

SECTION IX.

FARMYARD AND DAIRY PRODUCTION.

§ 1. Introductory.

1. **General.**—The live stock which accompanied Captain Phillip in 1788 included one bull, four cows, one calf and seven pigs, these being established at Farm Cove when Port Jackson was settled. The greater part of the early shipments of cattle were slaughtered to relieve the necessity of early colonists in the famines, which several times threatened the existence of the young community. The existing herds have sprung not only from the original stud, but have been steadily improved by the introduction of stud cattle and pigs, continually increasing attention being paid thereto, especially perhaps of late years. Stock-raising with regard to the special requirements of dairying, etc., has in fact been properly considered only in recent times. The technical advances made in the manufacture of butter, cheese, etc., in Europe, and the necessity of having regard thereto in connection with the export trade of Australia, demanded in Australian stock-raising a judicious crossing of strains with a view to increasing the essential contents in the milk for the production of butter or cheese; the eradication of grasses of little or no use, and the planting in lieu thereof of leguminosæ, grasses and other plants, so as to amplify the nutrient qualities of the natural herbage, which, however, it may be said, is very often excellent. The importation of British and other cattle for breeding purposes is ordinarily under private enterprise. Government supervision has at times been found necessary in order to prevent the introduction of diseases and pests, with the result that there is but little disease among Australian herds. Recently some of the States Governments have made considerable importations for stud purposes. Permanent structures for the shelter of dairy herds, etc., as a rule are not required anywhere in the Commonwealth. State nurseries, however, supply to settlers, gratis, trees for making shelter belts, and these are found to be sufficient. Owing to the mildness of the Australian climate the heavy expenses for housing, stall-feeding, etc., are unnecessary. Where winter fodder must be grown it is given to the cattle in the fields, and consists mostly of lucerne, oats, maize, barley, and rye. Ensilage is highly recommended by dairy experts, and, when necessary, increasing use is made thereof. Continued expansion of the dairying industry, and particularly its extension into non-coastal districts, will involve a more general use of the silo.

Australian grasses are particularly suitable for dairy cattle, since they possess milk-producing, as well as fattening, properties. The area of land devoted to green food and permanent artificially-sown grasses is constantly increasing, its produce being, for the most part, devoted to the depasturing of dairy herds. The opinion, long held, that only heavily-grassed country with good rainfall, was profitable for dairying has been controverted by experience, it being shewn that more lightly clad regions yield good milk results.

2. **State Supervision of Industry.**—Each of the State agricultural departments exercises considerable supervision in regard to the industry. Dairy experts are employed to give instruction in approved methods of production, to examine animals, to inspect the buildings used for milking and separating, and to examine the marketable produce. A high standard of dairy hygiene, cleanliness of *personnel* and *materiel*, and purity of the article and freedom from adulteration have also been insisted upon under State laws.

3. **Mixed Farming and Value of Dairy Production.**—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 removed from the metropolis well-equipped factories have been established.

The mode of estimating the value of dairy production presents certain features which demand special attention. "Market values" and so-called "farm values" have been used. The question of value will be considered in a later section of the Year Book.

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 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 steadily diminishing. Formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, but separator butter requires only about 2.6 gallons.

5. Butter and Cheese Factories.—The establishments in the Commonwealth, where the manufacture of butter, butterine, margarine, and cheese was carried on, numbered 550 in 1906. These were distributed as regards the various States as follows:—New South Wales, 178; Victoria, 222; Queensland, 70; South Australia, 55; Western Australia, 5; Tasmania, 20.

§ 2. Milk, Butter and Cheese.

1. Dairy Herds.—Since the drought year 1902, there has been in each State, almost without exception, a yearly increase in the number of dairy cows. In New South Wales, Victoria, South Australia proper, and Tasmania—as will be seen from the table of cattle and dairy cattle given below—the proportion of dairy cattle to all cattle is high. In Queensland, the Northern Territory of South Australia, and Western Australia, there is a greatly preponderating number of other cattle, dairying not having been established in the tropical regions of the Continent:—

CATTLE AND DAIRY CATTLE, AUSTRALIAN COMMONWEALTH, 1901-6.

