### 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, &c., 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 handmade butter was about 3 gallons, but separator butter requires only 2½ gallons.

5. Butter and Cheese Factories.—The factories in Australia for the manufacture of butter, cheese, and condensed milk numbered 563 in 1927-28. These were distributed in the various States as follows:—New South Wales, 160; Victoria, 179; Queensland, 123; South Australia, 55; Western Australia, 12; and Tasmania, 34.

### § 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 was reduced to 1,684,393. Following that year substantial increases have taken place, and the number recorded in 1927 represents a gain of nearly 520,000 in the past decade. In New South Wales, Victoria, South Australia, and Tasmania the proportion of dairy cattle on 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 past decennium, and the progress attained in that area has been largely responsible for the Australian increases since 1916. The returns for 1927 include heifers intended for milking and being within three months of calving. Details were not collected for Victoria and Tasmania, but the total of such heifers in the other States amounted to 133,227.

CATTLE	AND	DAIRV	CATTLE _	-NUMBER.	1023 TO	1027
CALLE	MIND	DAIN	CALLE.	-NUMBER.	1743 10	1741.

Sta	State.			1925.	1926.	1927.
New South Wales	All Cattle Dairy Cows All Cattle	2,932,437 784,824 1,591,367	2,871,196 834,557 1,605,554	2,931,818 840,930 1,513,787	2,813,144 885,238 1,435,761	2,848,654 894,440 1,327,077
Victoria Queensland	Dairy Cows	738,149 6,396,514	760,207 6,454,653	727,940 6,436,645	673,089 5,464,845	626,139 5,225,804
South Australia	Dairy Cows All Cattle Dairy Cows	512,529 413,272 136,438	584,886 400,423 133,619	551,426 373,597 127,670	611,227 340,007 127,292	645,316 316,314 117,580
Western Australia	All Cattle Dairy Cows	953,764 61,832 220,351	891,564 60,882 225,740	835,911 63,008 212,373	827,303 69,627 213,112	846,735 70,880 210,894
Tasmania  Northern Territory	Dairy Cows	70,497 843,718	70,073 855,285	70,382 970,342	67,457 863,597	66,902 835,390
Federal Capital Territo	Ty { Dairy Cows All Cattle Dairy Cows	(a) 6,085 . 375	(a) 5,058 413	(a) 5,312 646	(a) 5,509 815	(a) 6,188 1,417
Australia	All Cattle Dairy Cows	13,357,508 2,304,644	13,309,473 2,444,637	13,279,785 2,382,002	11,963,278 2,434,745	11,617,05 <b>6</b> 2,422,67 <b>4</b>

(a) Not available.

2. Milk.—The annual quantity of milk produced per dairy cow varies greatly with breed, 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. Of late years an improvement in the grade of dairy cattle has taken place, and the 300 gallon mark has been exceeded on each of the last four seasons, the yield of 363 gallons in 1924 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 based on 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, 1923 TO 1927-28.

Heading.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
1923							1	ļ
Dairy Cows (a) No.	790,890	766,524	538,106	135,944	60,110	70,244	409	2,362,227
Production 1,000 gals.	225,395	260,953	104,204	47,621	13,048	21,200	111	672,532
Aver. per cow gals.	285	340	194	350	217	302	271	285
1924—	Ĭ				1		i	i .
Dairy Cows (a) No.	809,691	749,178	548,707	135,029	61,357	70,285	394	2,874,641
Production 1,000 gals.	316,810	294,765	170,074	45,426	13,363	21,840	116	862,394
Aver. per cowgals.	391	393	310	336	218	311	294	363
1925-26-(c)	[	] :	1	Į.	1 1			
Dairy Cows (a) No.	837,744	744,074	568,156	130,644	61,945	70,227	530	2,413,320
Production 1,000 gals.	289,861	255,120	153,386	41,386	14,823	18,684	199	773,459
Aver. per cow gals.	346	343	270	317	239	266	375	820
1926-27 (c)	l			1	i i		1	
Dairy Cows (a) No.	837,373	700,515	553,472	123,066	63,768	68,920	730	2,347,844
Production 1,000 gals.	277,917	258,437	136,416	40,434	15,553	21,009	198	749,964
Aver. per cow gals.	332	369	246	329	244	305	271	319
1927-28 (c)	j			<b>'</b>	1 1		l	
Dairy Cows (a) No.	837,617	649,614	565,913	114,459	65,701	67,180	1,082	2,301,566
Production 1,000 gals.	283,046	260,648	180,679	37,947	17,159	22,556	220	802,255
Aver. per cow gals.	338	401	319	332	261	336	203	349

(a) Mean for the year.

