

SECTION IX.

FARMYARD AND DAIRY PRODUCTION.

§ 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 previous issues of this work (see Official Year Book No. 6, pp. 430 *et seq.*). 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 pasturage and in the process of manufacture, coupled with effective State supervision, the dairying industry has shewn 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 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 establishments in the Commonwealth where the manufacture of butter, cheese, and condensed milk was carried on, numbered 531 in 1913. These were distributed as regards the various States as follows:—New South Wales, 170; Victoria, 197; Queensland, 88; South Australia, 48; Western Australia, 3; Tasmania, 25.

§ 2. Milk, Butter, and Cheese.

1. **Dairy Herds.**—Since the drought year 1902 there has been a general increase in the number of dairy cows. In New South Wales, Victoria, South Australia, 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, 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. In the tables which follow in this section, the returns for the Northern Territory and the Federal Territory are, unless shewn separately, included in South Australia and New South Wales respectively, the dairy products from the newly-acquired Commonwealth territories being small. Prior to 1913 the figures for the Northern Territory were unreliable:—

CATTLE AND DAIRY CATTLE, COMMONWEALTH, 1909 to 1913.

State.			1909.	1910.	1911.	1912.	1913.
New South Wales	...	All Cattle	3,027,727	3,140,307	3,185,824	3,033,726	2,815,113
	...	Dairy Cows	755,879	826,443	855,926	852,040	821,923
Victoria	...	All Cattle	1,549,640	1,547,569	1,647,127	1,508,089	1,528,553
	...	Dairy Cows	625,063	668,777	699,555	655,939	656,080
Queensland	...	All Cattle	4,711,782	5,131,699	5,073,201	5,210,891	5,322,033
	...	Dairy Cows	333,839	365,444	357,035	375,660	391,439
South Australia	...	All Cattle	344,034	384,862	393,566	393,418	352,905
	...	Dairy Cows	110,757	119,628	121,803	114,734	107,879
Western Australia	...	All Cattle	793,217	825,040	843,638	806,294	834,265
	...	Dairy Cows	29,176	30,785	27,740	27,310	30,680
Tasmania	...	All Cattle	199,945	201,854	217,406	222,181	205,743
	...	Dairy Cows	50,996	52,966	56,858	60,160	59,380
Northern Territory	...	All Cattle	414,046	513,383	459,780	405,552	417,643
	...	Dairy Cows	464	556	300	300	70
Federal Territory	...	All Cattle	*	*	8,412	7,108	7,627
	...	Dairy Cows	*	*	1,192	742	744
Commonwealth	...	All Cattle	11,040,391	11,744,714	11,828,954	11,577,259	11,483,882
	...	Dairy Cows	1,906,174	2,064,599	2,120,469	2,086,885	2,068,195

* Included under New South Wales.

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, something under 300 gallons per annum. The best yields over a series of years appear to be in Victoria, New South Wales, and South Australia, while Western Australia and Tasmania are below Queensland. 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, during any part of the year, milking. The average given is considerably below that for cows which were yielding during the greater part of the year. It will be seen that the highest averages obtain in those States which have adopted more scientific methods of dairying, such as systematic breeding, culling of herds, milk testing, etc.

PRODUCTION OF MILK, COMMONWEALTH, 1909 to 1913.

Heading.	N.S.W.*	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
1909—							
Dairy cows ... No.	755,879	625,063	333,839	111,221	29,176	50,996	1,906,174
Production of milk gals.	201,183,337	162,994,658	70,642,888	29,778,032	4,893,446	11,600,000†	481,092,361
Aver. yield per cow gals.	266	261	212	268	168	227	252
1910—							
Dairy cows ... No.	826,443	668,777	365,444	120,184	30,785	52,966	2,064,599
Production of milk gals.	235,577,702	196,674,373	87,648,322	34,672,756	5,125,124	13,300,000†	572,998,277
Aver. yield per cow gals.	285	294	240	288	166	251	278
1911—							
Dairy Cows ... No.	857,118	699,555	357,095	121,808	27,740	56,858	2,120,169†
Production of milk gals.	237,623,000	238,149,700	71,770,148	27,952,612	5,017,004	14,214,500†	594,726,964‡
Aver. yield per cow gals.	277	340	200	230	181	250	280
1912—							
Dairy Cows ... No.	852,782	655,939	375,660	114,734	27,310	60,160	2,086,585†
Production of milk gals.	225,446,209	199,296,920	82,977,730	27,547,870	5,215,779	15,040,000†	555,524,508‡
Aver. yield per cow gals.	264	304	221	240	191	250	266
1913—							
Dairy Cows ... No.	822,667	656,080	391,439	107,879	30,680	59,380	2,068,125†
Production of milk gals.	231,592,000	216,947,170	90,545,516	27,593,023	5,550,197	11,557,309	583,785,215‡
Aver. yield per cow gals.	282	331	231	256	181	195	282