State.	1901.	1902.	1903.	1904.	1905.	1906.
New South Wales* ... All Cattle	2,047,454	1,741,226	1,880,578	2,149,129	2,337,973	2,549,944
... Dairy Cows	417,835	351,287	523,438	591,936	644,164	713,049
Victoria ... All Cattle	1,625,532 †	1,648,680 †	1,671,828 †	1,694,976	1,737,690	1,804,323
... Dairy Cows	483,650	510,546	515,179	632,493	649,100	701,309
Queensland ... All Cattle	3,772,707	2,543,471	2,481,717	2,722,340	2,963,695	3,413,919
... Dairy Cows	136,000 ‡	108,800 ‡	119,000 ‡	144,000 ‡	172,000 ‡	215,000 ‡
South Australia ... All Cattle	225,256	213,343	244,510	272,459	300,721	325,724
... Dairy Cows	74,995	75,011	83,348	88,156	93,069	97,843
Northern Territory All Cattle	255,521	305,820	291,970	247,920	346,910	354,871
... Dairy Cows	394	627	902	670	756	680
Western Australia... All Cattle	398,547	497,136	497,617	561,490	631,825	690,011
... Dairy Cows	34,111	24,324	27,232	27,724	35,011	34,822
Tasmania ... All Cattle	168,661	177,566	185,938	201,206	206,211	211,117
... Dairy Cows	40,933	33,316	45,018	50,230	49,618	49,132
Commonwealth* All Cattle	8,493,678	7,067,242	7,254,258	7,849,520	8,525,025	9,343,409
... Dairy Cows	1,188,418	1,103,911	1,314,117	1,535,209	1,643,718	1,811,835

† Statistics not collected: figures supplied by interpolation.

‡ Statistics not collected: figures estimated.

* In New South Wales, up to 1902 the figures include only the cows actually in milk at the time the returns were taken. The figures for subsequent years are made up as follows:—

Year.	Milch Cows.	Cows at Present Dry.	Heifers within 3 M'ths of Calving.	Total Dairy Cows.
1903	362,429	117,670	43,330	523,438
1904	424,936	131,595	35,405	591,936
1905	442,950	154,655	46,550	644,164
1906	494,820	172,888	45,341	713,049

2. **Milk.**—The annual quantity of milk produced per dairy cow varies greatly with locality and season, probably reaching as high as 500 gallons, but averaging for the whole of Australia, for all dairy cows and for all seasons, only about 250 gallons per annum. The best yields appear to be in New South Wales, Victoria, and Tasmania, while Western Australia is something below Queensland and South Australia. Tables giving estimated yields in New South Wales and Victoria are appended, but it is to be noted that the figures are subject to considerable uncertainty.

NEW SOUTH WALES.—YIELD OF MILK, 1901 TO 1905.

	1901.	1902.	1903.	1904.	1905.
Dairy cows in milk	417,835	351,287	362,429	424,936	442,950
Production of milk gallons	122,750,500	105,742,600	129,966,190	158,650,600	162,918,600
Average yield per cow gallons	294	301	359	373	368

Mean of last line, 339.

VICTORIA.—YIELD OF MILK, 1901 TO 1905.

	1901.	1902.	1903.	1904.	1905.
Cows whose milk was recorded	98,695	118,065	95,158	90,046	75,727
Milk return from cows whose record was kept gallons	31,807,351	32,343,292	31,995,901	31,992,259	24,838,030
Average per cow gallons	322	274	336	329	328

Mean, 318.

3. **Butter and Cheese.**—The butter output shews, on the whole, a tolerably steady increase in all the States excepting Tasmania, since 1902, the most marked development being in Queensland. Though the increases were not so great as was the case with butter, the production of cheese also reached its highest figure in 1906. For the six years from 1901 to 1906 the figures are:—

PRODUCTION OF BUTTER AND CHEESE, AUSTRALIAN COMMONWEALTH, 1901 TO 1906.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	W. Aust.	Tasmania.*	Total for C'wealth.†
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
BUTTER.							
1901	39,056,878	46,857,572	9,741,882	4,954,523	336,440	723,771	101,671,066
1902	29,950,977	39,227,754	4,851,362	4,521,246	321,462	699,526	79,572,327
1903	38,727,107	46,685,727	7,717,325	5,995,756	351,885	854,442	100,332,242
1904	53,591,243	61,002,841	17,538,473	6,836,170	441,103	845,378	140,255,208
1905	53,040,250	57,606,821	20,319,976	8,226,805	423,270	1,281,604	140,898,726
1906	58,877,182	68,088,168	22,746,593	8,873,632	380,157	904,930	159,870,662
CHEESE.							
1901	3,838,835	3,974,668	2,436,912	1,053,160	3,578	268,539	11,575,692
1902	4,148,038	3,849,561	952,013	705,969	1,592	348,614	10,005,787
1903	4,748,176	5,681,515	1,479,651	972,584	8,039	533,709	13,423,674
1904	4,223,621	4,747,851	2,607,475	851,800	350	204,160	12,635,257
1905	4,625,980	4,297,350	2,682,089	1,174,867	4,831	369,913	13,155,030
1906	5,369,345	4,877,593	2,921,140	1,398,785	1,314	190,481	14,778,658