(b) Exclusive of Northern Territory.

(c) Year ended 30th June.

3. Butter and Cheese.—Although the quantity of dairy production is largely affected by the nature of the season, an important advance in the output of butter has taken place in the past decade. During that period the average annual production increased from 180,000,000 lb. for the quinquennium 1912-1916, to 269,000,000 lb. for the latest five years under review. Queensland was responsible for the largest share of the increased output of butter during recent years, where the development has been very satisfactory. The maximum output of butter in Australia was recorded in 1924, when, as a result of a specially favourable season, 313,952,291 lb. were manufactured.

The manufacture of cheese is also largely dependent upon seasonal conditions. The average for the last decennium is, however, much greater than that for the previous one. The production in 1921 of 32,653,003 lb. is the highest yet recorded, while for 1927–28 the production, amounting to 31,534,875 lb., follows very closely.

The development in dairy production since 1896, and in the exports of butter from 1901 onwards are shown in the graphs on page 658. Particulars for the past five years are as follows:—

BUTTER AND CHEESE PRODUCTION, 1923 TO 1927-28.

	1121	74111	OTTLIEBL .	RODOVIIC	11, 1720 1	1/21 201	
State			1923.	1924.	1925–26.	1926–27.	1927-28.
			-	BUTTER.			
New South Wales Victoria Queensland South Australia Western Australia Tasmania Federal Capital Terr	··· ··· ··· ritory		lb. a72,666,613 a86,888,725 40,659,634 a17,244,389 3,005,491 a6,183,521 17,480	lb. a117,195,871 a100,849,382 a70,400,492 a16,066,694 2,962,630 a6,455,746 15,476	lb. 106,953,339 81,747,291 63,001,073 13,882,850 2,591,818 5,122,992 14,322	lb. 95,832,624 81,995,815 51,402,633 13,416,904 3,829,728 6,032,597 20,758	1b. 100,794,838 84,270,812 72,039,151 12,136,638 4,265,258 6,514,642 16,065
Australia			226,665,853	313,952,291	273,313,685	252,531,059	280,037,404
			(	CHEESE.			
New South Wales Victoria Queensland Bouth Australia Western Australia Tasmania			lb. a5,912,656 a7,216,936 7,221,355 a3,679,552 4,365 a1,345,661	1b. a7,705,596 a6,193,135 a12,643,863 a3,743,628 4,055 a1,152,015	1b. 6,462,535 5,279,009 12,580,942 3,636,278 3,818 836,738	1b. 6,735,960 5,997,648 9,260,043 3,708,730 5,172 971,644	1b. 7,284,622 5,621,945 14,128,420 3,465,456 5,088 1,029,344
Australia	••	••	25,380,525	31,442,292	28,799,320	26,679,197	31,534,875

4. Concentrated Milk .- "Condensed" or "concentrated" milk represents milk the bulk of which is reduced by evaporation. The industry is of comparatively recent growth, the quantity of milk treated in 1901 being negligible, but production increased annually until in 1911 the output nearly doubled that of the previous year. Thenceforward rapid progress was made, the greatest development taking place in Victoria, where the industry is most largely established. 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, 1923 TO 1927-28.

Year.		N.S.W. Victoria.		Queensland.	Australia.	
1923		 1h. a7,158,537	lb. a49,099,632	lb. 8,131,648	lb. 64.389,817	
1924–25	• • •	 5.804.191	45,693,120	10.511.919	62.009.230	
1925-26		 5,745,454	43,646,852	8,831,623	58,223,929	
1926-27		 b	48,186,040	b	c59,180,891	
1927-28		 b	53,876,662	b	d53,876,662	

 <sup>(</sup>a) For year ended 30th June of year following.
 (b) Not available for publication.
 (c) Including New South Wales and Queensland.
 (d) Victorian total only.

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 dealt with the exports of butter, cheese, and condensed milk exceeded the imports.