* Including figures for Federal Territory, which in 1911 were 1192 dairy cows; 153,090 gallons of milk averaging 128 gallons per cow; in 1912, 742 dairy cows; 106,647 gallons of milk, averaging 144 gallons per cow; and in 1913, 744 dairy cows; 89,410 gallons of milk averaging 120 gallons per cow. † Estimated. ‡ Exclusive of Northern Territory.

3. **Butter and Cheese.**—The butter output shews, in general, a tolerably steady increase since the drought year 1902, the most marked development being in Queensland. The production of butter reached its highest figures in 1911, the next highest yields being in 1913 and 1910. The year 1913 marks the highest cheese production, the return being upwards of 20 per cent. advance on that of 1910, the next highest record. In both butter and cheese a decrease took place in some of the States in 1907 and 1908, due to the dryness of the season. There was a recovery in 1909. For the five years from 1909 to 1913 the figures are:—

PRODUCTION OF BUTTER AND CHEESE, COMMONWEALTH, 1909 to 1913.

State.	1909.	1910.	1911.	1912.	1913.
BUTTER.					
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales* ...	62,865,608	76,624,830	83,204,568	76,609,528	77,779,197
Victoria ...	55,166,555	70,603,787	86,500,474	67,655,834	73,361,567
Queensland ...	24,592,711	31,258,333	27,858,535	30,307,339	35,199,387
South Australia ...	8,482,168	10,717,486	9,694,666	8,394,557	8,036,274
Western Australia ...	414,453	641,491	498,047	448,799	518,566
Tasmania† ...	2,751,757	3,365,982	3,817,455	3,776,104	3,843,247
Commonwealth ...	154,373,252	193,211,909	211,573,745	187,194,161	198,758,238

CHEESE.

	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales ...	4,775,268	5,191,089	5,460,652	5,454,685	6,620,648
Victoria ...	5,025,834	4,530,893	4,549,843	4,176,778	4,856,321
Queensland ...	3,622,497	4,146,661	3,718,257	3,947,615	5,395,050
South Australia ...	1,578,978	1,796,281	1,526,930	1,953,027	2,216,985
Western Australia ...	1,570	3,306	900	...	...
Tasmania† ...	731,290	868,781	630,130	623,386	654,411
Commonwealth ...	15,774,837	16,537,011	15,886,712	16,160,491	19,743,415

* Including Federal Territory, where 27,630 lbs. of butter were produced in 1911; 16,561 lbs. in 1912; and 12,494 lbs. in 1913. † Estimated.

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 were made prior to 1911, in which year the output for the Commonwealth was nearly doubled. In 1912 there was a further notable increase, the figures for Victoria for that and the following year shewing a marked expansion. There is still a considerable import of milk, as will be seen from the tables hereunder; but in 1912, for the first time, the balance of trade was in favour of exports. No condensed or concentrated milk is made in South Australia, Western Australia, or Tasmania. In New South Wales, Victoria, and Queensland the following quantities are returned for the last five years:—

CONDENSED AND CONCENTRATED MILK MADE, 1909 to 1913.

Year.	N.S.W.	Victoria.	Queensland.	Commonwealth.
	lbs.	lbs.	lbs.	lbs.
1909	2,400,687	3,487,312	7,038,202	12,926,201
1910	1,940,481	2,707,110	7,843,670	12,491,261
1911	3,058,497	13,697,691	6,227,519	22,983,707
1912	3,636,519	18,500,011	7,923,381	30,059,911
1913	3,682,812	20,942,620	8,059,051	32,684,483

5. **Oversea Trade in Milk, Butter, and Cheese.**—The tables following give the imports, exports, and net exports or imports of butter, cheese, and milk. In each of the five years exports of butter exceeded imports; in two the cheese import was heavier than the export; and this was also the case with milk.