* Tasmanian statistics of the production of butter and cheese relate only to the quantities made in factories.

† The totals for the Commonwealth here given are exclusive of Tasmanian butter and cheese made elsewhere than in factories.

4. **Concentrated Milk.**—“Condensed” or “concentrated” milk denotes milk the bulk of which is reduced by evaporation, no sweetening agent being added. When a sweetening agent is added it is called “preserved” milk. Small quantities of such milk have been made, but the industry is at present by no means a large one. In New South Wales and Victoria the following quantities are returned under the respective heads “Condensed or Concentrated Milk made” and “Concentrated Milk made”:—

NEW SOUTH WALES AND VICTORIA.—CONDENSED OR CONCENTRATED
MILK MADE, 1901 TO 1906.

State.	Year.					
	1901.	1902.	1903.	1904.	1905.	1906.
N. S. Wales ... lbs.	533,500	485,545	1,004,512	1,171,872	1,169,977	1,033,446
Victoria ... gallons	266,083	243,904	236,581	226,810	232,310	309,138

5. **Oversea Trade in Milk, Butter, and Cheese.**—The tables following give the import, export, or net export or import of butter, cheese, and milk. In each of the six years exports of butter exceeded imports; in only one did this occur with regard to cheese, and in none with regard to milk.

IMPORTS, EXPORTS, AND NET IMPORTS OF BUTTER, CHEESE AND MILK
AUSTRALIAN COMMONWEALTH, 1901 TO 1906.

IMPORTS.

Products.	1901.	1902.	1903.	1904.	1905.	1906.
Butter lbs.	1,342,338	6,901,779	1,887,148	43,873	592,201	70,143
" " " " " £	61,581	357,244	88,754	1,636	25,569	3,133
Cheese lbs.	2,774,464	2,318,110	1,141,300	375,642	384,718	304,951
" " " " " £	66,006	59,674	33,071	12,349	12,494	11,533
Milk—concentrated and preserved ¹ ... lbs.	10,778,775	13,331,341	13,664,776	11,196,926	10,943,788	10,672,265
" " " " " £	190,836	241,199	238,632	197,254	196,471	189,316

EXPORTS.

Butter lbs.	34,607,397	9,661,925	32,124,709	64,807,962	56,477,536	75,802,856
" " " " " £	1,451,168	472,772	1,267,411	2,461,450	2,354,399	3,240,063
Cheese lbs.	293,381	253,615	243,176	514,576	193,608	252,115
" " " " " £	7,982	7,623	7,077	11,216	5,291	6,832
Milk—concentrated and preserved ¹ ... lbs.	1,059,169	876,909	709,549	659,937	495,069	311,540
" " " " " £	17,532	15,360	14,183	11,857	9,319	6,375

NET EXPORTS.²

Butter lbs.	33,265,059	2,760,146	30,237,561	64,764,089	55,885,335	75,732,713
" " " " " £	1,389,587	115,528	1,178,657	2,459,814	2,328,890	3,236,930
Cheese lbs.	2,484,083	2,064,495	898,124	138,934	191,110	52,836
" " " " " £	58,024	52,051	25,994	1,133	7,203	4,701
Milk—concentrated and preserved ¹ ... lbs.	9,719,606	12,454,432	12,955,227	10,536,989	10,448,699	10,360,725
" " " " " £	173,254	225,839	224,449	185,397	187,152	182,941

1. See definition on page 363.

2. — Signifies net imports.

The large quantities of milk imported for local use indicate room for development in the preserving industry.

6. **Interstate Trade in Milk, Butter and Cheese.**—The extent of interstate trade in dairy products, naturally of considerable magnitude, is worthy of statistical presentation. That for butter, cheese and milk is as follows:—

INTERSTATE TRADE IN BUTTER AND CHEESE, 1906.