# BUTTER, CHEESE, AND MILK, IMPORTS AND EXPORTS.-AUSTRALIA,

					1923-24 T	0 1927–28.			
		Products.			1923–24.	1924–25.	1925–26.	1926-27.	1927–28.
					Імро	ORTS.			
Butter Cheese Milk—co	oncentra	ated and p	oreserved	lb. £ lb. £ (a)lb. £	2,368,102 191,828 1,422,148 71,379 373,866 26,652	19,717 1,340 356,717 37,448 367,073 32,359	2,991,243 246,703 1,487,023 111,827 348,178 20,398	7,160,864 519,672 1,789,766 133,600 647,122 34,115	6,975,370 549,548 2,084,486 116,200 931,344 36,837
					Expo	ORTS.			
Butter Cheese Milk—co	oncentra	ated and j	preserved	lb. £ lb. £ !(a)lb. £	65,984,020 4,919,664 3,831,269 142,820 17,765,480 1,080,088	145,281,326 10,006,081 10,397,392 365,764 29,172,996 1,694,634	97,899,824 7,006,830 6,884,347 271,973 25,908,328 1,476,422	76,767,844 5,465,347 3,663,175 133,266 17,759,929 1,081,256	99,164,946 6,905,933 6,933,857 260,879 20,640,224 1,188,903
					NET EXPO	RTS.(b)			
Butter Cheese Milk—co	oncentra	     	oreserved	lb. £ lb. £ (a)lb. £	63,615,918 4,727,836 2,409,121 71,441 17,391,614 1,053,436	145,261,609 10,004,741 10,040,675 328,316 28,805,923 1,662,275	94,908,581 6,760,127 5,397,324 160,146 25,560,150 1,456,024	69,606,980 4,945,675 1,873,409 -334 17,112,807 1,047,141	92,189,576 6,356,385 4,849,371 144,679 19,708,880 1,152,066

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

<sup>(</sup>a) See definition above.

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. The figures for the past five years are as follows:—

BUTTER AND CHEESE.-LOCAL CONSUMPTION, 1923 TO 1927-28.

Products.	1923.	1924.	1925-26.	1926-27.	1927-28.
Butter Total ,, Per head of population Cheese Total ,, Per head of population	1b. 163,049,935 28,36 22,971,404 4,00	lb. 168,690,682 28,72 21,401,617 3,64	29, 77	lb. 182,924,079 29,94 24,805,788 4,06	lb. 187,847,828 30, 13 26,685,504 4, 28

The quantity available for consumption in 1927–28 averaged 30 lb. of butter and 4 lb. of cheese, or a total of 34 lb. per head of population, an amount probably unsurpassed anywhere. The consumption of butter and cheese in the United Kingdom in normal times is given at about  $22\frac{1}{2}$  lb. per head per annum.

# § 3. Pigs and Pig Products.

1. Pigs.—The number of pigs in Australia from 1923 to 1927 is shown below:—

PIGS.—NUMBER, 1923 TO 1927.

State.	1923.	1924.	1925.	1926.	1927.
New South Wales (a)	322,762	339,378	382,331	332,827	301,819
Victoria	259,795	288,509	339,601	284,271	212,785
Queensland	132,243	156,163	199,598	183,662	191,947
South Australia	(a) 73,414	80,988	90,794	79,108	69,733
Western Australia	61,478	66,375	74,316	69,798	59,810
Tasmania	47,101	47,305	41,009	38,906	41,752
Northern Territory	647	1,000	382	343	292
Federal Cap. Territory (a)	434	291	343	94	69
Australia	897,874	980,009	1,128,374	989,009	878,207

(a) 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 the next two years, the number in 1917, viz., 1,169,365, being the highest recorded in Australia. From 1917 onwards the numbers have remained fairly constant but, compared with 1925, a decline is noticed for the two subsequent years. The number of pigs per head of population and the number per square mile, will be found in the tables of live stock, page 640.

2. Bacon and Ham.—(i) Production. The production of bacon and ham is increasing fairly rapidly, the averages for the past three quinquennia being 53,000,000, 59,000,000, and 72,000,000 lb. respectively. No increase in the volume of exports has taken place, the extra production being needed to supply the local demand, which is expanding with the population and the increasing consumption per head.