**IMPORTS, EXPORTS, AND NET EXPORTS OF BUTTER, CHEESE, AND MILK,
COMMONWEALTH, 1909 to 1913.**

IMPORTS.

Products.	1909.	1910.	1911.	1912.	1913.
Butter lbs.	80,111	71,695	22,607	44,142	13,844
" " " " " £	4,078	3,570	1,081	1,989	565
Cheese lbs.	367,504	303,155	318,891	443,847	364,699
" " " " " £	14,720	13,772	14,461	19,568	17,334
Milk—concentrated and preserved* lbs.	7,439,232	8,543,153	4,166,117	1,825,351	1,150,715
" " " " " £	145,736	135,297	74,278	25,949	26,579

EXPORTS.

Butter lbs.	55,700,987	87,928,151	101,722,136	66,685,056	75,802,303
" " " " " £	2,402,619	3,952,808	4,637,362	3,342,642	3,565,282
Cheese lbs.	203,477	921,583	1,159,363	146,022	1,609,452
" " " " " £	5,771	22,178	27,243	5,760	42,421
Milk—concentrated and preserved* lbs.	360,821	517,634	1,260,323	1,821,583	2,875,030
" " " " " £	7,852	10,289	21,990	37,876	75,165

NET EXPORTS.†

Butter lbs.	55,620,876	87,856,456	101,699,529	66,640,914	75,788,459
" " " " " £	2,398,541	3,949,233	4,636,281	3,940,653	3,564,717
Cheese lbs.	164,027	618,423	840,472	297,825	1,244,753
" " " " " £	8,949	8,406	12,782	14,928	25,087
Milk—concentrated and preserved* lbs.	7,078,411	8,025,524	2,905,794	606,232	1,724,315
" " " " " £	137,884	125,008	52,288	11,927	48,586

* See definition above.

† — signifies net imports.

6. **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 quantity available for consumption in the Commonwealth. In the period considered hereunder, 1910, 1911, and 1913 were the years in which the local supply of cheese was adequate :—

BUTTER AND CHEESE FOR LOCAL CONSUMPTION, 1909 to 1913.

Product.		1909.	1910.	1911.	1912.	1913.
		lbs.	lbs.	lbs.	lbs.	lbs.
Butter	... Total ...	98,652,376	105,569,150	109,874,216	120,500,247	122,969,779
"	... Per head of mean population ...	23.1	24.2	24.5	25.9	25.6
Cheese	... Total ...	15,938,864	15,918,853	15,046,240	16,458,316	18,498,662
"	... Per head of mean population ...	3.8	3.7	3.4	3.5	4.8

The quantity available for consumption in 1913 averaged 25.6 lbs. of butter and 4.8 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 about 20 lbs. per head.

§ 3. Pigs, Bacon, etc.

1. **Pigs.**—Great attention has been paid, both privately and by the various State Governments, to the improvement of marketable qualities in pigs. The number of pigs in the Commonwealth from 1909 to 1913 is shewn below :—

NUMBER OF PIGS, COMMONWEALTH, 1909 to 1913.

State.	1909.	1910.	1911.	1912.	1913.
New South Wales ...	237,849	321,632	370,700	293,450	287,896
Victoria ...	217,921	333,281	348,069	240,072	221,277
Queensland ...	124,803	152,212	173,902	143,695	140,045
South Australia ...	80,410	96,386	93,130	69,832	64,119
Western Australia ...	47,062	57,628	55,635	47,351	47,966
Tasmania ...	55,705	63,715	67,392	49,152	37,990
Northern Territory ...	1,887	996	1,500	1,500	1,018
Federal Territory ...	†	†	393	203	194
Commonwealth ...	765,137	1,025,850	1,110,721	845,255	800,505

† Included in New South Wales.

Prior to 1911 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. An examination of the returns shews remarkable fluctuations. There was a general decrease in 1906 and the two following years. Recovery began in 1909, and continued through 1910 and 1911; but 1912 and 1913 shew a heavy fall. The number of pigs per head of population, and the number per square mile, will be found in the tables of live stock, pages 277 and 278.

