes of live stock returned for 1931 were as follow :—Goats, 142,074; camels, 5,404; mules and donkeys, 14,379; and ostriches, 88. 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 6,091 angora goats are included in the total of 142,074 goats shown above. Of these, 2,213 were in New South Wales, 782 in Tasmania, 456 in Western Australia, 950 in South Australia, and 1,683 in Queensland, while the quantity of mohair produced in the latter State in 1931 was set down at 972 lbs., and the number of skins placed on the market was returned as 145.

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 1927-28 to 1931-32 were as follow :—

## NET EXPORTS OF PASTORAL PRODUCTS.—AUSTRALIA.

Products.	Unit of Quantity.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
QUANTITIES.						
Animals (living)—						
Cattle .. .. .	No.	11,131	8,452	6,191	174	331
Horses .. .. .	"	5,627	5,356	5,969	4,926	4,771
Sheep .. .. .	"	30,871	29,545	38,764	26,071	47,131
Bones .. .. .	cwt.	14,486	14,060	10,503	12,238	9,416
Glue-pieces and Sinews .. .. .	"	-13,469	-18,420	-20,176	-15,927	186
Glycerine .. .. .	lb.	-571,266	-388,800	-703,682	-254,290	13,575
Hair .. .. .	"	(a)	(a)	(a)	126,712	74,445
Hoofs .. .. .	cwt.	13,543	9,852	11,273	(a)	(a)
Horns .. .. .	"	(a)	(a)	(a)	(a)	(a)
Meats—						
Frozen Beef .. .. .	lb.	169,094,472	189,090,102	156,748,365	155,630,647	165,871,501
Frozen Mutton and Lamb .. .. .	"	46,359,146	84,905,335	100,410,980	109,252,956	165,281,142
Frozen Rabbits and Hares .. .. .	pair	3,433,098	3,598,075	3,873,337	(a)	(a)
Frozen, Other .. .. .	lb.	7,592,372	7,127,553	6,115,445	6,920,925	8,061,876
Potted, and Extract of .. .. .	"	(a)	(a)	(a)	(a)	(a)
Preserved in Tins, etc. .. .. .	lb.	3,760,147	3,168,759	3,381,248	4,265,578	5,258,749
Other (excluding Bacon and Ham) .. .. .	"	322,117	447,495	434,050	344,712	277,562
Sausage Casings .. .. .	cwt.	22,714	31,489	39,984	8,976	11,562
Skins—						
Hides .. .. .	No.	1,034,317	816,980	702,135	(a)	(a)
Sheep .. .. .	"	11,315,072	11,026,291	12,944,781	(a)	(a)
Rabbit and Hare .. .. .	cwt.	112,547	100,655	77,566	63,348	69,774
Other (including Undressed Furs) .. .. .	"	(a)	(a)	(a)	(a)	(a)
Tallow .. .. .	cwt.	648,592	768,314	592,231	484,762	768,511
Wool—						
Greasy .. .. .	lb.	682,913,332	759,443,979	696,578,126	767,050,003	772,804,985
Scoured .. .. .	"	55,397,621	46,019,059	44,195,688	43,685,080	55,708,642
Tops .. .. .	"	2,559,159	872,774	552,152	1,033,823	2,170,330

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 £287,458,566 for the period, or an average of £57,491,713 per annum, of which wool represents 78.98 per cent. Meat, skins, and tallow rank next in order of importance.

## NET EXPORTS OF PASTORAL PRODUCTS.—AUSTRALIA.

Products.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
VALUES.(a)					
Animals (living)—	£	£	£	£	£
Cattle .. .. .	41,352	21,205	-19,814	-7,788	-5,673
Horses .. .. .	65,285	79,257	85,178	105,254	100,935
Sheep .. .. .	40,512	43,447	35,681	3,346	8,496
Bones .. .. .	8,932	10,775	8,015	8,702	6,725
Glue-pieces and Sinews .. .. .	-2,503	-6,956	-13,577	-13,232	1,610
Glycerine .. .. .	-15,097	-6,809	-15,167	-3,119	4,091
Hair .. .. .	-43,054	-35,660	-47,591	-9,209	-24,966
Hoofs .. .. .	7,826	6,162	7,128	4,412	4,750
Horns .. .. .	25,488	24,385	22,626	18,164	14,815
Meats—					
Frozen Beef .. .. .	2,377,871	2,888,284	2,569,782	2,235,526	2,087,812
Frozen Mutton and Lamb .. .. .	1,188,388	2,165,321	2,386,175	2,105,956	2,994,056
Frozen Rabbits and Hares .. .. .	309,149	331,456	339,957	412,845	478,946
Frozen, Other .. .. .	142,475	180,422	152,310	149,643	151,793
Potted, and Extract of .. .. .	-60,662	-76,328	-52,491	6,981	5,774
Preserved in Tins, etc. .. .. .	100,110	84,029	118,513	138,253	135,805
Other (excluding Bacon and Ham) .. .. .	6,243	11,086	8,695	7,490	6,098
Sausage Casings .. .. .	136,567	144,063	245,246	159,913	56,701
Skins—					
Hides .. .. .	1,401,029	886,430	459,192	517,132	62,762
Sheep .. .. .	4,385,138	4,526,170	3,123,282	1,945,064	1,097,816
Rabbit and Hare .. .. .	2,490,709	2,624,253	1,507,142	557,207	477,476
Other (including Undressed Furs) .. .. .	831,042	277,477	586,842	175,095	304,696
Tallow .. .. .	1,043,311	1,366,341	981,454	597,594	827,454
Wool—					
Greasy .. .. .	58,295,914	55,592,624	32,775,631	29,294,646	28,883,940
Scoured .. .. .	6,621,937	5,519,161	3,563,207	2,469,360	2,817,703
Tops .. .. .	488,199	166,957	87,781	114,021	248,055
Noils (b) .. .. .	..	..	..	30,814	44,520
Waste (b) .. .. .	..	..	..	9,487	7,940
Total Values .. .. .	79,886,161	76,823,552	48,915,166	41,033,557	40,800,130

NOTE.—The minus sign — signifies net imports. (a) Australian currency values.

(b) Not available prior to 1930-31.

9. Value of Pastoral Production.—Details of the quantities and values of the items included in the value of pastoral production for the year 1931-32 are shown in the following table. The values quoted are the gross values in the metropolitan markets at port of shipment oversea. Complete data regarding production costs to permit of a determination of the net value of production in accordance with the resolutions of the Statistical Conference of 1924 and subsequent years are not yet available. The omission of the local consumption of rabbits (meat and skins) and other pastoral by-products, tends, however, to limit the exaggeration of the total gross value shown.

## PASTORAL PRODUCTION.—AUSTRALIA, 1931-32.

Item.		Quantity.	Value.
			£
Wool	.. .. .	lb. 1,006,630,847	35,073,500
Meats—			
Beef—			
Local Consumption (including Factories)	.. .. .	.. 607,887,486	8,714,067
Exports of Carcasses	.. .. .	.. 165,872,145	2,087 829
Mutton and Lamb—			
Local consumption (including Factories)	.. .. .	.. 523 018,729	7,242,175
Exports of Carcasses	.. .. .	.. 165,281,336	2,994,062
Rabbits and Hares (Export only)	.. .. .	pair 7,891,880	478,946
Other Meats, frozen and other (Export only)	.. .. .	.. (a)	159,053
Sausage Casings (Export only)	.. .. .	.. cwt. 22,447	1 2,365
Skins—			
Exports—			
Cattle and Calf	.. .. .	No. 318,505	216,647
Sheep	.. .. .	.. 9,277,611	257,460
Rabbit and Hare	.. .. .	.. cwt. 70,207	488,736
Other Furred	.. .. .	.. .. (a)	494,622
Other Skins	.. .. .	.. .. (a)	4,436
Consumption in Factories	.. .. .	.. .. (a)	1,670,148
Tallow—			
Exports	.. .. .	.. cwt. 772,769	831,415
Local Consumption	.. .. .	.. .. 499,143	509,303
Hair, Horns, etc. (Export only)	.. .. .	.. .. ..	55,741
Net Exports of Live Stock	.. .. .	.. .. ..	79,952
			61,540,457

(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 figures 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. Compared with Australia the consumption of beef, mutton and lamb in these countries is relatively small, but pork consumption is greatly in excess of the average recorded both for Australia and New Zealand. The consumption of beef in North America and on the Continent of Europe has shown a downward tendency of recent years while, the figures for pork and mutton have increased considerably.

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

Description.	Australia, 1931-32.	New Zealand, (d).	Great Britain, 1931.	Canada, 1932.	United States of America, 1931.
	lb.	lb.	lb.	lb.	lb.
Beef and Veal .. ..	92.54	146.28	66.50	56.02	56.50
Mutton and Lamb .. ..	79.94	77.30	31.00	6.97	7.10
Pork .. ..	6.68	13.72	(b) 47.50	91.79	(c) 69.60
Total .. ..	179.16	237.30	145.00	154.78	133.20
Bacon and Ham .. ..	10.68	12.83	(a)	(a)	(a)
Total All Meats .. ..	189.84	250.13	145.00	154.78	(c) 133.20

(a) Probably included with Pork.  
(d) Average, three years ending 1930-31.

(b) Including Lard.

(c) Excluding Lard.