RACON	AND	HAM	PRODUCTION.	1923	TO	1927-28

State.	1923.	1924.	1925–26.	1926-27.	1927-28.
	lb.	lb.	lb.	lb.	lh.
	a19,044,294	a21,068,976	22,949,531	24,600,275	25,479,208
Victoria	a22,540,973	a21,993,869	21,213,925	20,952,310	20,605,148
Queensland	16,219,969	a15,640,561	18,326,728	18,288,690	18,264,855
South Australia	a5.095.970	a5,374,457	5,600,760	5,165,670	5,111,465
Western Australia (b)	2,420,585	2.797.151	2,960,139	2,678,830	2,760,694
Tasmania `	a2,271,141	a2,428,966	2,314,756	1,946,323	2,780,304
Federal Cap. Territory	a7,815	a7,820	8,840	2,790	
Total	67,600,747	69,311,800	73,374,679	73,634,888	75,001,674

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

#### BACON AND HAM.-LOCAL CONSUMPTION, 1923 TO 1927-28.

Particulars.	1923.	1924.	1925–26.	1926–27.	1927-28.
Total	. 66,372,107 . 11.54	67,969,350 11.57	72,205,137 12.05	lb. 72,175,870 11.81	lb. 73,823,995 11.84

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

PIG PRODUCTS.—AUSTRALIAN TRADE, 1923-24 TO 1927-28.

Particulars	s. 	1923-24.	1924-25.	1925–26.	1926-27.	1927–28.
			Pigs.			
Imports	No.	13	10	6	8	
·,, · · ·	£	376	150	250	223	
Exports	No.	38	65	320	418	328
,,	£	288	676	1,951	2,506	1,294
Net Exports	No.	25	55	314	410	328
,,	€	-88	526	1,701	2,283	1,294
		Вас	ON AND HA	λМ.		
Imports	lb.	320,030	322,106	509,101	374,814	356,288
,,	£	19,005	18,492	33,773	23,101	21,108
Exports	lb.	1,548,670	1,664,556	1,678,643	1,833,832	1,533,967
·,, · · ·	£	132,581	124,891	139,864	147,886	129,073
Net Exports	lb.	1,228,640	1,342,450	1,169,542	1,459,018	1,177,679
,,	£	113,576	106,399	106,091	124,785	107,965

<sup>(</sup>ii) Local Consumption. From about 1904 onwards the production of bacon and ham has been sufficient to meet the local demand and provide a small surplus for export. The total home consumption and the average per head of population for the last five years are given hereunder:—

DIA DRADITARA	A TYCUMO A T T A ST MID A DID	1000 04 700	1005 00	
PIG PRODUCTS	-AUSTRALIAN TRADE	1923-24 TO	1927-28comminue	1.

	Particulars.		1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	
					LARD.			
Imports			lb.	574,733	112,084	244,517	575,293	712,307
,,		٠.	£	17,181	4,080	8,787	17,169	20,092
Exports		٠.	lb.	651,530	1,523,530	1,953,796	1,334,421	1,380,960
,,			£	24,027	42,744	56,630	38,839	38,209
Net Expor	·ts		lb.	76,797	1,411,446	1,709,279	759,128	668,653
,,*	••	• •	£	6,846	38,664	47,843	21,670	18,117
				Froz	zen Pork.			
Imports			1b.	1,679,278	962,639	466,425	733,179	2,112,598
-		• •	£	63,908		20,066		67,876
Exports		• • •	lb. '	53,142		90,106	481,330	159,494
•		• •	£	2,099		3,647	16,608	6,18
Net Expor	ots.	• •		-1,626,136		-376,319	-251,849	-1,953,19
,,			£	-61,809		-16,419	-15,049	-61,69

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

The output of pig products in Australia is usually sufficient to meet local requirements and provide a small surplus for export. During the last five years the value of the average annual net export amounted to £101,951, the bulk of the shipments consisting of bacon, ham and lard.

