

CHAPTER XVIII.

FARMYARD, DAIRY, AND BEE PRODUCTS.

§ 1. Introductory.

1. **General.**—The introduction of cattle into Australia, and the early history of the dairying industry are referred to in some detail in earlier issues of this work (see Official Year Book No. 6, p. 430). It may here be noted that the original stock has been crossed with specially imported stud cattle, while further judicious crossing of strains has resulted in an increased and improved milk supply. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter, and rugging in the coldest weather. Indigenous and imported grasses furnish food during the greater part of the year, and winter fodder, when necessary, is given to the cattle in the fields. With the adoption of scientific methods in the treatment of animals and pasturages and in the processes of manufacture, coupled with effective State supervision, the dairying industry has shown rapid expansion.

2. **Official Supervision of Industry.**—Dairy experts, under the supervision of the various State Agricultural Departments, give instruction in approved methods of production, and inspect animals, buildings, and marketable produce. A high standard of cleanliness, both of *personnel* and *matériel*, prevails. Financial assistance of a temporary nature is also given, advances made being generally repaid with promptitude.

The export trade is regulated by the terms of the Commonwealth Commerce Act 1905 and regulations thereunder. The provisions of this Act are set out in detail in Official Year Book No. 6, pp. 431–2. It will be sufficient to note here that the true trade description, etc., must be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are certificated by the inspector.

3. **Mixed Farming.**—Dairying is not now, as formerly, wholly confined to farmers, since many graziers in a large way of business have lately given it their attention. In non-coastal regions it is generally carried on in conjunction with agriculture and sheep-raising, sufficient fodder being grown to carry the cattle through the winter months. Local wants are thus met, and in many places remote from the metropolis well-equipped factories have been established.

4. **Factory System.**—Cream separation and butter-making are often carried on together under the co-operative system. The creation of large central butter factories, supplied by numerous separating establishments or “creameries,” has resulted in a considerable reduction in the cost of manufacture, since improved appliances such as refrigerators, may be profitably worked at the larger establishments. The product is also of a more uniform quality. The number of farmers who adhere to hand processes is rapidly diminishing. Formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, but separator butter requires less than 2½ gallons.

5. **Butter and Cheese Factories.**—The factories in Australia for the manufacture of butter, cheese, and condensed milk numbered 591 in 1921–22. These were distributed in the various States as follows:—New South Wales, 183; Victoria, 188; Queensland, 134; South Australia, 46; Western Australia, 7; and Tasmania, 33.

§ 2. Dairy Cattle and Dairy Products.

1. **Dairy Herds.**—The dairy herds of Australia were severely depleted during the drought of 1914–15, when the number of dairy cattle was reduced to 1,684,393. Following that year rapid increases took place, particularly in the past two years, in the latter of which the number recorded reached its highest point, and represented a gain of more than 200,000 dairy cattle during the past ten years. In New South Wales, Victoria, South Australia, and Tasmania the proportion of dairy cattle to all cattle is high. In Queensland, the Northern Territory, and Western Australia there is a greatly preponderating number of other cattle, dairying not being firmly established in the tropical regions of the Continent. In Southern Queensland, however, the industry has developed remarkably during the last decade, and the progress attained in that area has been mainly responsible for the Australian increases since 1911. The figures for the Northern Territory are rough estimates only:—

CATTLE, AND DAIRY CATTLE—NUMBER, 1917 TO 1921.

State.		1917.	1918.	1919.	1920.	1921.
New South Wales	{ All Cattle ..	3,148,309	3,271,782	3,075,954	3,367,880	3,538,240
	{ Dairy Cows ..	776,662	717,910	697,140	757,534	815,579
Victoria	{ All Cattle ..	1,371,049	1,596,544	1,631,120	1,575,159	1,750,369
	{ Dairy Cows ..	534,388	592,070	623,652	620,005	719,473
Queensland	{ All Cattle ..	5,316,558	5,786,744	5,940,433	6,455,067	7,047,370
	{ Dairy Cows ..	399,508	381,505	373,146	448,634	554,208
South Australia	{ All Cattle ..	313,245	342,768	349,562	376,399	419,197
	{ Dairy Cows ..	96,661	103,230	106,932	117,536	131,054
Western Australia	{ All Cattle ..	957,086	943,447	880,644	849,803	893,108
	{ Dairy Cows ..	37,979	42,123	42,993	47,719	53,828
Tasmania	{ All Cattle ..	197,938	218,234	214,442	208,202	216,704
	{ Dairy Cows ..	58,910	64,511	64,073	63,681	68,595
Northern Territory	{ All Cattle ..	638,431	570,039	610,534	659,840	568,031
	{ Dairy Cows ..	70	70	70	70	70
Federal Capital Territory	{ All Cattle ..	13,408	8,894	8,378	7,387	8,290
	{ Dairy Cows ..	728	598	480	459	414
Australia ..	{ All Cattle ..	11,956,024	12,738,852	12,711,067	13,499,737	14,441,309
	{ Dairy Cows ..	1,904,906	1,902,036	1,908,536	2,055,638	2,343,221