2. **Bacon and Ham.**—From 1905 to 1908 the production of bacon and ham in the Commonwealth showed little annual variation. In 1909 there was a considerable falling-off, but a large increase has taken place in subsequent years.

PRODUCTION OF BACON AND HAM, COMMONWEALTH, 1909 to 1913.

State.	1909.	1910.	1911.	1912.	1913.
	lbs.	lbs.	lbs.	lbs.	lbs.
New South Wales* ...	9,931,377	12,620,067	16,102,827	16,526,376	15,192,263
Victoria ...	13,620,485	16,438,837	19,546,772	20,043,706	19,289,258
Queensland ...	9,228,317	10,758,963	11,667,654	12,437,019	13,709,716
South Australia ...	3,348,050	3,741,942	4,311,497	3,771,064	3,265,773
Western Australia ...	120,623	121,154	97,136	114,950	100,143
Tasmania† ...	1,526,115	1,468,789	1,538,766	1,299,060	1,116,535
Commonwealth ...	37,774,967	45,149,752	53,264,652	54,192,175	52,673,688

* Including Federal Territory, where 22,670 lbs. of bacon and ham were produced in 1911; 15,196 lbs. in 1912; and 11,885 lbs. in 1913. † Estimated prior to 1913.

3. **Overseas Trade in Pig Products.**—The overseas trade in pigs and pig products is shewn in the following tables:—

IMPORTS, EXPORTS, AND NET EXPORTS OF BACON AND HAM, FROZEN PORK, PIGS, AND LARD, COMMONWEALTH, 1909 to 1913.

Particulars.	1909.	1910	1911	1912.	1913.	
BACON AND HAM.						
Imports ...	... lbs.	244,903	204,488	201,309	294,130	126,692
" ...	... £	9,384	8,687	8,566	11,962	6,301
Exports ...	... lbs.	403,801	1,605,699	2,340,612	2,174,114	1,866,894
" ...	... £	18,979	57,060	74,178	68,503	74,718
Net Exports	... lbs.	158,898	1,401,211	2,139,303	1,879,984	1,740,202
"	... £	9,595	48,373	65,612	56,541	68,417
FROZEN PORK.						
Imports ...	... lbs.	109,620	106,757	...	79,052	...
" ...	... £	3,301	3,227	...	2,592	...
Exports ...	... lbs.	394,559	741,410	1,641,013	897,929	215,175
" ...	... £	9,318	17,087	33,639	16,661	5,259
Net Exports	... lbs.	284,939	634,653	1,641,013	818,877	215,175
"	... £	6,017	13,860	33,639	14,069	5,259
PIGS.						
Imports ...	... No.	31	50	35	14	20
" ...	... £	1,177	799	539	198	54
Exports ...	... No.	229	303	385	609	440
" ...	... £	460	477	748	1,025	1,336
Net Exports*	... No.	198	253	350	595	420
"	... £	— 717	— 322	209	827	1,282

* — signifies net imports.

IMPORTS, EXPORTS, AND NET EXPORTS OF BACON AND HAM, FROZEN PORK, PIGS, AND LARD, COMMONWEALTH, 1909 to 1913—Continued.

Particulars.	1909.	1910.	1911.	1912.	1913.
LARD.					
Imports lbs.	358,213	198,897	387,626	794,961	884,812
" £	9,148	5,573	9,870	22,096	23,900
Exports lbs.	1,618,995	3,112,190	3,399,386	2,092,422	4,299,987
" £	28,948	62,664	57,861	37,063	85,194
Net Exports lbs.	1,260,782	2,913,293	3,011,760	1,297,461	3,415,175
" £	19,800	57,091	47,991	14,967	61,294

From 1901 to 1903 there was a considerable net import of bacon and ham, but for the following years there was a large net export. The local production of frozen pork and lard was for each of the years shewn more than sufficient for the local demand. The net export of pig products was considerably greater in 1910 and 1911 than in previous years. There was a decline in 1912, and a further falling off in 1913.

4. **Local Consumption of Bacon and Ham.**—From 1904 to 1913 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 AVAILABLE FOR LOCAL CONSUMPTION, 1909 to 1913.