## § 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 have been utilized to the fullest extent in breeding all classes of horses. 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 is highly regarded by the military authorities in India, and large numbers are obtained annually for remount purposes. During the war, Australian horses were found to stand up well to requirements, especially in Palestine and Sinai, where the rigours of the desert campaign severely 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.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	F.C.T.	Total.
1927	4598,377	428,666	547,412	224,027	165,021	35,872	40,108	41,208	2,040,691
1928	4567,371	412,867	522,490	205,865	160,876	34,908	37,452	49,241	1,942,753
1929	4534,945	393,015	500,104	189,054	159,528	34,336	33,703	49,299	1,845,614
1930	4524,512	379,872	480,970	183,529	156,973	32,700	33,363	48,151	1,792,734
1931	524,751	375,459	468,603	185,222	156,489	30,659	33,442	48,925	1,775,550

(a) 30th June year following.

The number of horses attained its maximum in Australia during 1918, when a total of 2,527,149 was recorded. Since that date, however, a general decline has been experienced, and the number for 1931 is the lowest returned since 1906. The numbers of horses in Australia and in the United States of America reached their maximum in 1918, while in Canada the highest total was recorded in 1921. The decline in each country since that year up to the latest available date amounted to 30, 41 and 13 per cent.

respectively. In Argentina on the other hand, a slight increase was recorded in 1930 over the numbers ascertained at the previous census of 1922. The rapid development of motor transport coupled with the use of petrol-driven cultivating and other machinery on farms brought about the decreases alluded to. In Australia, however, there has recently been a tendency to revert to the horse not only on the farm, but to some extent for the transport of goods in the cities. Confirmation of this fact is afforded by increases in 1932 in South and Western Australia of 5,000 and 1,000, respectively.

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 year 1931 were:—New South Wales, 29.55; Victoria, 21.15; Queensland, 26.39; South Australia, 10.43; Western Australia, 8.81; Tasmania, 1.73; Northern Territory 1.89; and Federal Capital Territory, 0.05 per cent.

The percentages in the various States have remained practically constant during the last quinquennium.

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 1927. For the year 1931 the relative numbers were:—New South Wales, 0.21; Victoria, 0.21; Queensland, 0.49; South Australia, 0.32; Western Australia, 0.37; Tasmania, 0.14; Northern Territory, 7.50; Federal Capital Territory, 0.11; Commonwealth, 0.27.

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 ..	1930	30.237	Dutch East Indies	1931	655
U.S. of America ..	1931	12.679	Uruguay ..	1930	613
Argentine Republic	1930	9,858	Lithuania ..	1931	597
Brazil .. ..	1920	5,254	Spain .. ..	1931	563
Poland .. ..	1931	4,124	Denmark ..	1931	499
Germany .. ..	1931	3,451	Bulgaria ..	1926	482
Canada .. ..	1931	3,129	Turkey .. ..	1931	481
France .. ..	1931	2,920	Irish Free State	1931	450
India (British and (Native) ..	1931	2,355	Chile .. ..	1930	441
Rumania .. ..	1931	1,988	Peru .. ..	1929	432
<b>Australia .. ..</b>	<b>1931</b>	<b>1,776</b>	Bolivia .. ..	1931	390
Japan .. ..	1930	1,490	Latvia .. ..	1931	366
United Kingdom ..	1931	1,194	Finland .. ..	1930	357
Yugoslavia .. ..	1931	1,169	Haiti .. ..	1931	350
Mexico .. ..	1926	1,036	Philippine Islands	1929	341
Italy .. ..	1930	967	Greece .. ..	1931	325
Colombia .. ..	1929	929	Siam .. ..	1931	303
Hungary .. ..	1931	865	Netherlands ..	1930	299
Union of South Africa	1930	856	New Zealand ..	1931	296
Cuba .. ..	1929	758	Belgium .. ..	1931	242
Czechoslovakia ..	1930	748	Paraguay .. ..	1927	210
Sweden .. ..	1931	656	French Morocco ..	1931	207
			Estonia .. ..	1931	207

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 of 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, for 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.

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
<b>Total .. ..</b>	<b>112,098</b>	<b>102,157</b>	<b>– 9,941</b>	<b>– 8.9</b>

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 27,381, valued at £800,362, equal to an annual average of 5,576 for £160,072. The average export price for the period was £28 14s. 2d. 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 stud animals from the United Kingdom and race horses from New Zealand. The average value per head of the horses imported during the last five years was £297 10s. 3d. The average number imported per annum was, however, only 245, and the average annual value, £72,891. The following table gives the imports, exports, and net exports of horses during each of the years from 1927–28 to 1931–32 :—

## HORSES.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
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
1930-31 (a) ..	101	40,094	5,027	145,348	4,926	105,254
1931-32 (a) ..	121	20,367	4,892	121,302	4,771	100,935

(a) Australian currency values.

## § 3. Cattle.

1. **Purposes for which Raised.**—In all the States, cattle-raising is carried out, 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, beef-producing cattle are mainly raised in the tropical districts, i.e., in the northern parts of Queensland, in the Northern Territory, and in the Kimberley district 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. In 1931, however, an increase in the numbers of almost 500,000 was recorded, half of which was due to expansion in the dairy herds.

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

## CATTLE.—NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Total.
1927	2,848,654	1,327,077	5,225,804	316,314	846,735	210,894	835,390	46,188	11,617,056
1928	2,784,615	1,304,426	5,128,341	263,016	837,527	208,812	768,751	45,269	11,300,757
1929	2,686,132	1,335,242	5,208,588	204,516	836,646	214,643	711,607	44,760	11,202,134
1930	2,840,473	1,429,920	5,463,724	218,985	812,844	230,254	720,476	44,240	11,720,916
1931	2,993,586	1,637,530	5,550,399	265,324	826,532	232,444	749,745	5,395	12,260,955

(a) 30th June year following.

Queensland contains within its borders nearly one half of the cattle of Australia. Despite decreases during recent years the percentage of cattle in Queensland on the total for Australia amounted to 45.27 in 1931. The largest relative gain since 1927

occurred in Victoria followed by Queensland and Tasmania slight decreases were recorded in the remaining States. The percentage proportion in each of the States and Territories during 1931 was:—New South Wales, 24.42; Victoria, 13.36; Queensland, 45.27; South Australia, 2.16; Western Australia; 6.74; Tasmania, 1.90; Northern Territory, 6.11; Federal Capital Territory, 0.04.

3. Comparison with other Countries.—The following table shows the number of cattle in Australia, and in some of the principal cattle-raising countries of the world, at the latest available date:—

CATTLE.—NUMBER IN VARIOUS COUNTRIES.

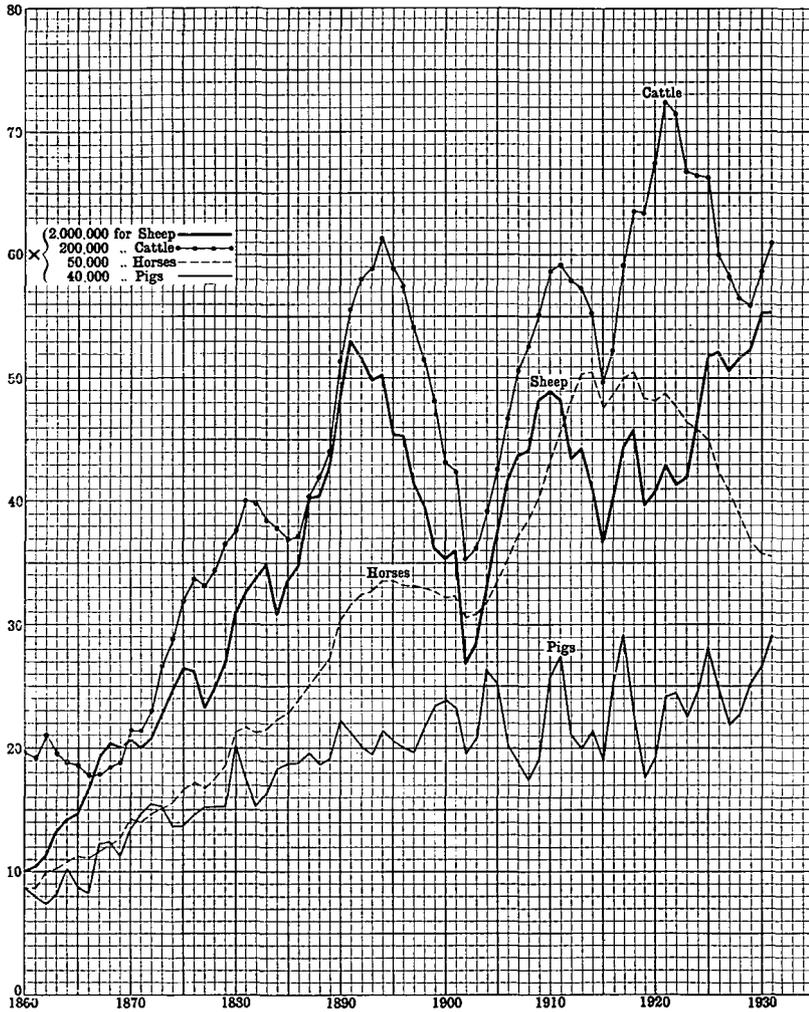
Country.	Date.	No. of Cattle (,000 omitted).	Country.	Date.	No. of Cattle (,000 omitted).
India (British and Native) .. ..	1930	159,763	Tanganyika Territory	1931	5,099
U.S. of America .. ..	1931	62,407	Turkey .. ..	1931	4,869
Soviet Republics .. ..	1931	49,900	Cuba .. ..	1929	4,865
Brazil .. ..	1920	34,271	Siam .. ..	1931	4,774
Argentine Republic .. ..	1930	32,212	Dutch East Indies .. ..	1931	4,681
Germany .. ..	1931	19,124	Czechoslovakia .. ..	1931	4,451
France .. ..	1931	15,434	New Zealand .. ..	1931	4,081
<b>Australia</b> .. ..	<b>1931</b>	<b>12,261</b>	Rumania .. ..	1931	4,079
Union of South Africa	1930	10,574	Irish Free State .. ..	1931	4,029
Poland .. ..	1931	9,786	Yugoslavia .. ..	1931	3,872
Canada .. ..	1931	7,991	Spain .. ..	1931	3,654
United Kingdom .. ..	1931	7,955	Denmark .. ..	1931	3,208
Colombia .. ..	1929	7,343	Sweden .. ..	1931	3,109
Uruguay .. ..	1930	7,128	Rhodesia .. ..	1931	3,035
Madagascar .. ..	1930	7,048	Paraguay .. ..	1926	2,973
Italy .. ..	1930	6,893	Nigeria .. ..	1931	2,911
French Equatorial and West Africa .. ..	1931	5,629	Netherlands .. ..	1930	2,366
Mexico .. ..	1926	5,585	Austria .. ..	1930	2,313
Kenya .. ..	1930	5,192	Venezuela .. ..	1922	2,278
			Bolivia .. ..	1931	2,064
			Uganda .. ..	1931	2,064

4. 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 stated in respect to horses. (See § 2, 6 *ante*.)