State.	Imports from other States of the C'wealth.		Exports to other States of the Commonwealth.		Net Interstate Exports. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
BUTTER.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	2,930,232	121,308	1,159,709	48,676	—1,770,523	— 72,632
Victoria ...	1,055,071	43,373	9,209,810	434,323	8,154,739	390,950
Queensland ...	45,161	1,330	1,822,431	73,929	1,777,270	72,599
South Australia ...	1,060,974	48,756	1,386,559	58,980	325,585	10,224
Western Australia ...	7,190,501	340,368	2,239	111	—7,188,262	—340,257
Tasmania ...	1,730,689	79,055	431,880	18,171	—1,298,809	— 60,884
CHEESE.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	359,396	8,856	446,479	11,257	87,083	2,401
Victoria ...	345,741	8,153	1,150,594	28,093	804,853	19,940
Queensland ...	116,210	2,988	372,410	8,957	256,200	5,969
South Australia ...	149,205	3,627	155,791	3,786	6,586	159
Western Australia ...	1,140,121	27,835	335	25	—1,139,786	— 27,810
Tasmania ...	141,258	3,667	126,322	3,008	— 14,936	— 659

1.— Signifies net imports.

It will be observed from the column of net exports that Victoria occupies the leading position as supplier, and Western Australia the chief position as interstate importer of these products.

INTERSTATE TRADE IN MILK AND CREAM, 1906.

State.	Imports from other States of the Commonwealth.		Exports to other States of the Commonwealth.		Net Interstate Exports. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
MILK AND CREAM—FRESH.						
	Gallons.	£	Gallons.	£	Gallons.	£
New South Wales ...	24,268	404	58,998	9,883	34,730	9,479
Victoria ...	58,998	9,883	20,955	349	— 38,043	— 9,534
Queensland ...	...	...	...	...	...	...
South Australia ...	...	...	3,313	55	3,313	55
Western Australia ...	...	...	...	...	...	...
Tasmania ...	...	...	...	...	...	...
MILK AND CREAM—CONCENTRATED.²						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	14,676	341	72,806	1,355	58,130	1,014
Victoria ...	25,912	478	530,362	8,453	504,450	7,975
Queensland ...	2,916	92	...	...	2,916	92
South Australia ...	...	...	...	...	...	...
Western Australia ...	430,631	6,786	600	9	— 430,031	— 6,777
Tasmania ...	131,061	2,143	1,428	23	— 129,633	— 2,120
MILK AND CREAM—PRESERVED.²						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	1,208,299	24,178	193,035	3,780	— 1,015,264	— 20,398
Victoria ...	76,700	1,560	1,279,138	25,084	1,202,438	23,524
Queensland ...	126,322	2,577	600,382	11,556	474,060	8,979
South Australia ...	370,396	7,880	567,253	11,398	196,857	3,518
Western Australia ...	734,282	13,240	14,861	325	— 719,421	— 12,915
Tasmania ...	146,422	2,880	7,752	172	— 138,670	— 2,708

1.— Signifies net imports.

2. See definition on page 363.

The remarks relating to the positions of Victoria and Western Australia in the case of butter and cheese apply also to concentrated and preserved milk and cream. New South Wales is a large importer of preserved milk from other States of the Commonwealth.

7. **Local Consumption of Butter and Cheese.**—The total production of butter and cheese, with the net export or import subtracted or added, gives approximately the consumption in the Commonwealth. In the period considered 1904 was the only year in which the local supply of cheese was adequate:—

BUTTER AND CHEESE LOCALLY CONSUMED, 1901 TO 1906.

Product.	1901.	1902.	1903.	1904.	1905.	1906.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Butter ...	68,406,007	76,812,181	70,094,681	75,491,119	85,013,391	84,137,949
Cheese ...	14,059,775	12,070,282	14,321,798	12,496,323	13,346,140	14,831,494

The consumption in 1906 was, therefore, equal to 20.6 lbs. of butter and 3.6 lbs. of cheese per head of mean population, an amount probably unsurpassed anywhere. The consumption of butter and cheese in the United Kingdom is given as 19 lbs. per head, and is therefore only equal to about four-fifths of that of the Commonwealth.

§ 3. Pigs, Bacon, etc.