2. **Milk.**—The annual quantity of milk produced per dairy cow varies greatly with locality and season, reaching as high as 1,000 gallons, but averaging for the whole of Australia, for all dairy cows and for all seasons, prior to 1916, considerably under 300 gallons per annum. Unfavourable seasons adversely affected the yields in 1918 and 1919, in which years the averages failed to reach 300 gallons, but satisfactory increases were in evidence throughout the States, with the exception of Western Australia, during the past two years, the 343 gallons obtained in Australia in 1921 constituting a record. The best yields over a series of years appear to be in Victoria, South Australia and New South Wales, while Queensland and Tasmania in normal years are above Western Australia. In the following table the annual average yields per cow for the last five years are taken from the number of dairy cows which were in milk during any part of the year. The average given is considerably below that for cows which were yielding during the greater part of the year. The highest averages were, of course, obtained in those States which have most extensively adopted scientific methods of dairying, such as systematic breeding, culling of herds, milk testing, etc.

MILK PRODUCTION, 1917 TO 1921.

Heading.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia. (b)
1917—								
Dairy cows (a) .. No.	759,603	511,237	371,410	91,486	35,883	55,716	724	1,826,059
Production 1,000 gals.	247,398	199,738	105,384	32,309	7,550	14,843	131	607,353
Aver. per cow ..gals.	326	391	284	358	210	266	182	333
1918—								
Dairy Cows (a) .. No.	747,286	563,234	390,507	99,945	40,056	61,710	663	1,993,401
Production 1,000 gals.	206,925	207,102	87,580	32,243	8,544	15,796	170	558,360
Aver. per cow ..gals.	277	368	224	323	213	256	256	293
1919—								
Dairy Cows (a) .. No.	707,525	607,866	377,325	105,106	42,563	64,292	539	1,905,216
Production 1,000 gals.	203,707	196,884	71,856	30,899	9,608	16,503	90	529,547
Aver. per cow ..gals.	288	324	190	294	226	257	167	278
1920—								
Dairy Cows (a) .. No.	727,337	621,829	410,890	112,259	45,356	63,877	469	1,982,017
Production 1,000 gals.	250,098	204,522	104,659	34,657	10,234	19,000	105	623,275
Aver. per cow ..gals.	344	329	255	309	226	297	223	314
1921—								
Dairy Cows (a) .. No.	786,557	669,739	501,421	124,295	50,773	66,138	437	2,199,360
Production 1,000 gals.	285,166	245,181	151,081	41,398	11,329	21,000	105	755,260
Aver. per cow ..gals.	363	366	301	333	223	318	240	343

(a) Mean for the year.

(b) Exclusive of Northern Territory.

3. **Butter and Cheese.**—While the quantity of dairy production is largely affected by the nature of the seasons, the output of butter shows a steady increase in the past decade. During that period the average annual production increased from 172,000,000 lbs. for the quinquennium 1907–1911 to 205,000,000 lbs. for the latest five years under review. The marked development of dairying in Queensland, where the butter production has more than doubled since 1911, was largely responsible for the increased butter output in Australia, although all the States contributed to this progress, with the exception of Victoria, where the butter industry appears to have remained stationary during the last ten years. The production of 267,071,340 lbs. in 1921 was the maximum output of butter in Australia.

The manufacture of cheese has been steadily increasing throughout Australia during recent years, the 1921 production of 32,653,003 lbs. being the highest yet recorded. The output of cheese has more than doubled in Australia since 1911, largely as the result of substantial progress in Queensland, the production of which State now amounts to one-half of the Australian total.

The development in dairy production since 1896, and in the exports of butter from 1901 onwards are shown in the graphs on page 700. Particulars for the past five years are as follows :—

BUTTER AND CHEESE PRODUCTION, 1917 TO 1921.

State.	1917.	1918.	1919	1920.	1921.
BUTTER.					
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales	a80,460,225	a65,991,738	a63,127,160	a84,259,641	a100,652,620
Victoria	a64,405,711	a66,240,403	a63,218,945	a64,938,458	a82,981,570
Queensland	38,930,690	32,371,575	26,213,514	40,751,373	60,923,194
South Australia	a10,482,895	a10,444,789	a9,810,335	a11,897,279	a14,565,599
Western Australia	1,361,484	1,789,390	1,980,273	2,212,311	2,658,153
Tasmania	4,848,227	4,947,560	4,290,724	4,014,402	5,270,243
Federal Capital Territory ..	a7,782	a17,220	a7,840	a8,400	a19,961
Australia	200,497,014	181,802,675	165,648,791	208,081,864	267,071,340

CHEESE.					
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales	a7,799,676	a5,982,120	a6,762,467	a6,407,209	a7,367,057
Victoria	a5,285,003	a6,055,964	a7,735,023	a3,636,571	a5,675,909
Queensland	11,142,114	8,636,700	8,296,318	11,512,262	15,200,527
South Australia	a2,449,716	a2,412,388	a2,540,183	a1,804,696	a3,392,400
Western Australia	100	200	821	354	1,073
Tasmania	754,196	702,868	861,460	799,432	1,016,037
Australia	27,430,805	23,790,240	26,196,272	24,160,524	32,653,003