CATTLE.—WORLD'S TOTAL.

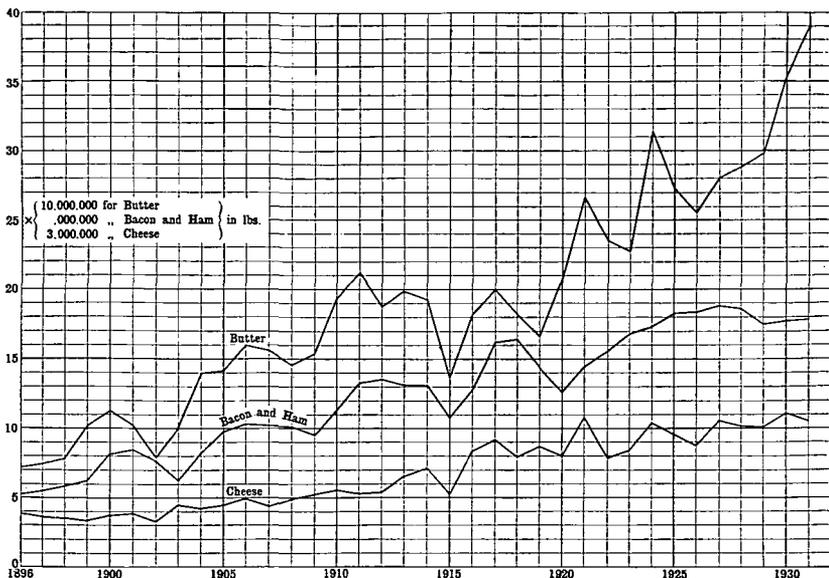
Continents, etc.	Number at the date nearest—		Increase (+) or Decrease (–) in 1927.	
	1913.	1927.	Actual Figures.	Percentages.
	,000	,000	,000	%
Europe (excluding the U.S.S.R.) .. ..	98,764	100,339	+ 1,575	+ 1.6
Union of Socialist Soviet Republics .. ..	60,280	67,835	+ 7,555	+ 12.5
North and Central 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
<b>Total</b> .. ..	<b>501,887</b>	<b>559,315</b>	<b>+ 57,428</b>	<b>+ 11.4</b>

## NUMBER OF HORSES, CATTLE, SHEEP, AND PIGS—AUSTRALIA, 1860 TO 1931.



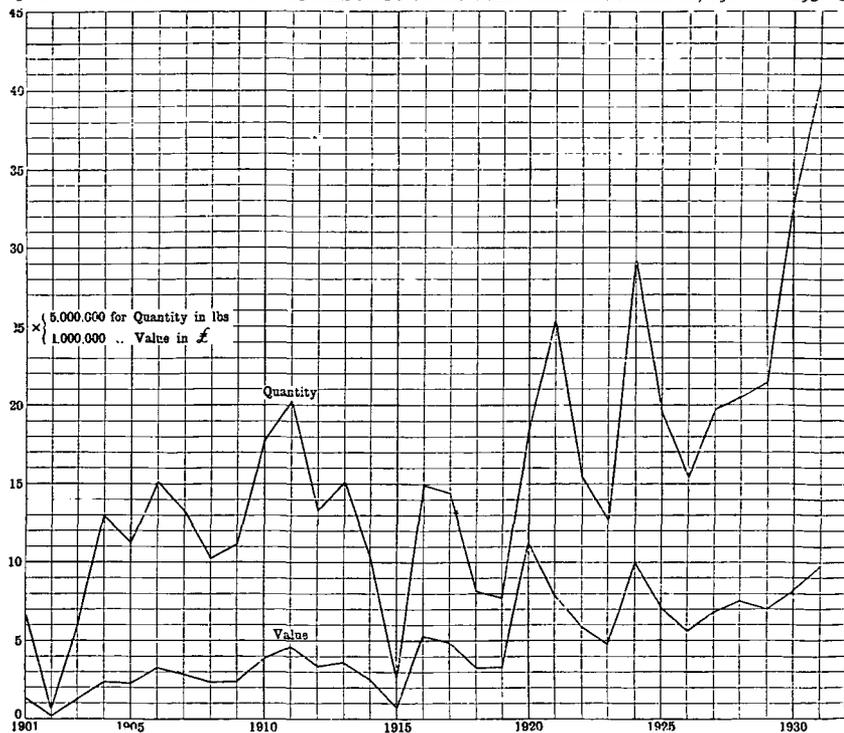
EXPLANATION—The base of each small square represents an interval of one year and the vertical side 2,000,000 in the case of sheep, 200,000 for cattle, 50,000 for horses, and 40,000 for pigs.

PRODUCTION OF BUTTER, CHEESE, AND BACON AND HAM—AUSTRALIA, 1896 TO 1931-32.



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 1931-32.



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

The number of cattle increased throughout the world since 1913, the most notable advances being in Africa and South America, where the numbers increased by more than 16 and 14 million head respectively since the pre-war year.

5. **Imports and Exports of Cattle.**—The products of the cattle-raising industry figure largely in the export trade of Australia, although the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details are as follow :—

#### CATTLE.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1927-28 ..	89	3,553	11,220	44,905	11,131	41,352
1928-29 ..	96	17,761	8,548	38,966	8,452	21,205
1929-30 ..	193	44,309	6,384	24,495	6,191	—19,814
1930-31 (a) ..	81	11,368	355	3,580	274	—7,788
1931-32 (a) ..	40	8,543	371	2,870	331	—5,673

(a) Australian currency values. Note.—The minus sign (—) signifies net imports.

The average value of the cattle imported during the last five years was £171 8s. 3d. per head, while the average value of the cattle exported during the same period was £4 5s. 5d. As previously stated, the imported cattle were required principally for stud purposes.

6. **Cattle Slaughtered.**—The number of cattle slaughtered during each of the years 1927 to 1931 is given hereunder :—

#### CATTLE (INCLUDING CALVES) SLAUGHTERED.

Year.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N. Ter.	Fed. Cap. Ter. (a)	Total.
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
1930	594,950	328,032	648,473	89,585	95,021	27,338	1,844	1,357	1,786,600
1931	630,372	375,380	540,649	81,285	91,748	28,565	1,844	1,349	1,751,192

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

7. **Production and Consumption of Beef.**—The production of beef in Australia during the year 1931-32 was estimated at 773,760,000 lbs. The requirements of the local market absorbed 603,925,000 lbs., approximately 78 per cent., leaving a balance of 22 per cent., which was exported as frozen and canned beef. (See also § 1, 10 *ante*.)

8. **Export of Frozen Beef.**—The export of frozen meat from Australia dates from about the year 1881, and since that year the trade in frozen beef has grown considerably, the quantities and values exported during the past five years being as follow, viz. :— 1927-28, 169,098,425 lbs., £2,377,967; 1928-29, 189,090,357 lbs., £2,888,287; 1929-30, 156,748,665 lbs., £2,569,788; 1930-31, 155,630,647 lbs., £2,235,526, and 1931-32, 165,872,145 lbs., £2,087,829. (See Table § 1, No. 8.) The largest purchaser of Australian beef is the United Kingdom, which during the year 1931-32 took £1,598,010 worth, or about 76.5 per cent., of the total shipments. Other countries importing Australian beef were in order of importance Belgium, Egypt, Philippine Islands, Japan, Malaya (British), and Malta. These countries, together with the United Kingdom, accounted for 96.2 per cent. of the total exports.

Australia's distance from the chief markets of the world up to the present has required that meat should be exported in a frozen condition and this has placed Australia at a disadvantage in competition with South American countries. The preference for chilled beef in the United Kingdom coupled with the embargoes on imports by former importing countries has adversely affected the development of the beef industry in Australia. An average annual export of approximately 170 million lbs. or 75,000 tons has nevertheless been maintained. Investigations are being conducted by the Council for Scientific and Industrial Research in Australia and the Low Temperature Research Station at Cambridge in England into the problem of chilling beef in a manner that will permit of its transport over long distances. The future progress of the industry in Australia would appear to depend upon the successful solution of this problem coupled with the forwarding of regular supplies suited to the requirements of overseas consumers. During 1932-33 several trial shipments of beef amounting to more than 254,000 lbs. were made to the United Kingdom. The meat arrived in good condition, and valuable knowledge has been obtained which will be used to advantage in future consignments.