1. **Pigs.**—The pigs in Australasia numbered 43 in 1792; 4017 in 1800; 8992 in 1810; 33,906 in 1821; 66,086 in 1842; and 121,035 in 1851. The figures for the States in subsequent census years, and in the last five years, were:—

NUMBER OF PIGS, AUSTRALIAN COMMONWEALTH, 1861 TO 1906.

State.	1861.	1871.	1881.	1891.	1901.	1902.	1903.	1904.	1905.	1906.
New South Wales ...	146,091	213,193	213,916	253,189	265,730	193,097	221,592	339,666	310,702	243,370
Victoria ...	43,480	177,447	239,926	286,780	334,295*	318,220*	302,145*	286,070	273,682	220,452
Queensland ...	7,465	32,707	56,438	122,672	121,641	77,202	117,553	185,141	164,087	138,282
South Australia ...	69,286	95,542	120,718	83,797	89,875	83,791	89,331	112,584	119,005	112,277
Western Australia ...	11,984	14,265	22,530	25,330	61,052	52,883	50,209	70,299	74,567	56,203
Tasmania ...	40,841	52,863	49,660	73,520	58,716	52,096	56,538	77,943	72,810	42,965
Commonwealth ...	319,147	586,017	703,188	845,888	931,309	777,289	837,368	1,062,703	1,014,853	813,569

* Statistics not collected. Figures supplied by interpolation.

The number of pigs was highest in 1904, when for the first time it was over a million; prior to 1899, it had never reached 900,000. That year, the two immediately following, and 1904 and 1905, mark the highest totals. An examination of the States' returns shews remarkable fluctuations. It will be noticed that in no State was the number as high in 1906 as in the preceding year.

2. **Bacon and Ham.**—Though the Tasmanian production of bacon and ham shews a falling-off, the output for the Commonwealth has increased in the last three years. In the three principal dairying States, particularly in Queensland, the returns indicate very satisfactory progress.

PRODUCTION OF BACON AND HAM, AUSTRALIAN COMMONWEALTH,
1901 TO 1906.

Year.	New South Wales.	Victoria.	Queensland:	South Australia.	Western Australia.	Tasmania.*	Total for Commonwealth.†
	lbs.	lbs.	lbs.		lbs.	lbs.	lbs.
1901 ...	11,080,891	15,011,616	7,064,714	†	333,393	530,015	34,020,629
1902 ...	8,995,856	14,438,370	6,512,952	†	246,827	414,340	30,608,345
1903 ...	7,864,771	12,504,851	4,145,900	†	178,557	401,417	25,095,496
1904 ...	10,680,532	14,851,944	6,514,852	†	250,264	574,781	32,872,373
1905 ...	11,652,440	16,433,665	10,500,335	†	401,447	446,714	39,434,601
1906 ...	11,843,595	18,051,166	10,846,959	†	272,494	151,700	41,165,914

* Tasmanian statistics of the production of bacon and ham relate only to quantities made in factories.

† The totals for the Commonwealth here given are exclusive of Tasmanian bacon and ham made elsewhere than in factories, and also of all South Australian bacon and ham.

‡ Information not available.

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

IMPORTS, EXPORTS, AND NET EXPORTS OF BACON AND HAM, FROZEN PORK, PIGS, AND LARD, AUSTRALIAN COMMONWEALTH, 1901 TO 1906.