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

4. **Concentrated Milk.**—"Condensed" or "concentrated" milk represents milk the bulk of which is reduced by evaporation. Small quantities of such milk were made prior to 1911, in which year the output for Australia was nearly doubled. Increasing quantities were annually manufactured till 1915, when a substantial falling off was in evidence in each of the three contributing States. During the next six years, however, the condensed milk industry developed considerably, particularly in Victoria, where the output for 1921 was nearly three times greater than that for 1915. There is still an import of milk, but the exports in each year far outweigh the quantity imported. No condensed or concentrated milk is made in South Australia, Western Australia, or Tasmania. In New South Wales, Victoria, and Queensland the returns for the last five years were as follows:—

CONDENSED, CONCENTRATED, OR POWDERED MILK MADE, 1917 TO 1921.

Year.	N.S.W.(a)	Victoria.(a)	Queensland.	Australia.
	lbs.	lbs.	lbs.	lbs.
1917	8,973,916	37,805,070	9,409,059	56,188,045
1918	10,680,409	45,251,710	6,845,610	62,777,729
1919	12,969,679	44,219,389	9,170,034	66,359,102
1920	14,938,147	42,643,871	13,362,464	70,944,482
1921	6,860,466	48,354,210	15,168,652	70,383,328

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

5. **Oversea Trade in Butter, Cheese, and Milk.**—The following tables give the imports, exports, and net exports of butter, cheese, and milk. In each of the five years the exports of butter, cheese, and condensed milk exceeded the imports.

**BUTTER, CHEESE AND MILK, IMPORTS AND EXPORTS.—AUSTRALIA.
1917-18 TO 1921-22.**

Products.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
IMPORTS.					
Butter lbs.	8,610	16,439	36,774	33,762	732,326
" £	592	1,087	2,282	2,997	58,982
Cheese lbs.	45,976	13,903	28,625	72,110	85,601
" £	2,940	1,098	2,988	8,371	7,518
Milk—concentrated and preserved(a) lbs.	772,987	575,934	1,075,887	603,565	130,592
" £	42,458	30,802	49,029	30,883	14,658

EXPORTS.					
Butter lbs.	72,277,526	41,114,764	39,006,304	92,420,995	127,579,797
" £	4,904,417	3,193,086	3,301,695	11,067,104	7,987,558
Cheese lbs.	8,427,098	2,303,308	7,524,910	9,531,310	12,671,029
" £	350,819	118,855	377,905	514,252	438,372
Milk—concentrated and preserved(a) lbs.	25,690,663	27,962,938	35,568,218	37,381,955	36,705,320
" £	1,029,424	1,092,911	1,606,310	2,189,167	2,132,580

NET EXPORTS.(b)					
Butter lbs.	72,268,916	41,098,325	38,969,530	92,387,233	126,847,461
" £	4,903,825	3,191,999	3,299,413	11,064,107	7,928,576
Cheese lbs.	8,381,122	2,289,405	7,496,285	9,459,200	12,585,428
" £	347,879	117,757	374,917	505,881	430,854
Milk—concentrated and preserved(a) lbs.	24,917,876	27,387,004	34,492,331	36,778,390	36,574,728
" £	986,966	1,062,109	1,557,281	2,158,284	2,117,922

(a) See definition above. (b) Excess of exports over imports.

6. **Local Consumption of Butter and Cheese.**—The total production of butter and cheese, with the subtraction or addition of the net export or import for the corresponding period gives approximately the quantity available for consumption in Australia. In the period considered hereunder the local supply of cheese was adequate :—

BUTTER AND CHEESE.—LOCAL CONSUMPTION, 1917 TO 1921.

Products.	1917.	1918.	1919.	1920.	1921.
	lbs.	lbs.	lbs.	lbs.	lbs.
Butter .. Total	123,228,008	140,704,350	126,679,261	115,694,631	139,491,543
„ .. Per head of population ..	25.73	27.69	23.88	21.38	25.32
Cheese .. Total	13,049,683	21,500,835	18,699,987	14,701,324	19,981,974
„ .. Per head of population ..	3.82	4.23	3.53	2.72	3.43

The quantity available for consumption in 1921 averaged nearly 25½ lbs. of butter and about 3¾ lbs. of cheese per head of population, an amount probably unsurpassed anywhere. The consumption of butter and cheese in the United Kingdom in normal times is given as about 22½ lbs. per head per annum.

§ 3. Pigs and Pig Products.

1. **Pigs.**—The number of pigs in Australia from 1917 to 1921 is shown below :—

PIGS.—NUMBER, 1917 TO 1921.