9. **Agreements Regarding Meat at the Ottawa Conference.**—A further stimulus to the Australian meat industry should result from the agreement reached in this connexion at the Imperial Economic Conference at Ottawa in August, 1932. Under the terms of the agreement the Government of the United Kingdom undertakes to regulate importations of foreign meat from 1st January, 1932, to 30th June, 1934, in accordance with the following Schedule :—

**STATEMENT SHOWING THE MAXIMUM QUANTITIES OF FOREIGN MEAT TO BE ALLOWED TO BE IMPORTED INTO THE UNITED KINGDOM DURING EACH QUARTER OF THE PERIOD 1ST JANUARY, 1933, TO 30TH JUNE, 1934, EXPRESSED AS PERCENTAGES OF THE QUANTITIES IMPORTED IN THE CORRESPONDING QUARTERS OF THE TWELVE MONTHS ENDED JUNE, 1932.**

Meat.	1933.				1934.	
	January-March.	April-June.	July-September.	October-December.	January-March.	April-June.
Frozen Mutton and Lamb ..	% 90	% 85	% 80	% 75	% 70	% 65
Frozen Beef (Carcasses and Boned Beef) .. ..	90	85	80	75	70	65
Chilled Beef .. ..	100	100	100	100	100	100

Australia undertakes to limit the export to the United Kingdom of frozen mutton and lamb during the year 1933 to a quantity equivalent to that exported during the year ended June, 1932, viz., 165,282,000 lbs., while the export of frozen beef will not be increased during 1933 to an extent exceeding 10 per cent. of the quantity exported during 1931-32, viz., 165,872,000 lbs. Thereafter, no restriction will be placed upon the importation of any meat from Australia into the United Kingdom during the currency of the agreed programme. It is agreed that from 30th June, 1934, the regulation of the imports of foreign meat is to be continued until 1938, at the rates in force for the quarter ending June, 1934, unless a permanent policy is agreed upon as a result of consultations which are to take place during 1933 between the Governments of the United Kingdom and Australia. Details of imports of beef, mutton and lamb into the United Kingdom during the period 1927 to 1931 will be found in the tables hereafter.

10. Imports of Chilled and Frozen Beef into the United Kingdom.—The following statement shows the quantities and values of chilled and frozen beef imported into the United Kingdom during each of the five years 1927 to 1931.

**IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES INTO THE UNITED KINGDOM.**

Country of Origin.	1927.	1928.	1929.	1930.	1931.
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**CHILLED—QUANTITY.**

	cwt.	cwt.	cwt.	cwt.	cwt.
Brazil .. .. .	76,832	329,225	332,656	506,976	598,664
Uruguay .. .. .	336,831	589,659	795,465	866,685	778,437
Argentina .. .. .	9,986,205	8,644,551	8,174,800	7,713,349	7,911,175
Other Foreign Countries .. .. .	2,920	..	1	..	..
British .. .. .	2,187	1,085	2,004	..	..
<b>Total Chilled</b> .. .. .	<b>10,404,975</b>	<b>9,564,520</b>	<b>9,304,926</b>	<b>9,087,010</b>	<b>9,288,276</b>

**CHILLED—VALUE.**

	£	£	£	£	£
Brazil .. .. .	188,951	812,048	881,278	1,276,361	1,160,043
Uruguay .. .. .	717,738	1,456,834	2,075,707	2,197,906	1,589,591
Argentina .. .. .	21,893,115	22,260,448	22,275,517	20,248,423	17,384,571
Other Foreign Countries .. .. .	7,452	..	4	..	..
British .. .. .	4,693	2,244	4,121	..	..
<b>Total Chilled</b> .. .. .	<b>22,811,949</b>	<b>24,531,574</b>	<b>25,236,627</b>	<b>23,722,690</b>	<b>20,134,205</b>

**FROZEN—QUANTITY.**

	cwt.	cwt.	cwt.	cwt.	cwt.
United States of America .. .. .	6,190	166	173	..	..
Brazil .. .. .	59,087	68,820	50,636	106,271	83,477
Uruguay .. .. .	149,824	94,822	65,924	191,180	169,200
Argentina .. .. .	885,060	288,474	346,619	256,502	197,895
Other Foreign Countries .. .. .	2,474	..	24,268	..	486
Australia .. .. .	558,621	904,772	820,360	719,111	992,462
New Zealand .. .. .	189,879	331,508	77,969	230,876	220,317
Other British Countries .. .. .	1,424	121	7,347	11,133	1,288
<b>Total Frozen</b> .. .. .	<b>1,852,559</b>	<b>1,688,683</b>	<b>1,393,296</b>	<b>1,515,073</b>	<b>1,665,125</b>
<b>Grand Total</b> .. .. .	<b>12,257,534</b>	<b>11,253,203</b>	<b>10,698,222</b>	<b>10,602,083</b>	<b>10,953,401</b>

IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES INTO THE UNITED KINGDOM—*continued.*

Country of Origin.	1927.	1928.	1929.	1930.	1931.
FROZEN—VALUE.					
	£	£	£	£	£
United States of America ..	15,379	508	778	..	..
Brazil .. .. .	109,397	136,487	110,242	226,617	149,606
Uruguay .. .. .	316,294	225,884	169,468	476,559	349,300
Argentina .. .. .	1,822,828	680,191	869,126	664,586	410,853
Other Foreign Countries ..	6,010	..	54,037	..	877
Australia .. .. .	1,109,227	1,935,417	1,819,616	1,561,342	1,547,425
New Zealand .. .. .	370,010	681,685	171,623	496,784	320,691
Other British Countries ..	2,757	298	16,280	22,470	2,503
Total Frozen .. .. .	3,751,902	3,660,470	3,211,170	3,448,358	2,781,255
Grand Total .. .. .	26,593,851	28,192,044	28,447,797	27,171,048	22,915,460

## § 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 premier position in sheep-raising. Within its borders is contained generally one half of the sheep of Australia, and in the years 1924 to 1927 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 110,568,279 in 1930, the latter figure constituting a record eclipsing the previous record of 106.4 millions in 1891. At no previous period have such large numbers been depastured continuously, and the development has taken place notwithstanding an annual slaughter of some ten to fifteen million sheep and lambs for the mutton and lamb trade.

The number of sheep in the several States and Territories for each year from 1928 to 1931 with an estimate for the year 1932 is as follows:—

## SHEEP.—NUMBERS.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Nor. Ter.	Fed. Cap. Ter.	Total.
1928	250,184,950	16,498,222	18,509,201	7,079,947	8,943,002	2,000,605	7,635	2,207,211	103,430,773
1929	418,720,000	17,427,203	20,324,303	6,185,252	9,556,823	2,091,113	12,203	2,240,445	104,558,342
1930	553,366,000	16,477,995	22,542,043	5,980,959	9,882,761	2,119,606	15,838	2,183,077	110,568,279
1931	52,986,000	16,376,217	22,324,278	6,608,981	10,098,104	2,012,055	18,867	194,391	110,618,893
1932 <i>b</i>	53,000,000	17,512,394	21,312,865	7,713,236	10,404,981	2,000,000	20,000	200,000	112,163,476

(a) 30th June year following.

(b) Estimate as at 31st December, 1932.

3. **Proportion in the Several States and Territories.**—Apart from the effect of drought the relative numbers of sheep depastured in the different States show little change. The most noteworthy alteration was a loss of 2.20 per cent. in New South Wales and a gain of 3.67 per cent. in Queensland during 1931 as compared with 1927.

The percentage distribution in 1931 was :—New South Wales, 47.90; Victoria, 14.81; Queensland, 20.18; South Australia, 5.98; Western Australia, 9.13; Tasmania, 1.82; Federal Capital Territory, 0.18 per cent.

4. **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 figures taken mainly from the Year Book of the International Institute of Agriculture represent the latest returns available in regard to the number of sheep in the principal wool-producing countries. The leading position is held by Australia, with more than 110 millions, followed by the Soviet Republics, with 80 millions, the United States with 54 millions and the Union of South Africa, 48 millions. In previous years the largest numbers were recorded in the Soviet Republics where a total of as high as 130 millions was shown, but in 1931 the number quoted by the International Institute of Agriculture was reduced to 80 millions, equal to a decline of over 50 millions. No explanation of this large decrease is available, but it is known that heavy slaughterings have occurred as a protest by the peasants to the intensification of the Soviet collectivization plan. Russian sheep are almost entirely coarse-woolled and the poor quality wool does not ordinarily figure in world trade. Efforts are being made, however, 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. As pointed out in sub-paragraph 6 following, however, the export of stud sheep is now subject to control. The production of wool, in Russia, apparently, amounted to about 220 million lbs. only during the year 1931. This represents an average weight of fleece shorn of about 3 lb., which is considerably less than half of that obtained in Australia.

## SHEEP.—NUMBER IN VARIOUS COUNTRIES.

Country.	Date.	No. of Sheep (,000 omitted).	Country.	Date.	No. of Sheep (,000 omitted).
Australia .. ..	1931	110,619	Greece .. ..	1931	7,072
Soviet Republics ..	1931	79,500	French Morocco ..	1931	6,613
United States of America ..	1931	53,912	Chile .. ..	1930	6,263
Union of South Africa	1930	48,358	Iraq (a) .. ..	1931	5,464
India (British and Native) .. ..	1930	44,628	Bolivia .. ..	1931	5,232
Argentine Republic ..	1930	44,413	Persia .. ..	1931	4,942
New Zealand .. ..	1931	29,793	Algeria .. ..	1931	4,671
United Kingdom ..	1931	26,374	Portugal .. ..	1925	3,721
Uruguay .. ..	1930	20,558	Canada .. ..	1931	3,608
Spain .. ..	1931	20,047	Irish Free State ..	1931	3,575
Rumania .. ..	1931	12,356	Germany .. ..	1931	3,499
Turkey .. ..	1931	11,762	Kenya .. ..	1930	3,227
Peru .. ..	1929	11,209	Syria and Lebanon ..	1931	2,969
Italy .. ..	1930	9,896	Basutoland .. ..	1931	2,829
France .. ..	1931	9,845	Mexico .. ..	1926	2,698
French Equatorial and West Africa ..	1931	9,766	Poland .. ..	1931	2,599
Bulgaria .. ..	1926	8,739	Somaliland .. ..	1931	2,500
Yugoslavia .. ..	1931	8,426	Tunis .. ..	1931	2,475
Brazil .. ..	1920	7,933	Sudan (Anglo-Egyptian) ..	1931	2,250
			Nigeria .. ..	1931	2,250
			Tanganyika Territory	1931	2,233

(a) Including goats.