	1901.	1902.	1903.	1904.	1905.	1906.
BACON AND HAM.						
Imports ... lbs.	905,164	730,699	626,791	371,354	162,715	194,059
" ... £	29,516	27,738	24,152	13,425	5,807	7,171
Exports ... lbs.	286,699	204,266	231,570	382,530	492,076	532,851
" ... £	10,424	8,106	9,756	12,596	15,262	18,467
Net Exports ¹ lbs.	— 618,465	— 526,433	— 395,221	— 11,226	329,361	338,792
" ... £	— 19,092	— 19,632	— 14,396	— 829	9,455	11,296
FROZEN PORK.						
Imports ... lbs.	106	211,678	2,467,732	211,803	154,052	139,363
" ... £	2	6,840	65,136	4,237	4,039	3,717
Exports ... lbs.	303,899	647,920	277,310	521,331	2,824,016	3,472,224
" ... £	5,971	14,654	7,174	9,346	47,596	60,936
Net Exports ¹ lbs.	303,793	436,242	— 2,190,472	309,528	2,669,964	3,332,861
" ... £	5,969	7,814	— 57,962	5,059	43,557	57,219
PIGS.						
Imports ... No.	39	50	21	73	64	24
" ... £	765	513	121	832	814	1,269
Exports ... No.	164	31	77	247	322	220
" ... £	234	119	106	276	399	263
Net Exports ¹ No.	125	— 19	56	174	258	196
" ... £	— 531	— 394	— 15	— 556	— 415	— 1,006
LARD.						
Imports ... lbs.	79,956	461,046	698,793	89,652	45,702	64,561
" ... £	1,716	12,459	17,703	1,736	924	1,294
Exports ... lbs.	93,929	64,430	426,507	952,088	1,064,562	551,268
" ... £	1,791	1,361	7,770	15,311	16,163	8,373
Net Exports ¹ lbs.	13,973	— 396,616	— 272,286	862,436	1,018,860	486,707
" ... £	75	— 11,098	— 9,933	13,575	15,239	7,079

1. — Signifies net imports.

4. **Interstate Trade in Pig Products.**—The interstate trade in pigs, bacon and hams, frozen pork, lard, etc., in 1906 was as follows:—

INTERSTATE TRADE IN PIG PRODUCTS, 1906.

State.	Imports from other States of the C'wealth.		Exports to other States of the Commonwealth.		Net Interstate Exports. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
PIGS.						
	No.	£	No.	£	No.	£
New South Wales ...	1,250	1,620	4,469	5,308	3,219	3,688
Victoria ...	4,453	5,215	216	570	4,237	4,645
Queensland ...	11	62	1	2	10	60
South Australia ...	7	47	1,152	1,458	1,145	1,411
Western Australia ...	115	395	...	...	115	395
Tasmania ...	3	2	1	3	2	1
BACON AND HAMS.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	2,821,452	91,665	492,883	13,137	2,328,569	78,528
Victoria ...	205,431	5,414	4,358,223	138,986	4,152,792	133,572
Queensland ...	160,832	4,644	2,480,225	79,838	2,319,393	75,194
South Australia ...	58,577	2,005	467,457	14,120	408,880	12,115
Western Australia ...	3,800,966	122,253	1,734	65	3,799,232	122,188
Tasmania ...	773,673	20,736	20,409	571	753,264	20,165
FROZEN PORK.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	76,488	1,236	183,432	3,499	106,944	2,263
Victoria ...	1,648	21	114,544	1,934	112,896	1,913
Queensland ...	115,327	2,282	68,709	1,406	46,618	876
South Australia ...	...	...	...	...	...	...
Western Australia ...	173,222	3,300	...	...	173,222	3,300
Tasmania ...	...	...	...	...	...	...
LARD AND REFINED ANIMAL FATS.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	501,164	9,512	172,911	3,186	328,253	6,326
Victoria ...	275,482	4,265	423,002	7,874	147,520	3,609
Queensland ...	46,775	797	636,706	11,846	589,931	11,049
South Australia ...	66,924	1,365	399,808	6,572	332,884	5,207
Western Australia ...	48,428	9,930	100	18	548,328	9,912
Tasmania ...	194,562	3,642	808	15	193,754	3,627

1. — Signifies net imports.

5. **Local Consumption of Bacon and Ham.**—From 1904 to 1906 the production of bacon and ham was sufficient to meet the local demand, and there was a surplus for export, but in 1901, 1902, and 1903 this was otherwise, and considerable quantities were imported.

BACON AND HAM LOCALLY CONSUMED, 1901 TO 1906.

Year.	1901.	1902.	1903.	1904.	1905.	1906.
Consumption ¹ ... lbs.	34,639,094	31,134,778	25,490,717	32,861,147	39,105,240	40,827,122

1. This excludes South Australia, for which no figures of production were available.

§ 4. Poultry Farming.