# § 4. Total Dairy Production.

The total dairy production of Australia in 1927-28 is shown below:-

TOTAL DAIRY PRODUCTION.—AUSTRALIA, 1927-28.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Total.
	<del>-</del>		N	lılk.				
Used for— Butter Cheese Condens- ing and	gallons. 214,747,560 :	5,534,560	gallons. 151,712,733 16,018,076	gallons. 26,291,473 3,261,741		gallons. 15,419,856 1,023,489		gallons. 608,294,825 52,142,209
concen- trating Other pur- poses	57,580,377	15,586,280	- 1	8,394,106	8,052,410	6,112,655	172,069	141,818,012
Total	283,046,000	260,647,500	180,679,464	37,947,320	17,158,928	22,556,000	219,839	802,255,046
			Bu	JTTER.				
In Factories On Dairy	1	lb. 80,678,548	lb. 69,464,415	lb. 8,742,291	lb. 2,847,929	lb. 4,455,310	lb.	lb. 262,094,815
and other Farms		3,592,264	2,574,736	3,394,347	1,417,329	2,059,332	16,065	17,942,589
Total	100,794,838	84,270,812	72,039,151	12,136,638	4,265,258	6,514,642	16,065	280,037,404

<sup>(</sup>a) Including milk used for making cheese.

<sup>(</sup>b) Not available for publication.

TOTAT	TATDY	PRODUCTION	ATTOMDATTA	1927-28-continued
TUTAL	DAIRY	PRADDUCTION.	-AUSTRALIA	1312 1-28

			,					
Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Total.
			С	HEESE.				
In Factories On Dairy	lb. 7,080,992	lb. 5,404,450	lb. 14,120,829	lb. 3,465,456	lb. (b)	lb. 721,664	lb.	lb. 30,793,391
and other Farms	203,630	217,495	7,591		5,088	307,680	٠.	741,484
Total	7,284,622	5,621,945	14,128,420	3,465,456	5,088	1,029,344		31,534,875
	Co	NDENSED,	Concente	RATED, OR	Powderi	D MILK.		
In Factories	lb. (b)	lb. 53,876,662	lb. (b)	1b.	lb.	1b.	lb.	1b. 53,876,662
			BACON	AND HA	м.			·
In Factories On Dairy	lb. 24,523,873	lb. 19,628,277	lb. 17,986,523	lb. 4,656,943	lb. a2,591,975	lb. 1,329,563	lb.	lb. 70,717,154
and other Farms	955,335	976,871	278,332	454,522	168,719	1,450,741	••	4,284,520
Total	25,479,208	20,605,148	18,264,855	5,111,465	2,760,694	2,780,304	٠.	75,001,674

<sup>(</sup>a) A portion only from pigs slaughtered in the State, the balance being imported and subsequently cured. (b) Figures not available for publication.

Particulars in regard to the production of other milk products are not available for all the States, but the following articles were made in Victoria during 1927-28:—Casein, 2,619,855 lb.; and milk sugar, 213,119 lb.

### § 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, poultry experts give lectures and instruction, and egg-laying competitions are conducted. 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, 1923-24 TO 1927-28.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania . (a)	Australia.
1923-24 1924-25 1925-26 1926-27 1927-28	£ 2,443,160 2,727,000 3,446,000 3,807,500 3,924,350	£ 4,587,560 4,326,295 4,515,400 4,819,500 4,760,000	£ 364,681 530,782 621,876 500,237 598,467	£ 1,088,105 1,148,322 1,094,205 1,046,056 1,234,532	£ 252,527 286,350 305,888 330,903 426,422	£ 300,000 300,000 300,000 300,000 300,000	£ 9,036,033 9,318,749 10,283,369 10,804,196 b11,247,869

3. Oversea Trade in Poultry Products.—The Australian oversea trade in poultry products is confined to eggs, which are mainly consigned to the United Kingdom. New South Wales, Victoria, and Queensland are participating in this trade, which, during 1927-28, amounted to £85,844. This represents a considerable reduction when compared with the previous year, when the value of the shipments totalled £233,672. The exports of frozen poultry expanded during the three years ended 1922-23, but since that year the shipments have not been maintained. The oversea trade during the past five years was as follows :--

POULTRY PRODUCTS, TRADE.—AUSTRALIA, 1923-24 TO 1927-28.