5. **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.

Continents, etc.	Number at the date nearest—		Increase (+) or Decrease (-) in 1929.	
	1913.	1929.	Actual Figures.	Percentages.
	,000	,000	,000	%
Europe (excluding the U.S.S.R.) ..	126,999	123,900	- 3,099	- 2.4
United Socialist Soviet Republics	111,051	132,800	+ 21,749	+19.5
North and Central America ..	43,148	55,700	+ 12,552	+29.1
South America .. ..	100,392	102,500	+ 2,108	+ 2.1
Asia (a) .. ..	41,802	65,900	+ 24,098	+55.5
Africa .. ..	76,583	100,300	+ 23,717	+30.9
Oceania .. ..	109,331	133,700	+ 24,369	+22.2
<b>Total .. ..</b>	<b>609,306</b>	<b>714,800</b>	<b>+ 105,494</b>	<b>+20.1</b>

(a) Excluding U.S.S.R., China and Persia.

6. **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 buyers from New Zealand, South Africa, Russia and Japan at the Australian Stud Sheep Sales during recent years opened up a regular export trade with these countries in stud sheep. On the 27th November, 1929, however, the export of stud sheep was prohibited, except with the approval of the Minister for Trade and Customs. Consequently exports declined during 1931-32, and amounted to 297 sheep only valued at £1,702, as compared with 6,389 valued at £32,933 in 1929-30. The following table shows the imports and exports of stud and ordinary sheep for the years 1927-28 to 1931-32 :—

## SHEEP.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
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
1929-30 ..	2,908	23,278	41,672	58,959	38,764	35,681
1930-31 (a) ..	1,417	10,868	27,478	14,214	26,061	3,346
1931-32 (a) ..	1,566	8,326	48,697	16,822	47,131	8,496

(a) Australian currency values.

7. **Sheep Slaughtered.**—The number of sheep slaughtered in the several States during each of the years from 1927 to 1931 was as follows:—

**SHEEP (INCLUDING LAMBS) SLAUGHTERED.**

Year.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Nor. Ter.	Fed. Cap. Ter.(a)	Total.
1927..	5,009,511	4,732,494	660,742	1,209,608	784,349	328,671	..	22,507	12,756,882
1928..	4,967,835	5,286,642	805,461	1,263,352	807,510	331,820	..	20,384	13,483,004
1929..	6,326,925	6,024,702	1,089,978	1,242,835	861,785	341,527	644	23,026	15,911,422
1930..	6,254,436	5,745,475	1,671,245	1,308,976	994,813	363,329	540	23,911	16,362,725
1931..	6,894,961	5,678,252	1,761,974	1,378,931	1,038,672	399,904	540	23,448	17,176,682

(a) Year ended 30th June year following.

8. **Production and Consumption of Mutton and Lamb.**—The production of mutton and lamb during the year 1931–32 amounted to 688,300,065 lb., of which 521,697,830 lb., or 76 per cent., was consumed locally, leaving a balance of 24 per cent. for exportation. See also § 1, No. 10.

9. **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 export of 246,971,346 lbs., valued at £5,482,564, was made in 1919–20, and in 1922–23 the shipments were valued at £4,321,917. 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 follow:—1927–28, 46,362,954 lb., £1,188,506; 1928–29, 84,929,176 lb., £2,166,043; 1929–30, 100,411,243 lb., £2,386,186; 1930–31, 109,253,195 lb., £2,105,963; 1931–32, 165,281,336 lb., £2,994,062. See Table § 1 No. 8.

As in the case of frozen beef, the principal customer in this trade is the United Kingdom, which absorbed 95 per cent. of the total quantity exported from Australia during the year 1931–32, while the balance was shipped mainly to Belgium, France and Malaya (British).

10. **Resolutions at Ottawa Conference.**—Reference has already been made to the agreement reached at the Imperial Economic Conference at Ottawa regarding the regulation of imports of meat into the United Kingdom. See § 3, 9 *ante*.

11. **Imports of Frozen Mutton and Lamb into the United Kingdom.**—The quantities and values of frozen mutton and lamb imported into the United Kingdom from various countries for the five years ending in 1931 are given in the following table, viz. :—

**IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM.**

Country of Origin.	1927.	1928.	1929.	1930.	1931.
<b>MUTTON—QUANTITIES.</b>					
	cwt.	cwt.	cwt.	cwt.	cwt.
Soviet Union .. ..	..	1,152	..	..	..
China .. .. .	13,369	..	4,681	..	..
Chile .. .. .	182,742	223,693	192,017	202,715	125,907
Brazil .. .. .	1,690	1,421	26,168	11,588	1,799
Uruguay .. .. .	193,719	245,573	194,441	156,756	53,605
Argentina .. .. .	788,681	706,145	654,865	656,685	485,350
Other Foreign Countries ..	952	902	1,803	2,641	124
<b>Total, Foreign ..</b>	<b>1,181,153</b>	<b>1,178,886</b>	<b>1,073,975</b>	<b>1,030,385</b>	<b>666,785</b>

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM—  
*continued.*

Country of Origin.	1927.	1928.	1929.	1930.	1931.
MUTTON—QUANTITIES.					
	cwt.	cwt.	cwt.	cwt.	cwt.
Australia .. .. .	192,440	211,681	128,858	254,238	502,211
New Zealand .. .. .	1,047,682	962,891	883,789	1,172,262	1,105,105
Other British Countries .. .. .	6	311	125	1,305	3
Total, British .. .. .	1,240,128	1,174,883	1,012,772	1,427,805	1,607,319
Grand Total .. .. .	2,421,281	2,353,769	2,086,747	2,458,190	2,274,104

MUTTON—VALUE.					
	£	£	£	£	£
Soviet Union .. .. .	..	2,690	..	..	..
China .. .. .	29,587	..	10,922	..	..
Chile .. .. .	389,778	555,282	440,917	335,882	203,360
Brazil .. .. .	3,405	3,941	56,985	29,466	3,038
Uruguay .. .. .	434,838	590,242	486,818	366,746	103,301
Argentina .. .. .	1,760,080	1,838,331	1,693,863	1,594,543	952,349
Other Foreign Countries .. .. .	2,045	2,504	4,536	5,912	244
Total, Foreign .. .. .	2,619,733	2,992,990	2,694,041	2,332,549	1,262,292
Australia .. .. .	402,108	530,911	293,478	552,149	810,537
New Zealand .. .. .	2,727,274	2,708,136	2,360,940	2,699,759	2,033,978
Other British Countries .. .. .	8	721	347	3,752	8
Total, British .. .. .	3,129,390	3,239,768	2,654,765	3,255,660	2,844,523
Grand Total .. .. .	5,749,123	6,232,758	5,348,806	5,588,209	4,106,815

LAMB—QUANTITIES.					
	cwt.	cwt.	cwt.	cwt.	cwt.
Iceland .. .. .	6,775	8,383	10,980	16,910	18,097
United States .. .. .	2,154	208	1,595	2,443	..
Chile .. .. .	92,723	128,528	139,151	152,052	113,992
Brazil .. .. .	2,994	723	1,002	15,785	10,362
Uruguay .. .. .	123,533	157,823	172,316	266,571	230,695
Argentina .. .. .	747,802	805,323	890,297	795,358	1,067,959
Other Foreign Countries .. .. .	..	14	1,105	182	280
Total, Foreign .. .. .	975,981	1,101,002	1,216,446	1,249,301	1,441,385
Australia .. .. .	432,377	334,846	464,632	555,932	1,027,134
New Zealand .. .. .	1,679,290	1,831,914	1,862,298	2,120,580	2,364,656
Other British Countries .. .. .	88	236	785	905	..
Total, British .. .. .	2,111,755	2,166,996	2,327,715	2,677,417	3,391,790
Grand Total .. .. .	3,087,736	3,267,998	3,544,161	3,926,718	4,833,175

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM—  
*continued.*

Country of Origin.	1927.	1928.	1929.	1930.	1931.
<b>LAMB—VALUE.</b>					
	£	£	£	£	£
Iceland .. .. .	24,632	34,864	31,026	50,177	45,310
United States .. .. .	7,320	1,046	5,317	8,761	..
Chile .. .. .	324,430	488,993	510,295	443,906	274,645
Brazil .. .. .	8,722	2,392	3,429	51,500	24,319
Uruguay .. .. .	376,436	511,805	573,966	820,209	603,981
Argentina .. .. .	2,475,284	2,834,450	3,077,313	2,519,074	2,806,270
Other Foreign Countries .. .. .	..	125	5,194	634	687
<b>Total, Foreign .. .. .</b>	<b>3,216,824</b>	<b>3,873,675</b>	<b>4,206,540</b>	<b>3,894,261</b>	<b>3,755,212</b>
Australia .. .. .	1,556,658	1,284,660	1,725,152	1,933,600	2,785,113
New Zealand .. .. .	6,904,046	7,950,598	7,664,459	8,232,156	7,600,524
Other British Countries .. .. .	426	737	4,007	3,339	..
<b>Total, British .. .. .</b>	<b>8,461,130</b>	<b>9,235,995</b>	<b>9,393,618</b>	<b>10,169,095</b>	<b>10,385,637</b>
<b>Grand Total .. .. .</b>	<b>11,677,954</b>	<b>13,109,670</b>	<b>13,600,158</b>	<b>14,063,356</b>	<b>14,140,849</b>

### § 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 1931-32, one-quarter of the world's supply. Moreover, half of the world's production of fine quality merino wool is produced in Australia. 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.