State.	1917.	1918.	1919.	1920.	1921.
New South Wales (b) ..	395,639	294,338	253,338	305,967	383,326
Victoria (a) ..	323,159	267,819	186,810	175,275	230,770
Queensland ..	172,699	140,966	99,593	104,370	145,083
South Australia (b) ..	110,353	79,078	60,295	78,395	87,667
Western Australia ..	111,844	85,863	58,155	60,581	63,001
Tasmania (a) ..	54,653	44,328	35,530	38,116	49,743
Northern Territory ..	500	1,200	1,675	1,416	452
Federal Cap. Territory (b) ..	518	310	572	286	343
Australia ..	1,169,365	913,902	695,968	764,406	960,385

(a) As on 1st March of year following.

(b) As on 30th June of year following.

For many years the number of pigs in Australia has fluctuated considerably. There was a heavy falling off in 1915, followed by substantial increases during 1916 and 1917, the number of pigs in 1917 being the highest recorded in Australia. The total of 1,169,365 pigs in 1917 declined to 695,968 in the next two years, but the numbers were supplemented by large increases during 1920 and 1921, and the total now amounts to nearly 1,000,000. The number of pigs per head of population, and the number per square mile, will be found in the tables of live stock, page 687.

2. **Bacon and Ham.**—(i) *Production.* During the past five years the production of bacon and ham has fluctuated between the record quantity of 66,181,218 lbs. manufactured in 1918, and 50,250,487 lbs. in 1920, the average for the period amounting to 59,545,755 lbs., which is far in excess of any previous five-yearly average.

BACON AND HAM.—PRODUCTION, 1917 TO 1921.

State.	1917.	1918.	1919.	1920.	1921.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales(a) ..	18,544,053	16,801,370	16,657,362	16,249,762	20,413,330
Victoria(a) ..	21,324,846	22,212,395	19,385,509	15,139,100	17,396,798
Queensland ..	14,791,540	16,476,480	12,155,489	11,337,050	12,386,417
South Australia(a) ..	6,591,064	6,567,394	5,810,616	4,172,372	5,089,424
Western Australia(b) ..	2,362,604	2,813,650	2,609,284	2,077,662	1,962,621
Tasmania ..	1,298,819	1,309,633	1,128,096	1,267,061	1,356,329
Federal Cap. Territory(a)	11,091	296	12,236	7,480	9,540
Total ..	64,924,017	66,181,218	57,758,592	50,250,487	58,614,459

(a) For year ended 30th June of year following. (b) A portion only from pigs slaughtered in the State, balance imported and subsequently cured.

(ii) *Local Consumption.* From 1904 onwards the production of bacon and ham has been sufficient to meet the local demand, and provide a small surplus for export.

BACON AND HAM.—LOCAL CONSUMPTION, 1917 TO 1921.

Particulars.	1917.	1918.	1919.	1920.	1921.
	lbs.	lbs.	lbs.	lbs.	lbs.
Total ..	59,860,162	60,586,277	54,732,706	47,151,519	55,926,806
Per head of population ..	12.01	11.92	10.32	8.71	10.15

3. *Oversea Trade in Pig Products.*—The oversea trade in pigs and pig products is shown in the following table :—

PIG PRODUCTS.—AUSTRALIAN TRADE, 1917-18 TO 1921-22.

Particulars.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
PIGS.					
Imports ..	No. 20	4	16	11	31
" ..	£ 438	102	94	65	194
Exports ..	No. 36	60	164	166	119
" ..	£ 209	479	1,044	1,199	990
Net Exports ..	No. 16	56	148	155	88
" ..	£ -229	377	950	1,134	796
BACON AND HAM.					
Imports ..	lbs. 5,097	42,624	15,047	14,610	25,292
" ..	£ 353	2,169	1,067	1,479	1,610
Exports ..	lbs. 5,068,952	5,637,565	3,040,933	3,113,578	2,712,945
" ..	£ 321,635	378,723	258,890	323,280	223,067
Net Exports ..	lbs. 5,063,855	5,594,941	3,025,886	3,098,968	2,687,653
" ..	£ 321,282	376,554	257,823	321,801	221,457

NOTE.—The minus sign — signifies net imports.

PIG PRODUCTS.—AUSTRALIAN TRADE, 1917-18 TO 1921-22—*continued.*

Particulars.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
LARD.					
Imports lbs.	7,208	29,575	22,001	42,795	115,659
" £	380	1,475	1,092	1,825	3,625
Exports lbs.	1,466,703	6,016,825	7,969,444	3,118,105	2,909,658
" £	56,353	205,694	375,910	153,084	88,753
Net Exports .. lbs.	1,459,495	5,987,250	7,947,443	3,075,310	2,793,999
" £	55,973	204,219	374,818	151,259	85,128

FROZEN PORK.					
Imports lbs.	121	..	..	..	..
" £	3	..	..	..	..
Exports lbs.	262,503	839,557	371,397	163,303	152,584
" £	11,915	40,325	19,149	9,370	7,414
Net Exports .. lbs.	262,382	839,557	371,397	163,303	152,584
" £	11,912	40,325	19,149	9,370	7,414

The production of pig products in Australia is more than sufficient to meet local requirements, and a fairly large and profitable export trade is being built up.