Consumption.	1909.	1910.	1911.	1912.	1913.
	lbs.	lbs.	lbs.	lbs.	lbs.
Total	37,616,069	43,748,541	51,125,349	52,312,191	50,933,486
Per head of mean population ...	8.8	10.0	11.4	11.3	10.6

5. **Total Dairy Production.**—The total dairy production of the Commonwealth in 1913 is shewn below:—

TOTAL DAIRY PRODUCTION, COMMONWEALTH, 1913.

Where Produced.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
MILK.							
On Dairy & other Farms	gallons. 231,592,000	gallons. 216,947,170	gallons. 90,545,516	gallons. 27,593,023	gallons. 5,550,197	gallons. 11,557,309	gallons. 583,785,215*

BUTTER.

	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
In Factories	73,245,383	67,701,897	33,122,143	4,415,074	146,953	2,754,855	181,386,305
On Dairy & other Farms	4,533,814*	5,679,670	2,077,244	3,621,200	371,613	1,088,392	17,371,933
Total	77,779,197*	73,381,567	35,199,387	8,036,274	518,566	3,843,247	198,758,238

TOTAL DAIRY PRODUCTION, COMMONWEALTH, 1913—Continued.

Where Produced.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
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CHEESE.

	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
In Factories ...	3,451,710	2,847,951	5,261,682	2,214,865	...	442,897	14,219,305
On Dairy & other Farms	3,168,938*	2,008,370	133,168	2,120	...	211,514	5,524,110
Total ...	6,620,648	4,856,321	5,395,050	2,216,985	...	654,411	19,743,415

CONDENSED OR CONCENTRATED MILK.

	lbs.	lbs.	lbs.	...	...	...	lbs.
In Factories ...	3,682,812	20,942,620	8,059,051	...	...	...	32,684,483

BACON AND HAM.

	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
In Factories ...	12,874,666	16,345,955	12,840,736	2,520,035	...	784,559	45,365,951
On Dairy & other Farms	2,317,597*	2,943,303	868,980	745,738	100,143	331,976	7,307,737
Total ...	15,192,263*	19,289,258	13,709,716	3,265,773	100,143	1,116,535	52,673,688

* Including Federal Territory, where there was produced 89,410 gallons of milk; also 12,494 lbs. of butter on farms; also 11,885 lbs. of bacon and hams (on farms). † Exclusive of Northern Territory, for which no returns are available.

§ 4. Poultry Farming.

1. **Development of the Industry.**—Poultry stocks are usually maintained by farmers and furnish a considerable addition to the annual agricultural or dairying returns. During recent years the poultry industry has assumed an independent position among rural industries. It is also carried on in conjunction with pig farming. Special poultry farms have been instituted for scientific breeding. Poultry experts engaged by the State Governments give lectures and instruction. Poultry for consumption is extensively reared, and the egg-producing qualities of the birds have also 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. **Production of Poultry.**—Figures for the yield of poultry products are difficult to obtain. The following values are returned:—

ESTIMATED VALUE OF POULTRY AND EGGS, COMMONWEALTH,
1909-10 to 1913-14.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.
	£	£	£	£	£	£	£
1909-10 ...	1,309,000	1,570,000	185,000	431,575	160,562	*	3,656,137†
1910-11 ...	1,170,000	1,592,000	204,000	496,311	168,251	\$227,000	3,857,562
1911-12 ...	1,200,000‡	1,618,500	195,000	533,941	175,890	\$230,000	3,953,331
1912-13 ...	1,434,000‡	1,825,010	188,000	541,489	183,689	\$230,000	4,402,188
1913-14 ...	1,579,600‡	1,706,700	219,400	569,254	223,713	\$230,000	4,528,667

* Not available. † Excluding Tasmania. ‡ Including Federal Territory, where the estimated value was £1800 in 1911-12; £1880 in 1912-13; and £1600 in 1913-14. § Estimated.

3. **Oversea Trade in Poultry Products.**—The imports and exports of eggs show a considerable balance on the side of imports in each of the years 1901 to 1906 and during the last five years. In 1907 the export greatly exceeded the import, and in 1908 the imports were greater in quantity, but less in value, than the exports. The figures for frozen poultry indicate a considerable oversea export.