The important position held by Australia among the principal sheep and wool producing countries of the world is more clearly shown in the following table :—

#### SHEEP AND WOOL—PRINCIPAL PRODUCING COUNTRIES.

Country.	Year.	No. of Sheep (in millions).	Wool Production (in millions of lb., greasy).
Australia .. .. .	1931-32	110.6	1,006.6
United States .. .. .	1931	53.9	435.0
Soviet Republics .. .. .	1931	79.5	386.0
South Africa .. .. .	1930	48.3	335.0
Argentina .. .. .	1930	44.4	333.0
New Zealand .. .. .	1931-32	28.7	282.8

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 the clip. The heavy decline in the price of wool which commenced in 1929-30 continued during the season 1931-32 and its effect upon the national income is reflected in the following figures. Based on the average auction room price of greasy wool the output for the season 1931-32 was valued at £35,073,500 compared with £44,222,000 in 1929-30; £70,833,000 in 1928-29, £81,430,000 in the record price year 1924-25, and £58,985,000, representing the average of the previous five seasons. The average auction room price of greasy wool declined from 16.44d. per lb. in 1928-29 to 10.29d. per lb. in 1929-30, to 8.36d. in 1930-31, to 8.46d. in 1931-32, and in 1932-33 an increase to 8.72d. per lb. was recorded, a fall of 47.0 per cent. since 1928-29. During the five years ending 1931-32 the export of wool averaged 43 per cent. of the value of the total shipments of merchandise from Australia, while during 1931-32 the proportion was 32.8 per cent.

3. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as "in the grease" or as "scoured or washed" is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of extraneous matter and grease in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, while it varies also with the breed and the condition of the sheep. There is, moreover, no clearly defined standard in regard to the cleanliness of wool described as scoured or washed. Consequently, any comparisons of the weight of the Australian clip for different years or seasons whether on a greasy or a scoured basis cannot be regarded as scrupulously exact. After extensive inquiry, however, by this Bureau it has been accepted that for the purpose of converting the Australian clip from the greasy to the clean category, the clean weight may be estimated at 46.15 per cent. of the greasy weight; in other words, 2½ lb. of greasy wool are equivalent to 1 lb. of clean wool.

The quantity of scoured or washed Australian wool exported during the last five years was approximately 13 per cent. of the total wool exports regarded as "greasy".

4. **Production.**—(i) *Quantity.* The bulk of the Australian wool production is shorn from live sheep. Approximately 6 per cent. is obtained by fellmongering and about 4 per cent. is on exported skins. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table gives the production for each of the past five seasons:—

#### WOOL.—TOTAL PRODUCTION.

State.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
	lb.	lb.	lb.	lb.	lb.
New South Wales(a) ..	443,860,000	484,753,597	461,852,890	428,752,210	503,275,416
Victoria ..	148,503,795	179,854,306	160,662,578	146,862,612	159,721,916
Queensland ..	136,544,333	150,108,044	161,087,873	182,061,407	184,716,462
South Australia ..	78,369,918	74,616,004	67,300,881	63,478,524	67,021,312
Western Australia ..	67,549,734	63,890,984	72,562,594	76,951,500	77,985,741
Tasmania ..	13,272,000	14,900,000	14,100,000	14,100,000	13,875,000
Northern Territory(b)	30,000	30,000	30,000	35,000	35,000
Total ..	888,129,780	968,152,935	937,596,816	912,141,253	1,006,630,847

(a) Including Federal Capital Territory.

(b) Approximate figures.

(ii) *Estimate for 1932-33.* Although the returns are not yet complete, the total wool production of the Commonwealth during 1932-33 is estimated at 1,028,000,000 lb., valued at approximately £37,350,000 or 8.72d. 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 from the report of the Textile Division of the United States Department of Commerce shows the importance of Australia as a wool-producing country. Out of a total world production of 3,828 million lb. in 1931, Australia's share amounted to over 912 million lb., or nearly 25 per cent.

**WOOL (a).—WORLD'S PRODUCTION.**

(In millions of lb.)

Countries.	Average Annual Pre-War Production.(b)	Production.				
		1927.	1928.	1929.	1930.	1931.(c)
<b>North America—</b>						
United States ..	314.1	328.1	351.0	363.5	397.9	435.0
Canada ..	11.2	18.7	19.6	21.4	21.2	20.4
Mexico ..	7.0	2.0	1.3	1.3	12.4	6.6
<b>Total ..</b>	<b>332.3</b>	<b>348.8</b>	<b>371.9</b>	<b>386.2</b>	<b>431.5</b>	<b>462.0</b>
<b>Central America and West Indies ..</b>	<b>1.0</b>	<b>0.7</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>South America—</b>						
Argentine Republic	358.7	331.0	342.3	323.4	333.3	333.0
Brazil ..	35.0	26.4	24.2	24.2	24.2	24.2
Chile ..	17.4	35.0	33.0	32.5	30.0	26.7
Peru ..	9.9	10.0	10.0	10.3	10.3	12.1
Uruguay ..	157.0	130.0	135.0	135.0	140.0	110.0
All other ..	9.3	20.3	17.1	19.8	8.1	9.1
<b>Total ..</b>	<b>587.3</b>	<b>552.7</b>	<b>561.6</b>	<b>545.2</b>	<b>545.9</b>	<b>515.1</b>
<b>Europe—</b>						
Austria ..	15.4	1.2	0.8	0.9	0.8	0.8
Belgium ..	1.0	0.8	0.8	0.8	0.8	1.2
Bulgaria ..	23.7	22.0	21.5	22.9	22.0	21.6
Czechoslovakia ..	..	3.4	3.3	3.3	3.3	3.3
Denmark ..	3.5	3.2	2.6	3.0	2.6	2.6
Estonia ..	..	2.4	1.9	1.5	1.5	1.5
Finland ..	..	5.0	5.0	4.3	4.5	4.5
France ..	80.7	47.4	49.6	44.0	46.3	43.0
Germany ..	52.0	38.5	31.9	34.7	35.0	32.4
Greece ..	14.0	17.5	16.6	16.6	19.0	17.6
Hungary ..	17.6	16.5	11.5	6.1	6.2	11.0
Iceland ..	2.0	(d)	(d)	(d)	(d)	(d)
Italy ..	55.0	55.8	49.5	37.5	33.0	28.6
Netherlands ..	3.6	4.0	4.0	4.4	3.5	2.5
Norway ..	8.2	6.2	5.5	5.5	5.5	5.5
Poland ..	7.1	4.3	9.8	8.8	9.9	10.4
Portugal ..	10.0	6.0	6.3	5.1	6.6	6.6
Rumania ..	13.2	55.0	55.0	55.0	53.0	44.0
Russia ..	320.0	237.1	370.3	384.2	384.3	386.0
Spain ..	72.0	104.5	100.0	99.0	75.0	108.0
Sweden ..	2.9	2.2	1.6	1.3	1.3	1.2
Switzerland ..	1.0	0.7	0.9	0.9	0.9	0.9
Turkey ..	28.0	..	..	..	..	..
United Kingdom ..	134.0	117.7	106.1	117.8	152.6	156.0
Irish Free State ..	..	12.8	13.6	14.5	14.7	15.0
Yugoslavia ..	25.4	37.4	30.0	30.0	30.0	26.8
All other ..	..	7.8	7.3	9.9	9.5	10.7
<b>Total ..</b>	<b>890.3</b>	<b>809.4</b>	<b>905.4</b>	<b>912.0</b>	<b>921.8</b>	<b>941.7</b>

(a) Computed on "greasy" basis. (b) Average for years 1909 to 1913 inclusive. (c) Where 1931 figures were not obtainable, an earlier figure or an unofficial estimate has been inserted. (d) Included with Denmark.

WOOL.—WORLD'S PRODUCTION—*continued.*

(In millions of lb.)

Countries.	Average Annual Pre-War Production.	Production.				
		1927.	1928.	1929.	1930.	1931.
<b>Asia—</b>						
British India ..	60.0	55.0	70.0	70.0	70.0	71.0
China ..	50.0	60.0	55.5	55.5	55.5	70.0
Persia ..	12.1	18.0	14.0	45.0	45.0	48.8
Russia in Asia ..	60.0	79.5	(e)	(e)	(e)	(e)
Turkey in Asia ..	90.0	11.3	11.0	7.7	59.9	60.0
All other ..	1.0	52.0	56.6	51.6	52.0	51.0
<b>Total ..</b>	<b>273.1</b>	<b>275.8</b>	<b>207.1</b>	<b>229.8</b>	<b>282.4</b>	<b>300.8</b>
<b>Africa—</b>						
Algeria ..	35.2	36.8	38.8	43.0	48.0	35.3
British South Africa ..	165.9	240.0	285.0	312.0	337.0	335.0
Tunis ..	3.7	5.7	3.1	3.8	8.8	8.8
Morocco ..	14.9	38.7	21.6	21.7	23.1	30.9
All other ..	30.0	29.3	18.4	19.5	20.4	20.6
<b>Total ..</b>	<b>249.7</b>	<b>350.5</b>	<b>366.9</b>	<b>400.0</b>	<b>437.3</b>	<b>430.6</b>
<b>Oceania—</b>						
Australia ..	741.4	924.4	888.1	968.2	937.6	912.1
New Zealand ..	198.5	202.4	235.6	222.5	241.8	266.0
<b>Total ..</b>	<b>939.9</b>	<b>1,126.8</b>	<b>1,123.7</b>	<b>1,190.7</b>	<b>1,179.4</b>	<b>1,178.1</b>
<b>Total all other Countries</b>	<b>13.0</b>	<b>15.0</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>GRAND TOTAL</b>	<b>3,286.6</b>	<b>3,479.7</b>	<b>3,536.6</b>	<b>3,663.9</b>	<b>3,798.3</b>	<b>3,828.3</b>

(e) Included with Russia in Europe. (See also notes on preceding page.)