During the last five years the average annual net export amounted to nearly half a million pounds sterling, the bulk of the shipments consisting of bacon, ham and lard.

§ 4. Total Dairy Production.

The total dairy production of Australia in 1921 is shown below :—

TOTAL DAIRY PRODUCTION.—AUSTRALIA, 1921.

Particulars.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust. (a)	W. Aust.	Tasmania.	Fed. Cap. Ter. (a)	Total.
MILK.								
Used for—	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
Butter ..	223,140,885	188,293,740	123,327,251	31,462,964	6,228,201	12,666,621	63,275	585,182,937
Cheese ..	7,709,343	5,641,455	13,277,550	3,270,089	1,546	1,021,648	..	30,921,631
Condensing and con- centrat- ing ..	2,372,202	10,737,971	3,985,979	..	..	..	..	17,096,152
Other pur- poses ..	51,943,191	40,508,054	10,490,112	6,664,852	5,099,526	7,311,731	42,104	122,069,570
Total ..	285,165,621	245,181,220	151,080,892	41,397,905	11,329,273	21,000,000	105,379	675,527,290

BUTTER.								
In Factories On Dairy and other Farms ..	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	95,694,451	77,501,149	58,550,238	10,658,132	1,532,007	3,476,277	..	247,412,254
	4,958,169	5,480,421	2,372,956	3,907,467	1,126,146	1,793,966	19,961	19,659,086
Total ..	100,652,620	82,981,570	60,923,194	14,565,599	2,658,153	5,270,243	19,961	267,071,340

(a) For year ended 30th June, 1922.

(b) Including 10,000 gallons, Northern Territory.

TOTAL DAIRY PRODUCTION.—AUSTRALIA, 1921—*continued.*

Particulars.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust. (a)	W. Aust.	Tasmania.	Fed. Cap. Ter. (a)	Total.
CHEESE.								
In Factories ..	lbs. 7,044,567	lbs. 5,359,660	lbs. 15,188,627	lbs. 3,392,160	lbs. ..	lbs. 723,599	lbs. ..	lbs. 31,708,613
On Dairy & other Farms ..	322,490	316,249	11,900	240	1,073	292,438	..	944,390
Total ..	7,367,057	5,675,909	15,200,527	3,392,400	1,073	1,016,037	..	32,653,003

CONDENSED, CONCENTRATED, OR POWDERED MILK.

	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
In Factories ..	6,860,466	48,354,210	15,168,652	..	..	..	..	70,383,328

BACON AND HAM.

	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
In Factories ..	18,544,067	15,583,960	11,973,725	4,169,206	1,728,617b	841,244	..	52,840,819
On Dairy & other Farms ..	1,869,263	1,812,838	412,692	920,218	234,004	515,085	9,540	5,778,640
Total ..	20,413,330	17,396,798	12,386,417	5,089,424	1,962,621	1,356,329	9,540	58,614,459

(a) For year ended 30th June, 1922. (b) A portion only from pigs slaughtered in the State, the balance being imported and subsequently cured.

§ 5. Poultry Farming.

1. **General.**—Poultry stocks are largely maintained by farmers, and production therefrom furnishes a considerable addition to the annual agricultural or dairying returns. During recent years, however, poultry-keeping has assumed an independent position among rural industries, while it is also carried on in conjunction with pig farming. Special poultry farms have been instituted for scientific breeding, and poultry experts give lectures and instruction. Poultry for consumption is extensively reared, and the egg-producing qualities of the birds have been greatly improved by careful breeding. Co-operative egg-collecting circles have been formed in some districts; eggs are also delivered with the milk and cream to the local butter factories, and thence forwarded to market.

2. **Poultry Products.**—There is some difficulty in obtaining complete figures for the yield of poultry products. The following values relate to poultry and eggs:—

POULTRY AND EGGS.—VALUE OF PRODUCTION, 1917-18 TO 1921-22.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania. (a)	Australia.
	£	£	£	£	£	£	£
1917-18 ..	2,082,000	2,160,650	295,882	669,105	188,982	250,000	5,646,619
1918-19 ..	2,501,000	2,738,620	319,602	690,539	189,471	300,000	6,739,232
1919-20 ..	2,814,000	3,579,230	356,590	924,986	191,288	300,000	8,166,094
1920-21 ..	3,196,000	4,545,620	449,827	1,164,999	189,658	300,000	9,846,104
1921-22 ..	2,650,000	4,406,750	429,983	1,027,634	208,429	300,000	9,022,796

(a) Estimated.

3. **Oversea Trade in Poultry Products.**—The Australian oversea trade in live or frozen poultry is insignificant, although the export of frozen poultry is increasing. During the past two years fairly large consignments were forwarded from New South Wales mainly to the United States of America. The imports and exports of eggs and egg-contents show a balance on the side of exports. The export trade in eggs has expanded considerably during the last three years, and exceeded three-quarters of a million dozen in 1921–22. The number of eggs imported into Australia during the last five years amounted to 76,829 dozen, of which number China supplied 60,717 dozen, or more than 79 per cent.