**IMPORTS, EXPORTS, AND NET EXPORTS OF EGGS AND LIVE AND FROZEN
POULTRY, COMMONWEALTH, 1909 to 1913.**

Particulars.	1909.	1910.	1911.	1912.	1913.
EGGS.					
Imports doz.	38,931	39,330	40,969	45,160	53,577
" £	1,007	1,111	1,209	1,464	1,748
Exports doz.	10,527	3,853	5,734	6,211	4,872
" £	713	326	1,124	518	377
Net exports* doz.	— 28,404	— 35,477	— 35,235	— 38,949	— 48,705
" " £	— 294	— 785	— 85	— 946	— 1,371
LIVE POULTRY.					
Imports No.	1,862	1,274	2,398	1,720	1,725
" £	944	663	964	1,460	913
Exports No.	4,708	3,251	2,218	3,859	2,480
" £	1,475	1,057	1,068	1,231	1,074
Net exports* No.	2,846	1,977	— 180	2,139	755
" " £	531	394	104	229	161
FROZEN POULTRY.					
Imports lbs.	3,565	4,811	5,653	2,102	10,328
" £	100	131	257	64	475
Exports pair	5,828	7,680	16,869	23,390	25,520
" £	3,127	4,171	7,470	10,144	10,979
Net exports †	†	†	†	†	15,192
" " £	3,027	4,040	7,213	10,080	10,504

* — signifies net imports. † Quantity not available.

§ 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 annual returns of honey from the hives range between 20 lbs. and 60 lbs. per hive.

The value of the export of honey from Australia was only £2675 in 1909, £2439 in 1910, £4414 in 1911, £1924 in 1912, and £4094 in 1913. It is believed that this export could be considerably increased. Australian honey exhibited in the Franco-British Exhibition in London in 1908, obtained the highest award, thus evidencing the purity of its flavour.

2. **Production of Honey and Beeswax.**—The particulars of honey and beeswax production are as given below:—

**NUMBER OF HIVES AND PRODUCTION OF HONEY AND BEESWAX,
SEASON 1913-14.**

State.	Bee Hives.			Honey Produced.		Beeswax Produced.	
	Productive	Un-productive.	Total.	Quantity.	Value.	Quantity.	Value.
	No.	No.	No.	lbs.	£	lbs.	£
New South Wales	43,895	10,968	54,863	1,862,471	27,440	39,060	2,490
Victoria ...	41,397	14,168	55,565	1,961,746	26,565	37,323	2,449
Queensland ...	13,862	2,599	16,461	754,760	9,042	12,059	648
South Australia ...	19,808	7,909	27,717	876,395	12,781	11,607	677
Western Australia	5,963	1,910	7,873	156,162	1,952	3,910	228
Tasmania ...	7,164	2,946	10,110	180,472	3,008	4,630	289
Federal Territory	95	61	156	4,364	60	184	10
Commonwealth	132,184	40,561	172,745	5,796,370	80,848	108,773	6,791

QUANTITY OF HONEY AND BEESWAX PRODUCED, 1909-10 to 1913-14.

Season.	N. S. Wales	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania	Fed.Ter.	C'wealth.
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HONEY.

	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1909-10	2,066,330	1,611,284	548,171	812,487	409,345	*	...	5,447,617†
1910-11	2,765,618	2,308,405	517,565	996,376	388,507	*	...	6,926,471†
1911-12	3,394,489	1,635,260	574,973	760,094	416,823	*	38,764	6,820,403†
1912-13	2,390,355	3,277,590	581,228	1,446,364	292,515	*	19,645	8,007,697†
1913-14	1,862,471	1,961,746	754,760	876,395	156,162	180,472	4,364	5,796,370

BEESWAX.

1909-10	53,006	22,369	11,849	10,059	9,841	*	...	107,124†
1910-11	72,617	34,695	11,798	10,608	7,215	*	...	136,933†
1911-12	66,686	28,405	11,419	9,745	13,730	*	672	130,657†
1912-13	49,267	45,354	11,744	18,054	6,073	*	467	130,959†
1913-14	39,060	37,323	12,059	11,607	3,910	4,630	184	108,773

* Not available. † Exclusive of Tasmania.

The quantity of honey and beeswax produced from year to year varies considerably according to the climatic conditions of the seasons. During the past five years New South Wales has been the largest producer, accounting for nearly 38 per cent. of the total honey produced in the Commonwealth, and 46 per cent. of the beeswax; Victoria, the next in importance, produced about 33 per cent. of the honey, and 27 per cent. of the beeswax, South Australia, Queensland, and Western Australia coming next in the order named.