1. **Development of the Industry.**—Until recently, poultry farming as a well organised industry could scarcely be said to exist, although in metropolitan and suburban districts poultry has of course long been kept for the table and egg supplies. The aggregate output, though considerable, represented relatively little value beyond the cost of production, owing to imperfect management. Many farmers also, both wheat-growers and dairymen, have maintained a large poultry stock, erecting poultry yards constructed on modern principles, and feeding from the stubble fields and waste grain with a minimum expenditure in tending. This brought about a considerable addition to the net agricultural or dairying return. The poultry industry during recent years has assumed an independent position among rural industries, notwithstanding that large numbers of poultry runs on wheat and dairy farms are still maintained; poultry farming is also carried on in conjunction with pig farming. In special poultry farms, breeding on scientific principles and a proper arrangement of the runs is secured, and feeding and reproduction are technically attended to, and proper shelter is provided either by means of trees or sheds. Poultry experts are engaged by the State Governments to instruct in matters that will amplify the returns. Poultry for consumption are extensively reared, and the egg-producing qualities of the birds have also been greatly improved by careful breeding.

2. **Oversea Trade in Poultry Products.**—The imports and exports of eggs shew a considerable balance on the side of imports, in each of the six years tabulated. The introduction of valuable poultry for breeding is evidenced by the fact that although the exports in 1903, 1904 and 1905 exceeded the imports in number, the imports were of greater value. The figures for frozen poultry shew that a considerable oversea trade is carried on:—

IMPORTS, EXPORTS AND NET EXPORTS OF EGGS AND LIVE AND FROZEN POULTRY, AUSTRALIAN COMMONWEALTH, 1901 TO 1906.

	1901.	1902.	1903.	1904.	1905.	1906.
EGGS.						
Imports ... dozen	123,597	136,163	161,099	249,379	84,517	83,925
" ... £	3,833	4,077	3,748	4,437	1,943	2,184
Exports ... dozen	65,924	84,133	46,973	29,841	23,041	38,090
" ... £	3,319	4,078	2,292	1,245	1,199	1,718
Net exports ¹ dozen	—57,673	—52,030	—114,126	—219,538	—61,476	—45,835
" " £	— 514	— 1	— 1,456	— 3,192	— 744	— 466
LIVE POULTRY.						
Imports ... No.	"	"	577	1,454	1,417	3,220
" ... £	1,462	1,305	1,167	2,079	1,984	1,747
Exports ... No.	"	"	1,388	2,062	4,000	2,806
" ... £	470	1,190	371	1,086	1,863	1,767
Net Exports ¹ No.	"	"	811	608	2,583	414
" " £	— 992	— 115	— 796	— 993	— 121	— 20
FROZEN POULTRY.						
Imports ... lb.	"	"	23,601	15,833	22,623	8,949
" ... £	209	5,270	963	673	899	331
Exports ... pair	"	"	53,123	9,936	46,987	34,655
" ... £	26,738	41,283	10,364	3,509	11,765	9,506
Net Exports ¹ pair	"	"	"	"	"	"
" " £	26,529	36,013	9,401	2,836	10,866	9,175

1. — Signifies net imports.

2. Quantity not available.

3. **Interstate Trade in Poultry Products.**—South Australia is the largest supplier to the other States of the Commonwealth of poultry products generally, but Victoria has the largest Interstate market for frozen poultry.

INTERSTATE TRADE IN POULTRY AND POULTRY PRODUCTS, 1906.

State	Imports from other States of the Commonwealth.		Exports to other States of the Commonwealth.		Net Interstate Exports. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
LIVE POULTRY.						
	No.	£	No.	£	No.	£
New South Wales	13,318	3,123	1,850	920	11,468	2,203
Victoria	690	395	930	499	240	104
Queensland	829	444	325	84	504	360
South Australia	196	65	13,384	3,324	13,188	3,259
Western Australia	1,239	676	52	17	1,187	659
Tasmania	594	428	325	287	269	141
FROZEN POULTRY.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales	44,150	1,604	21,438	720	22,712	884
Victoria	4,453	133	121,779	4,383	117,326	4,250
Queensland	56	2	3,411	129	3,355	127
South Australia	65	2	6,205	195	6,140	193
Western Australia	104,983	3,713	...	...	104,983	3,713
Tasmania	...	...	874	27	874	27
EGGS.						
	Dozen.	£	Dozen.	£	Dozen.	£
New South Wales	1,091,994	38,869	46,968	1,822	1,045,026	37,047
Victoria	390,583	12,294	92,909	3,597	297,674	8,697
Queensland	762	74	217,896	6,942	217,134	6,868
South Australia	1,686	104	2,760,731	106,264	2,759,045	106,160
Western Australia	1,562,755	64,495	...	...	1,562,755	64,495
Tasmania	70,981	2,806	257	17	70,724	2,789

1.— Signifies net imports.