POULTRY PRODUCTS, TRADE.—AUSTRALIA, 1917–18 TO 1921–22.

Particulars.			1917–18.	1918–19.	1919–20.	1920–21.	1921–22.
LIVE POULTRY.							
Imports	..	No.	753	693	721	484	663
"	..	£	383	878	1,564	850	1,170
Exports	..	No.	988	1,699	2,477	2,886	2,626
"	..	£	823	1,231	2,448	2,741	3,272
Net Exports	..	No.	235	1,006	1,756	2,402	1,963
"	..	£	440	353	884	1,891	2,102
FROZEN POULTRY.							
Imports	..	lbs.	931	3,752	10,273	4,087	2,712
"	..	£	39	208	602	328	178
Exports	..	pair	6,541	8,298	13,346	22,376	50,367
"	..	£	3,549	5,141	10,760	29,963	50,205
Net Exports	..	(a)	(a)	(a)	(a)	(a)	(a)
"	..	£	3,510	4,933	10,158	29,635	50,027
Eggs.							
Imports	..	doz.	9,171	2,633	4,015	27,452	33,558
"	..	£	434	169	230	1,802	1,994
Exports	..	doz.	16,136	8,409	211,034	413,602	808,849
"	..	£	1,462	746	17,461	53,932	75,857
Net Exports	..	doz.	6,965	5,776	207,019	386,150	755,291
"	..	£	1,028	577	17,231	52,130	73,863
EGG-CONTENTS.							
Imports	..	lbs.	8,669	344	4,992	23,898	26,590
"	..	£	1,708	94	1,523	4,446	4,091
Exports	..	lbs.	(a)	(a)	(a)	(a)	(a)
"	..	£	1,508	1,823	48,675	27,298	12,116
Net Exports	..	lbs.	(a)	(a)	(a)	(a)	(a)
"	..	£	- 200	1,729	47,152	22,852	8,025

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

§ 6. Bee Farming.

1. **General.**—As is the case with poultry-farming, bee-farming is frequently carried on in connexion with agriculture or dairying. The returns of honey from productive hives during 1921–22 gave an average of 67½ lbs. per hive, while the average quantity of wax was ½ lb. per hive.

2. **Production of Honey and Beeswax.**—The number of hives and the production of honey and beeswax during the year 1921–22 are given in the following table :—

BEE-HIVES, HONEY, AND BEESWAX, 1921–22.

State.	Bee Hives.			Honey Produced.		Beeswax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Value.	Quantity.	Value.
	No.	No.	No.	lbs.	£	lbs.	£
New South Wales ..	34,093	7,365	41,458	2,986,574	50,523	28,255	2,715
Victoria ..	38,593	11,554	50,147	2,712,675	50,863	32,737	3,274
Queensland ..	12,062	4,145	16,207	598,357	11,701	8,231	708
South Australia ..	13,501	6,606	20,107	791,324	10,716	9,108	721
Western Australia ..	6,453	1,474	7,927	196,440	4,213	3,980	314
Tasmania ..	4,314	2,276	6,590	82,920	2,764	1,976	197
Fed. Cap. Territory ..	36	4	40	2,500	42	130	12
Australia ..	109,052	33,424	142,476	7,370,790	130,822	84,417	7,941

The table hereunder gives the production of honey and beeswax for the latest available five years :—

HONEY AND BEESWAX PRODUCTION, 1917–18 TO 1921–22.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia.
HONEY.								
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1917–18	3,863,430	4,974,888	771,015	1,279,433	358,019	124,482	12,081	11,383,348
1918–19	879,356	1,644,447	410,182	1,683,725	415,616	151,605	420	5,185,351
1919–20	472,020	1,396,704	305,586	552,976	336,206	80,468	320	3,144,280
1920–21	1,441,617	1,724,942	426,662	1,821,811	149,226	85,125	1,760	5,651,143
1921–22	2,986,574	2,712,675	598,357	791,324	196,440	82,920	2,500	7,370,790
BEESWAX.								
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1917–18	53,314	64,980	11,519	12,942	5,459	2,857	28	151,099
1918–19	19,231	25,286	9,099	14,653	6,621	3,087	..	77,977
1919–20	12,195	24,735	7,215	7,350	6,611	2,329	..	60,435
1920–21	23,234	24,222	7,501	17,501	3,849	1,788	86	78,181
1921–22	28,255	32,737	8,231	9,108	3,980	1,976	130	84,417

The quantity of honey and beeswax produced naturally varies from year to year according to the conditions of the seasons. During the last five years New South Wales has produced 9,642,997 lbs. of honey and 136,229 lbs. of beeswax, while the Victorian figures amounted to 12,453,656 lbs. and 171,960 lbs. respectively for honey and beeswax. These two States together accounted for 67½ per cent. of the total production of honey, and 68 per cent. of the beeswax. Next in order of importance were South Australia, Queensland, and Western Australia.