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,
COMMONWEALTH, 1909 to 1913.**

Particulars.	1909.	1910.	1911.	1912	1913.
HONEY.					
Imports lbs.	9,842	872	2,477	5,024	636
" " " " " £	249	23	93	89	19
Exports lbs.	168,953	182,083	353,367	135,318	284,322
" " " " " £	2,675	2,439	4,414	1,924	4,094
Net Exports lbs.	159,111	181,211	350,890	130,294	283,686
" " " " " £	2,426	2,416	4,321	1,835	4,075

BEESWAX.					
Imports lbs.	19,041	7,821	8,335	7,212	6,059
" " " " " £	1,112	505	564	536	480
Exports lbs.	35,540	26,408	12,691	9,453	10,455
" " " " " £	2,064	1,587	751	581	657
Net Exports lbs.	16,499	18,587	4,356	2,241	4,396
" " " " " £	952	1,082	187	45	177

§ 6. Summary of Australian Farmyard and Dairy Products.

The value of the principal farmyard and dairy products raised in the Commonwealth in 1913 was:—

**VALUE OF THE PRINCIPAL FARMYARD AND DAIRY PRODUCTS IN THE
COMMONWEALTH DURING THE YEAR 1913.**

Produce.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aus.	Tas.	N. T.	Fed. Ter.	C'wealth.
	£	£	£	£	£	£	£	£	£
Milk, cons'm'd as such ...	938,900	900,200	239,000	191,900	109,000	57,500	1,200	1,100	2,438,800
Butter ...	3,461,200	3,341,900	1,582,100	416,150	29,000	186,550	(a)	600	9,017,500
Cheese ...	174,400	126,700	140,550	53,060	...	13,620	(a)	...	508,330
O'densd & con- cen'ted milk	52,734	386,300	187,536	...	...	...	...	...	626,570
Bacon & ham	511,400	810,600	447,380	131,690	3,350	41,075	...	400	1,945,895
Poultry & eggs	1,578,000	1,706,700	219,400	569,254	223,713	230,000	...	1,600	4,528,667
Honey & wax	29,930	29,014	9,690	13,458	2,180	3,297	...	70	87,639

(a) Information not available.

§ 7. Summary of Australian Farmyard and Dairy Products Exported, 1909 to 1913.

The quantities and values of Australian farmyard and dairy products exported from the Commonwealth during each of the last five years are shewn below:—

QUANTITIES OF AUSTRALIAN FARMYARD AND DAIRY PRODUCTS EXPORTED FROM THE COMMONWEALTH DURING EACH OF THE YEARS 1909 to 1913.

Products.	1909.	1910.	1911.	1912.	1913.
Beeswax lbs.	35,540	26,408	12,671	9,347	10,455
Butter "	55,644,925	87,894,943	101,722,136	66,679,120	75,795,642
Cheese "	193,204	911,760	1,149,134	136,452	1,602,609
Egg albumen and yolk "					
Eggs doz.	10,359	3,753	5,542	6,163	4,872
Feathers, undressed "					
Honey lbs.	168,953	182,023	353,367	135,318	284,222
Lard "	1,617,442	3,105,307	3,399,209	2,090,477	4,279,440
Meats—					
Bacon and ham "	396,342	1,604,362	2,338,299	2,172,860	1,846,966
Frozen poultry pair	5,828	7,680	16,869	23,320	25,520
" pork lbs.	394,559	741,410	1,641,013	897,929	215,175
Milk, concentrated & preserved "	169,310	266,904	1,017,072	1,646,414	2,779,963
Pigs, living No.	229	303	385	609	440
Poultry, living "	4,708	3,251	2,198	3,849	2,480

* Quantity not available.

VALUE OF AUSTRALIAN FARMYARD AND DAIRY PRODUCTS EXPORTED FROM THE COMMONWEALTH DURING THE YEARS 1909 to 1913.