7. **Wool Locally Used.**—The quantity of wool used locally, so far as can be ascertained, is shown in the following table. Precise details of consumption are difficult to obtain, but the quantities shown hereunder should closely approximate the truth.

## WOOL.—ESTIMATED CONSUMPTION OF GREASY WOOL—AUSTRALIA.

Particulars.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
	lb.	lb.	lb.	lb.	lb.
Wool Consumption — in terms of Greasy ..	42,905,118	51,130,028	56,499,906	46,523,514	66,771,374

8. Export of Wool.—(i) *Greasy—Quantities.* Of the total weight of greasy wool shipped overseas during the past five years nearly 30 per cent. was sent to the United Kingdom, as compared with 38 per cent. dispatched in pre-war years. The other leading consignees since 1928–29 were France, Japan, Germany, Belgium, Italy and the United States of America, the principal continental countries taking 49.4 per cent., and America and Japan 19.6 per cent. of the total shipments. The following table shows the quantities of “greasy” wool exported, and the principal countries of destination :—

WOOL IN THE GREASE.—EXPORTS, AUSTRALIA.

Country to which Exported.	Average, Five Years, 1909–13.	1928–29.	1929–30.	1930–31.	1931–32.	Average for Five Years ending 1931–32.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	212,004,088	212,035,141	202,438,310	228,196,396	256,845,443	219,124,306
France ..	149,835,946	172,006,450	172,783,716	147,453,999	116,355,296	149,902,598
Japan ..	7,262,683	101,092,258	83,243,431	151,201,649	185,672,264	125,521,804
Germany ..	106,344,666	99,933,251	94,962,530	104,320,246	80,565,488	95,036,734
Belgium ..	55,143,706	99,095,826	80,764,804	74,488,232	63,822,477	78,960,821
United States of America	15,486,447	19,154,235	19,346,569	20,378,195	9,362,688	19,066,213
Italy ..	4,381,197	40,104,242	35,582,700	37,724,169	56,740,272	40,968,495
Netherlands ..	(a)	296,051	770,940	956,029	461,462	517,017
India ..	425,547	1,404,596	948,394	466,704	673,314	854,267
Canada ..	126,653	270,921	310,185	23,735	102,134	176,837
Other Countries ..	5,830,377	17,346,556	8,249,325	3,759,976	4,626,184	9,027,861
Total ..	556,841,340	763,339,527	699,400,904	768,969,330	775,227,022	739,156,953

(a) Included in Other Countries.

(ii) *Scoured and Washed—Quantities.* The exports of “scoured and washed” wool during the period shown were as follow :—

WOOL, SCOURED AND WASHED (a).—EXPORTS, AUSTRALIA.

Country to which Exported.	Average Five Years 1909–13.	1928–29.	1929–30.	1930–31.	1931–32.	Average for Five Years ending 1931–32.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	32,032,577	24,818,010	26,859,655	23,762,729	33,355,887	25,607,843
France ..	16,068,910	5,463,934	6,331,892	6,206,301	5,371,571	6,513,368
Japan ..	1,888,161	1,972,525	1,333,763	2,334,505	2,508,758	2,268,875
Belgium ..	7,528,058	6,987,612	4,382,722	5,255,927	6,007,231	5,780,085
Germany ..	12,310,967	3,534,812	3,964,028	5,174,277	4,883,080	4,912,068
United States of America	66,156	875,775	585,093	376,543	356,088	598,253
Canada ..	(b)	614,677	440,097	1,091,112	1,599,432	806,743
Italy ..	265,442	544,585	336,770	616,790	2,664,242	911,533
Netherlands ..	(b)	12,718	12,590	24,995	208,112	56,414
India ..	59,684	174,272	354,569	459,440	549,272	310,973
Other Countries ..	127,155	2,202,143	342,720	355,390	385,984	2,148,140
Total ..	70,347,110	47,201,063	44,944,799	45,658,009	57,889,666	49,911,295

(a) Including “tops.”

(b) Included with Other Countries.

The figures for “scoured and washed wool” include tops as follow :—in 1927–28, 2,559,159 lb., valued at £488,199; in 1928–29, 872,774 lb., valued at £166,957; in 1929–30, 552,152 lb., valued at £87,871; in 1930–31, 1,033,913 lb., valued at £114,035, and in 1931–32, 2,170,330 lb. valued at £248,055. See also § 1 No. 8. The total exports of wool tops during the last five years amounted to 7,188,328 lb., valued at £1,105,027, of which 3,027,241 lb., or more than 42 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.**

Country to which Exported.	Average Five Years 1909-13.	1928-29.	1929-30.	1930-31.	1931-32.	Average for Five Years ending 1931-32.
	£	£	£	£	£	£
United Kingdom ..	10,608,967	19,947,694	12,648,045	10,257,653	11,841,995	14,937,837
France ..	6,494,832	11,865,744	8,075,006	5,479,746	4,004,983	8,277,191
Japan ..	516,528	8,693,195	4,434,746	6,478,587	7,513,519	7,487,379
United States of America ..	795,328	1,883,155	1,154,433	1,117,533	542,728	1,560,612
Germany ..	5,131,282	7,773,780	4,626,041	4,165,020	3,223,083	5,773,713
Belgium ..	2,546,915	6,434,323	3,316,902	2,623,906	2,284,555	4,169,151
Italy ..	202,434	3,019,802	1,641,166	1,482,943	2,174,633	2,252,530
Netherlands ..	(a)	27,411	44,061	41,616	36,651	32,653
Canada ..	6,765	113,926	82,850	109,280	178,703	112,779
India ..	22,308	110,802	74,292	41,839	64,638	68,919
Other Countries ..	267,283	1,745,413	502,968	205,182	237,408	1,011,051
<b>Total ..</b>	<b>26,592,642</b>	<b>61,615,245</b>	<b>36,600,510</b>	<b>32,003,305</b>	<b>32,102,896</b>	<b>45,683,815</b>

(a) Included with Other Countries.

9. *Average Export Value.*—The following table shows the average values per pound of Australian wool according to the export returns for the periods indicated. The values are based on the auction room price plus the cost of placing the wool on board ship.

**AUSTRALIAN WOOL.—EXPORT VALUE PER POUND.**

Description.	Average Five Years 1909-13.	Average Five Years 1923-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	Average Five Years 1929-33.
	d.	d.	d.	d.	d.	d.	d.	d.	d.
Greasy	9.40	20.42	20.49	17.58	11.30	9.16	8.97	9.07	11.16
Scoured	16.36	28.15	31.87	28.72	19.34	13.56	12.14	12.95	16.73

10. *Average Market Value.*—The following table gives details of the average price in Australia of greasy and scoured wool as compiled by the National Council of Wool-selling Brokers. In the matter of greasy wool the margin between the values shown and those of the previous table represents the cost of placing the wool on board ship. This cost includes delivery from store to ship, wharfage, buyers' commission, handling charges, and insurance after sale.

**WOOL.—AVERAGE MARKET VALUE PER LB.**

Description.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
	d.						
Greasy ..	16.86	19.50	16.44	10.29	8.36	8.46	8.72
Scoured ..	27.99	32.21	28.12	18.69	13.74	12.65	14.08

11. *Exports and Local Sales of Wool.*—Approximately 90 per cent. of Australian wool is now disposed of locally prior to export. Buyers from the United Kingdom, France, Belgium, Germany, and other European countries, and 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 proportions of the various descriptions of wool marketed in each State, will be found in the Production Bulletins issued by this Bureau.

12. **The Wool Market.**—(i) *The 1931-32 Season.* The season 1931-32 was the third consecutive year of extremely low values. Average auction prices were 16.44d. per lb. in 1928-29, compared with 10.29d. in 1929-30, 8.36d. in 1930-31, a fall of 49.15 per cent. In 1931-32, however, there was an increase to 8.46d., but this figure is too low to be remunerative to growers. Measured in terms of Australian, Sterling, and Gold currencies the approximate value of greasy wool per lb. was as follows:—

**AVERAGE VALUE OF GREASY WOOL PER LB.—AUSTRALIA.**

Year.	Australian Currency.	Sterling.	Gold Prices.
	<i>d.</i>	<i>d.</i>	<i>d.</i>
1928-29 .. ..	16.44	16.44	16.44
1929-30 .. ..	10.29	10.29	10.29
1930-31 .. ..	8.36	6.96	6.96
1931-32 .. ..	8.46	6.69	5.10
1932-33 .. ..	8.72	6.98	4.84

The average values shown in sterling and gold currencies have been calculated by converting the average prices shown in Australian currencies on the basis of the average rate of exchange between the months of September and June in each year. Though not exact these results will suffice for general purposes. The estimated value of the total wool production for the season 1931-32 was £35,073,500 as compared with £34,803,500 in 1930-31, and £81,430,000 during the record year of 1924-25.

During the year 2,713,846 bales were sold, compared with 2,481,255 bales in the previous year. The average return per bale was 4s. 5d. less than the previous year, while the aggregate realized £29,642,868 as against £60,873,662 in 1927-28.