3. **Oversea Trade in Bee Products.**—In normal years the local production of honey exceeds Australian requirements, and a considerable quantity is exported. During the past five years the value of the exports amounted to £350,213, or an annual average of £70,043, and it is believed that the export could be considerably increased. Australian honey exhibited at the Franco-British Exhibition in London in 1908 obtained the highest award. The more general use of frame hives in recent years has affected the production of wax, and as a result the quantity imported has exceeded that exported during each of the past five years.

BEE PRODUCTS.—IMPORTS, EXPORTS, ETC., AUSTRALIA, 1917-18 TO 1921-22.

Particulars.		1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
HONEY.						
Imports	.. lbs.	382	150	1,093	201,548	13,572
"	.. £	12	4	35	5,838	399
Exports	.. lbs.	3,199,691	8,747,760	588,384	97,541	94,471
"	.. £	79,225	248,685	18,815	5,328	4,448
Net Exports	.. lbs.	3,199,309	8,747,610	587,291	- 104,007	80,899
"	.. £	79,213	248,681	18,780	- 510	4,049
BEESWAX.						
Imports	.. lbs.	54,686	36,136	26,149	28,235	223,441
"	.. £	4,842	3,493	1,969	2,452	12,786
Exports	.. lbs.	1,471	7,269	16,853	7,535	2,259
"	.. £	134	598	1,467	810	154
Net Exports	.. lbs.	- 53,215	- 28,867	- 10,296	- 20,700	- 221,182
"	.. £	- 4,708	- 2,895	- 502	- 1,642	- 12,632

NOTE.—The minus sign — signifies net imports.

§ 7. Value of Farmyard, Dairy, and Bee Products.

The value of the farmyard and dairy products raised in Australia in 1921 was as follows:—

FARMYARD, DAIRY, AND BEE PRODUCTS.—VALUE, 1921.

Products.	N.S.W.(a)	Victoria. (a)	Q'land.	S. Aust. (a)	W. Aust.	Tas.	N.T.	Fed. Cap. Ter. (a)	Australia.
	£	£	£	£	£	£	£	£	£
Milk, consumed as such	2,885,733	2,250,447	582,784	370,270	283,307	406,207	556	2,339	6,781,643
Butter	6,866,350	5,129,223	5,128,302	907,776	232,676	547,079	..	1,362	18,812,768
Cheese	294,245	203,678	794,058	100,977	32	42,787	..	..	1,435,777
Condensed and concentrated milk	319,218	2,074,616	782,639	..	..	..	..	..	3,176,473
Bacon and ham	957,497	1,325,383	798,809	270,141	132,278	97,161	..	447	3,581,716
Pork	420,291	245,000	113,233	143,570	84,461	65,335	..	..	1,071,890
Lard	25,246	28,480	32,965	11,450	11,786	5,077	..	12	115,016
Livestock	77,359	138,738	30,535	18,544	6,050	8,720	..	57	280,003
Poultry and eggs	2,650,000	4,406,750	429,983	1,027,634	208,429	300,000	..	(b)	9,022,796
Honey and wax	53,238	54,137	12,409	11,437	4,527	2,961	..	54	138,763
Total	14,549,177	15,856,452	8,705,717	2,861,799	963,546	1,475,327	556	4,271	44,416,845

(a) Year ended 30th June year following.

(b) Included with New South Wales.

§ 8. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy, and bee products exported during each of the last five years are shown below :—

AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS.—EXPORTS, 1917-18 TO 1921-22.

Products.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
QUANTITY.					
Beeswax lbs.	1,450	7,252	14,438	5,838	830
Butter	72,277,526	41,114,764	39,006,304	92,420,995	127,347,428
Cheese	8,426,641	2,303,276	7,516,412	9,530,221	12,670,782
Egg albumen and yolk	(a)	(a)	(a)	(a)	(a)
Eggs doz.	15,922	8,359	210,784	413,477	807,359
Feathers, undressed	(a)	(a)	(a)	(a)	(a)
Honey lbs.	3,199,691	8,747,760	588,384	97,541	94,471
Lard	1,465,352	6,016,383	7,931,014	3,118,105	2,908,595
Meats—					
Bacon and ham	5,067,946	5,636,891	3,040,933	3,113,488	2,712,911
Frozen poultry pair	6,541	8,298	13,346	22,376	50,367
Frozen pork lbs.	262,503	839,557	371,397	163,303	152,584
Milk, concentrated and preserved	25,581,708	27,934,998	35,548,082	37,281,554	36,678,109
Pigs, living No.	36	164	164	166	119
Poultry, living	983	1,699	2,477	2,880	2,624
VALUE.					
Beeswax	£ 133	£ 506	£ 1,325	£ 628	£ 77
Butter	4,904,417	3,193,086	3,301,695	11,067,104	7,968,078
Cheese	350,791	118,850	377,398	514,128	438,350
Egg albumen and yolk	854	1,823	48,675	27,055	12,061
Eggs	1,450	743	17,434	53,920	75,764
Feathers, undressed	61	793	1,133	956	956
Honey	79,225	248,685	18,815	5,328	4,448
Lard	56,292	205,675	374,641	153,084	88,694
Meats—					
Bacon and ham	321,573	378,685	258,890	323,253	223,065
Frozen poultry	3,549	5,141	10,760	29,963	50,205
Frozen pork	11,915	40,325	19,149	9,370	7,414
Milk, concentrated and preserved	1,025,895	1,091,889	1,605,161	2,184,761	2,131,279
Pigs, living	209	479	1,044	1,199	990
Poultry, living	819	1,231	2,448	2,731	3,268
Total	6,757,122	5,287,269	6,038,228	14,373,657	11,004,649

(a) Quantity not available.