§ 5. Bee Farming.

1. **The Bee-farming Industry.**—Bee farming, like poultry farming, has ordinarily been an adjunct to agricultural or dairying industries, and can hardly yet be said to have been organised as a distinct industry. The returns collected shew that, while production varies greatly, there is on the whole a steady improvement, to which the large increase in the Western Australian product since 1902 has largely contributed. The annual average returns of honey from the hives range between 20 lbs. and 600 lbs. per hive.

2. **Honey and Beeswax.**—The particulars of honey production, available only for three States, are as given below:—

NUMBER OF HIVES AND PRODUCTION OF HONEY AND BEESWAX,
1901 TO 1907.

			1901.	1902.	1903.	1904.	1905.	1906.	1907.
N.S.W.	Hives	No.	58,954	53,089	46,243	58,330	64,730	48,632	...
"	Honey	lbs.	2,397,698	2,259,177	1,815,480	2,147,295	3,023,468	1,841,236	1,907,744
"	Beeswax	lbs.	49,337	51,735	37,207	49,589	58,610	39,620	34,690
Victoria	Hives	No.	21,412	22,083	32,126	40,759	49,120	41,780	48,005
"	Honey	lbs.	957,020	573,477	1,199,331	833,968	1,906,188	1,209,144	2,965,299
"	Beeswax	lbs.	15,269	13,530	23,061	18,979	28,653	21,844	46,780
W.A.	Hives	No.	3,880	4,939	7,109	8,705	12,837	12,825	...
"	Honey	lbs.	138,787	42,082	262,968	179,271	287,498	555,079	382,584
"	Beeswax	lbs.	3,158	2,978	3,478	4,533	6,211	9,303	8,302

3. **Oversea Trade in Bee Products.**—Both honey and beeswax are produced in the Commonwealth in sufficient quantities to supply all local requirements, and a considerable quantity of each is sent oversea.

IMPORTS, EXPORTS, AND NET EXPORTS OF HONEY AND BEESWAX,
AUSTRALIAN COMMONWEALTH, 1901 TO 1906.

	1901.	1902.	1903.	1904.	1905.	1906.
HONEY.						
Imports ... lbs.	71	415	205	1,233	12,036	2,618
" ... £	2	12	5	10	138	27
Exports ... lbs.	189,048	85,774	21,995	77,452	112,039	58,297
" ... £	2,543	1,644	446	875	1,333	1,001
Net Exports lbs.	188,977	85,359	21,790	76,219	100,003	55,679
" " £	2,541	1,632	441	865	1,195	974
BEESWAX.						
Imports ... lbs.	11,301	3,135	12,851	12,520	9,767	13,725
" ... £	413	180	652	694	593	787
Exports ... lbs.	64,139	68,570	63,421	39,795	86,720	30,570
" ... £	3,439	3,135	3,375	2,144	4,863	1,768
Net exports ... lbs.	52,838	65,435	50,570	27,275	76,953	16,845
" " ... £	3,026	2,955	2,723	1,450	4,270	981

4. **Interstate Trade in Bee Products.**—The interstate trade in honey and beeswax in 1906 is given below:—

INTERSTATE TRADE IN BEE PRODUCTS, 1906.

State.	Imports from other States of the C'wealth.		Exports to other States of the Commonwealth.		Net Interstate Exports. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
HONEY.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	326,875	3,844	50,761	654	276,114	3,190
Victoria ...	264,035	3,132	131,557	2,322	132,478	810
Queensland ...	2,522	45	78,849	909	76,327	864
South Australia ...	5,266	64	494,643	5,962	489,377	5,898
Western Australia ...	73,343	1,479	5,260	62	68,083	1,417
Tasmania ...	89,149	1,347	120	2	89,029	1,345
BEESWAX.						
	lbs.	£	lbs.	£	lbs.	£
New South Wales ...	3,433	185	637	33	2,796	152
Victoria ...	3,299	174	569	35	2,730	139
Queensland ...	41	3	2,514	138	2,473	135
South Australia ...	169	10	1,619	94	1,450	84
Western Australia ...	1,029	65	112	6	917	59
Tasmania ...	134	10	2,654	141	2,520	131

1. — Signifies net imports.

§ 6. Graphical Representation.

Two graphs showing respectively the increase in dairy production and in the exports of butter will be found on page 296.