Products.	1909.	1910.	1911.	1912.	1913.
	£	£	£	£	£
Beeswax	2,064	1,587	749	575	657
Butter	2,399,693	3,951,131	4,637,362	3,342,320	3,564,925
Cheese	5,337	21,730	26,754	5,303	42,030
Egg albumen and yolk	4	724	651	...	3
Eggs	706	520	437	516	377
Feathers, undressed	2,244	2,021	2,971	2,926	1,576
Honey	2,675	2,435	4,414	1,924	4,094
Lard	28,876	62,474	57,854	37,007	84,737
Meats—					
Bacon and ham	18,682	56,935	74,065	68,439	73,982
Frozen poultry	3,127	4,171	7,470	10,144	10,979
" pork	9,318	17,087	33,639	16,661	5,259
Milk, concentrated and preserved	3,319	4,865	16,675	34,317	72,950
Pigs, living	460	477	748	1,025	1,336
Poultry, living	1,475	1,057	1,038	1,209	1,074
Total	2,477,980	4,127,074	4,864,827	3,522,366	3,863,979

§ 8. British Imports of Dairy Products.

1. Value of Britain's Imports of Dairy Products.—Great Britain has paid annually since 1909, £24,000,000 for imported butter, the value of the imports in 1909, 1910, 1911, 1912, and 1913 being £22,425,000, £24,493,000, £24,600,000, £24,354,000, and £24,084,000, respectively; for imported cheese the amounts in the years named were respectively £6,830,000, £6,810,000, £7,140,000, £7,414,000, and £7,035,000; for bacon and ham, £16,914,000, £15,918,000, £17,391,000, £17,276,000, and £20,497,000, respectively; and for pork, £1,336,000, £1,500,000, £1,413,000, £1,101,000, and £1,665,000, respectively.

2. **Butter.**—Australia in 1911 stood second, and in 1912 and 1913 third, in the value of butter imported into the United Kingdom; but the import of other Australian dairy products was inconsiderable.

IMPORT OF BUTTER INTO THE UNITED KINGDOM, 1913.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	Cwt.	£		Cwt.	£
Denmark ...	1,706,759	10,657,589	Argentine Republic	72,418	394,529
Russia ...	751,414	3,831,366	Norway...	20,132	119,808
Australia ...	594,552	3,210,733	Other Countries ...	8,008	43,534
New Zealand ...	251,663	1,351,285			
Sweden ...	332,331	2,047,634			
France ...	248,579	1,505,442			
Netherlands ...	153,172	921,738	Total ...	4,199,028	24,083,658

In October, 1907, a falling-off of imports of Australian butter into Great Britain was noticed, with the result that, three months later, there was a heavy shortage, accompanied by rapidly rising prices, until a limit was reached with 156s. per cwt., the highest recorded for Australasian butter. After a short period of high values in February, 1908, prices steadied at 116s., and then gradually fell to 104s. in the middle of May, when European grass-fed butter was ready for the British market. In January, 1910, the average price was 111s. After a fall in 1911, 134s. was reached in the middle of January, 1912. These high values were followed by a rapid decline. Higher prices were again in evidence as 1913 advanced, 128s. being obtained for best unsalted butter in October and November of that year. Prices in London during the last five years have been considerably higher than the average of any previous year since the Australian export trade was instituted twenty years ago. A marked approach to Danish values has lately been made in the prices of Australian butter.

3. **Cheese.**—The value of the British cheese import in 1913 was £7,035,000, of which over four million pounds' worth was received from Canada. Small experimental shipments from Australia were made in 1908 and following years, a fair price being realised. In 1913, the value of the import from Australia was £24,600.

4. **Bacon and Ham.**—Of a total import of bacon and ham valued in 1913 at £20,497,000, Great Britain received imports to the value of £8,870,000 from Denmark; £8,838,000 from the United States; and £1,200,000 from Canada. The British import from Australia was small, but experimental shipments have been made during recent years.

5. **Pork.**—The total value of British imports of pork (including refrigerated, frozen and salted) was £1,665,000 in 1913. Of this the value of Australian produce was *nil*, whilst from the Netherlands, pork valued at £1,269,000 was imported into Great Britain.

6. **Other Products.**—There is practically no British import from Australia of honey, beeswax, poultry, game, lard, or eggs, but frozen rabbits to the value of £571,000 were received from the Commonwealth in 1913.

§ 9. Graphical Representation of Dairy Production.

Two graphs shewing respectively the increase in dairy production and in the exports of butter will be found on page 292.