§ 9. British Imports of Dairy Products.

1. Quantities and Values.—The following table gives the quantities and values of the principal dairy products imported into the United Kingdom during the years 1917 to 1921 :—

DAIRY PRODUCTS.—IMPORTS, UNITED KINGDOM, 1917 TO 1921.

Products.	1917.	1918.	1919.	1920.	1921
Butter cwt.	1,806,516	1,578,658	1,560,204	1,702,203	3,523,976
" £	18,895,707	19,769,738	19,854,427	24,518,748	42,339,947
Cheese cwt.	2,946,066	2,357,103	2,118,250	2,750,260	2,817,465
" £	19,462,390	15,905,858	15,170,620	20,633,946	17,446,521
Milk—Concentrated and preserved cwt.	1,700,511	2,707,761	3,347,645	2,127,199	2,350,610
" £	6,623,666	13,472,544	17,083,310	13,083,697	11,303,566
Bacon and ham cwt.	7,747,740	12,028,505	10,094,352	5,935,981	6,804,875
" £	48,769,759	103,410,221	89,681,616	53,339,250	51,745,149
Pork (a) cwt.	184,177	111,345	160,263	485,181	372,055
" £	899,346	763,484	1,075,563	3,443,332	1,863,027

(a) Frozen, chilled, and salted.

2. *Butter.*—(i) *Imports.* Australia has for many years supplied a large proportion of the butter imported into the United Kingdom. The quantity forwarded in 1921 amounted to 964,226 cwt., or more than 27 per cent. of the total importation into the United Kingdom, and was exceeded only by that shipped from Denmark. The value of the Australian shipments was £11,479,626.

BUTTER IMPORTS.—UNITED KINGDOM, 1921.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	Cwt.	£		Cwt.	£
Denmark ..	1,250,176	15,084,605	South African Union	21,941	231,800
Australia ..	964,226	11,479,626	Foreign Countries,		
New Zealand ..	709,381	8,494,063	n.e.i. ..	4,748	41,916
Argentine Republic	401,354	5,017,034	British Possessions		
Netherlands ..	63,065	744,245	n.e.i. ..	736	6,147
Russia ..	65,211	710,655			
Canada ..	43,138	529,856	Total ..	3,523,976	42,339,947

(ii) *London Prices.* The average price of the best quality Australian butter in London during the past ten years is shown in the following table :—

AUSTRALIAN BUTTER.—LONDON PRICES, 1913 TO 1922.

Year.	Average Top Price per Cwt.	Year.	Average Top Price per Cwt.
	s. d.		s. d.
1913	114 6	1918	(b) 252 0
1914	119 0	1919	(b) 252 0
1915	144 6	1920	(b) 299 9
1916	169 6	1921	234 0
1917	(a) 206 0	1922	183 0

(a) Proclaimed price.

(b) Flat rate for all imported butter.

Under contract the British Government purchased the surplus output of Australian butter during the period from 1st July 1918, to 31st July, 1920. The price paid was 175s. per cwt. for butter scoring 90 points, a shilling per cwt. being added or deducted as the grading score exceeded or fell below that standard. On the 1st August, 1920, the contract was extended for a further period, the price of butter having been increased to 240s. per cwt., subsequently raised to 272s., and the grading price being likewise increased to 1s. 6d. per cwt. This contract terminated on the 31st March, 1921, butter thenceforward being sold in open market.

3. *Cheese.*—The value of cheese imported into the United Kingdom in 1921 was £17,446,521, of which nearly nine million pounds' worth was received from New Zealand, and six and a half million pounds' worth from Canada. Small experimental shipments from Australia were made in 1908 and following years, fair prices being realized. The value of the imports from Australia has increased from £24,568 in 1913 to £501,912 in 1921.

4. *Bacon and Ham.*—Of a total import of bacon and ham valued in 1921 at £51,745,149, the United Kingdom received imports to the value of £23,739,332 from the United States, £16,932,105 from Denmark, and £6,873,563 from Canada. The import from Australia was small, experimental shipments only having been made during recent years.

5. *Pork.*—The total value of the United Kingdom imports of pork (including refrigerated, frozen, and salted) was £3,913,847 in 1921. There was no importation from Australia, the bulk of the supplies being forwarded from the Netherlands, the United States, and the Argentine Republic.

6. *Other Products.*—There was practically no shipment to the United Kingdom from Australia of beeswax, poultry, game, lard, or honey, but frozen rabbits to the value of £471,778, and eggs to the value of £139,076 were received from Australia in 1921.