During the year 1931-32 the number of bales sold in Australia was 2,713,846 as against 2,481,255 bales in the previous year and 2,411,373 bales in 1927-28. The amounts realized at the sales in these years were, respectively 1931-32, £29,642,868; 1930-31, £27,645,745; and in 1927-28 which was the record year for aggregate values, £60,873,662.

(ii) *Wool Realization Scheme.* The affairs of the British-Australian Wool Realization Association have been liquidated and consequently references to its operations which appeared in previous Year Books are not repeated in this issue.

13. **United Kingdom Importation of Wool.**—The appended statement of the quantity and value of wool imported into the United Kingdom during the year 1931 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, 1931.**

Country from which imported.	Quantity.	Value.	Country from which imported.	Quantity.	Value.
	lb.	£		lb.	£
Australia ..	289,969,400	11,801,012	Other British Possessions ..	3,806,700	115,583
New Zealand ..	188,381,500	8,246,548	Peru ..	3,048,200	103,957
Union of South Africa ..	130,994,300	5,544,671	Belgium ..	2,088,700	100,885
Argentine Republic ..	94,346,600	2,320,716	Germany ..	1,896,500	79,451
Uruguay ..	38,517,900	1,141,360	Falkland Islands	1,395,700	48,750
India ..	35,806,300	1,034,819	Persia ..	645,700	32,537
Chile ..	25,213,000	816,068	United States of America ..	510,800	13,782
France ..	19,016,500	908,918	Other Countries	5,077,300	186,200
Irish Free State	7,513,600	219,810			
			Total ..	848,228,700	32,715,067

(a) Greasy, Scoured, and Tops.

Of the importations of wool into the United Kingdom, Australian wool represented 34 per cent. of quantity and 36 per cent. of value, and New Zealand 22 per cent. of quantity and 25 per cent. of value. Altogether, 657,867,500 lb., valued at £27,011,193, were received from British Possessions, these figures being equivalent to 78 per cent. of the total weight and 83 per cent. of the total value of all wool imported.

14. *Inquiry into Wool Industry.*—(i) *General.* A Committee under the chairmanship of the Honorable John Gunn was appointed by the Commonwealth Government on the 15th August, 1932, to inquire into and report on the condition of the Australian Wool Industry. The report of the Committee was presented on the 24th November, 1932. The inquiry covered costs of production, prices, etc., and recommendations were made for the rehabilitation of the industry.

(ii) *Costs of Production.* Information relating to costs of production was obtained by the Committee from 668 returns covering the operations of representative properties in all States, these properties carrying altogether about 8 million sheep. From the returns received a sufficient number to represent typical conditions in different areas was selected and the following data are based on these selected returns. It is claimed in the Report that the figures given are representative of typical average costs on medium and large properties under the favourable seasonal conditions experienced in 1931. One member of the Committee, however, did not accept the conclusions arrived at in determining the cost of production, and his objections were set out in a separate statement. It should be noted that the costs quoted refer to the production of wool only, as distinct from stock and other station produce.

AVERAGE COSTS ATTRIBUTABLE TO WOOL ONLY.

	Per lb. of Wool.
Expenses of production—	<i>d.</i>
Working Expenses excluding all Interest .. .. .	6 $\frac{3}{4}$
Annual Maintenance and Average Drought Expenses .. .. .	1 $\frac{3}{4}$
	8 $\frac{1}{2}$
Total Wool Expenses at Sheep Properties .. .. .	8 $\frac{1}{2}$
Add Rail Freight, Handling and Selling Charges .. .. .	1
	9 $\frac{1}{2}$
Average Cost when sold .. .. .	9 $\frac{1}{2}$

The summary above does not take into account interest on borrowed capital or capital invested. This item at an average rate of interest of 5 per cent. on property valued at £3 per sheep area would amount to a further increase of 4 $\frac{1}{2}$ d. per lb. of wool making a total cost including all interest to the point of sale of 14d. per lb. No allowance has been made for management or the risk of investment in the industry.

(iii) *Prices.* Information regarding prices will be found on page 556, *ante*.

(iv) *Recommendations.* Recommendations were made by the Committee with a view to reducing the hiatus between cost and price. The recommendations refer, amongst other things, to reductions in rail freights, State Government charges generally, Land Tax (Commonwealth and State), Private Business Charges generally. Interest Rates, Handling and Selling Charges. The Committee also recommended (a) the formation of a Commonwealth Wool Executive, consisting of representatives of the wool-growers and wool-selling brokers, and (b) that the Commonwealth Government, by regulation or otherwise, should take to itself power to prohibit the export of wool, except on such conditions as may be prescribed, provided that such power should not be exercised except upon request of the Commonwealth Wool Executive.

Relief from those charges which come within the jurisdiction of the Commonwealth Government has been effected and efforts have been directed to give effect to the other recommendations as far as possible.

### § 6. Trade in Hides and Skins.

1. **Extent of Trade.**—In addition to the hides and skins treated locally, considerable quantities are exported, the value of Australian cattle and horse hides, and sheep and other skins sent overseas during the five years 1927–28 to 1931–32 amounting to £31,746,926, or an average of £6,349,385 per annum.

2. **Sheepskins with Wool.**—Sheepskins with wool—the exports of which during the five years aggregated £15,114,330—constitute the largest item in the values referred to in the preceding paragraph. During the year 1931–32 France was the largest purchaser, taking 48.6 per cent. of the total consignments, while the United Kingdom ranked next with 26.2 per cent., followed by the United States with 14.6 per cent. The remaining 20 per cent. was shipped principally to Germany and Belgium. The exports of sheepskins with wool during each of the years from 1927–28 to 1931–32 were as follow :—

#### SHEEPSKINS WITH WOOL.—EXPORTS, AUSTRALIA.

Particulars.	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.	Average for 5 Years.
Number ..	10,829,913	10,910,516	12,562,384	12,016,672	9,146,335	11,093,164
Value £	4,410,702	4,544,827	3,103,558	1,949,048	1,106,195	3,022,866

3. **Sheepskins without Wool.**—Sheepskins without wool are exported chiefly to the United States of America and the United Kingdom. These two countries took 94 per cent. of the exports during the past five years, the purchases of the United States of America alone amounting to 49 per cent. of the total shipments. Quantities and values for the last five years are given in the table hereunder :—

#### SHEEPSKINS WITHOUT WOOL.—EXPORTS, AUSTRALIA.

Particulars.	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.	Average for 5 Years.
Number ..	553,170	514,302	673,221	280,128	131,276	430,419
Value £	42,447	44,001	53,415	13,612	3,643	31,424

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. In 1931–32 Italy took 26 per cent. of the total shipments, followed by the United Kingdom 23 per cent., Sweden 10 per cent., Finland and Japan each 9 per cent., and Germany 7 per cent.

The exports during the past five years are given in the table below :—

#### CATTLE HIDES.—EXPORTS, AUSTRALIA.

Particulars.	1927–28.	1928–29.	1929–30.	1930–31.	1931–32.	Average for 5 Years.
Number ..	1,003,220	829,780	754,846	752,366	293,890	726,820
Value £	1,690,908	1,331,486	794,991	610,720	212,539	928,129

Calfskins exported during the years 1927–28 to 1931–32 numbered 1,334,210, valued at £377,957, and were shipped mainly to the United States of America, the value of the skins taken by that country averaging 56.3 per cent. of the total exports during the past five years. The annual export of horse hides is very small, and averaged only 8,802 hides, valued at £5,497.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly large, the average value during the past five years amounting to £332,939. New Zealand is the chief source of supply, and small quantities are obtained also from the Pacific Islands, France, and Italy. The number and value of cattle hides, including calfskins, imported into Australia during the five years 1927-28 to 1931-32 were as follow :—

**CATTLE HIDES.—IMPORTS, AUSTRALIA.**

Particulars.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	Average for 5 Years.
Number ..	327,903	363,400	340,150	(a)	(a)	(a)
Value (b) £	419,345	570,416	401,793	169,165	157,057	343,555

(a) Not available.

(b) Australian currency values.

The number of horse hides imported into Australia is small. The value of imports during the last five years averaged £337.

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

**OTHER SKINS.—EXPORTS, AUSTRALIA.**

Description.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	Average for Five Years ending 1931-32.
	£	£	£	£	£	£
Rabbit and Hare	2,492,522	2,630,295	1,526,242	570,240	488,736	1,541,607
Opossum ..	540,735	166,059	681,472	215,711	333,209	387,437
Kangaroo ..	200,781	207,532	193,385	127,932	96,997	165,326
Fox ..	140,301	132,771	115,241	47,787	56,435	98,507
Wallaby ..	42,184	87,299	38,714	25,012	7,848	40,211
Other ..	214,085	20,839	19,281	7,230	2,509	52,789
<b>Total ..</b>	<b>3,630,608</b>	<b>3,244,795</b>	<b>2,574,335</b>	<b>993,912</b>	<b>985,734</b>	<b>2,285,877</b>

The United States of America and the United Kingdom were the chief purchasers of these skins, as shown below :—

**OTHER SKINS.—AVERAGE EXPORTS TO UNITED STATES AND UNITED KINGDOM 1927-28 TO 1931-32.**

Description.	United Kingdom.	United States of America.
	£	£
Rabbit and Hare .. .. .	625,893	765,603
Opossum .. .. .	306,627	47,016
Kangaroo .. .. .	18,758	144,364
Fox .. .. .	67,340	22,360
Wallaby .. .. .	30,706	7,812
Other .. .. .	6,184	38,935
<b>Total .. .. .</b>	<b>1,055,508</b>	<b>1,026,090</b>