Particulars.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
	Live	Poultry.			
Imports N	o.   881	459	i 384	281	264
,,	£ 3,981	1,084	1,475	1,604	1,002
Exports N	o. 2,234	2,057	3,418	1,847	2,569
,,	£   1,707	1,527	2,311	1,311	1,837
Net Exports N	o. 1,353	1,598	3,034	1,566	2,30
,,	$\mathfrak{L}$   $-2,274$	443	836	-293	838
	Froze	n Poultry	•		
Imports 1	b. 5,438	11,591	12,367	12.340	66,677
,,	£ 269	752	741	749	4,766
Exports pa	ir   10,882	10,898	22,381	19,880	9,570
· · · · · · · · · · · · · · · · · · ·	£ 11,270	14,141	25,242	30,259	8,930
Net Exports	(a)	(a)	(a)	(a)	(a)
" ·· ··	£ 11,001	13,389	24,501	29,510	4,164
•		Eggs.	<u>'                                    </u>	<u></u>	
Imports do	oz. 28,123	30,051	29,652	24,182	25,752
	£ 1,707	1,796	2,003	1,507	1,579
Exports do		692,015	1,531,744	3,151,990	1,104,005
·,	£ 52,743	53,538	116,681	233,672	85,844
Net Exports do		661,964	1,502,092	3,127,808	1,078,253
,,	£ 51,036	51,742	114,678	232,165	84,265
	Egg-	CONTENTS.			
Imports 1	b. 34,418	32,105	21,495	39,675	38,858
,,	£ 7,845	7,190	4,313	6,382	6,531
	b. $(a)$	(a)	(a)	(a)	(a)
•	£ 212	144	95	97	` 17
Net Exports 1	b. (a)	(a)	(a)	(a)	(a)
,,	£ $-7,633$	-7,046	-4,218	-6,285	-6,514
	nus — signifies no			ty not availabl	l

## § 6. Bee Farming.

1. General.—As is the case with poultry-farming, bee-farming is frequently carried on in conjunction with agriculture or dairying. The returns of honey from productive hives during 1927-28 gave an average of 58 lb. per hive, while the average quantity of wax was 0.77 lb. per hive.

<sup>(</sup>a) Quantity not available.

2. Production of Honey and Beeswax.—The number of hives and the production of honey and beeswax during the year 1927-28 are given in the following table:—

BEE-HIVES. I	HONEY.	AND	BEESWAX.	1927-28.
--------------	--------	-----	----------	----------

		Bee Hives	•	Honey Pr	oduced.	Beeswax Produced.		
State.	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Value.	Quantity.	Value.	
	No.	No.	No.	. lb.	£	lb.	£	
New South Wales	24,929	11,096	36,025	1,154,201	24.350	17,139	1.510	
Victoria	37,771	14,977	52,748	2,992,860	62,350	34,358	3.293	
Queensland	10.227	5,530	15,757	394,960	7,057	7,504	506	
South Australia	16,709	7,228	23,937	931,711	13,587	.13,069	980	
Western Australia	9,002	1,894	10,896	366,286	6.561	5,501	406	
Tasmania	3,997	1,422	5,419	88,419	2,211	1,337	50	
Fed. Cap. Territory	14	103	117	• •				
							!	
Australia	102,649	42,250	144,899	5,928,437	116,116	78,908	6,748	

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

### HONEY AND BEESWAX PRODUCTION, 1923-24 TO 1927-28.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia.				
Honey.												
1923-24 1924-25 1925-26 1926-27 1927-28	1b. 590,800 3,088,550 2,234,495 1,510,420 1,154,201	2,110,713 4,054,975 2,114,807 2,370,310 2,992,860	1b. 505,346 691,136 801,587 461,009 394,960	721,640 2,764,389 1,360,916 1,918,195 931,711	1b. 395,047 378,889 311,492 553,238 366,286	1b. 133,330 95,476 116,392 75,876 88,419	180 1,600 600 12,120	10. 4,457,056 11,075,015 6,940,289 6,901,168 5,928,437				
				BEESWAX.								
1923-24 1924-25 1925-26 1926-27 1927-28	lb. 12,701 40,043 38,171 22,532 17,139	25,371 47,117 28,812 33,238 34,358	1b. 7,405 9,883 11,888 8,785 7,504	lb. 11,216 27,837 11,772 22,368 13,069	5,637 6,844 3,737 5,190 5,501	lb. 1,596 1,666 1,566 1,224 1,337	1b. 2 65 100 104	63,928 133,455 96,046 93,441 78,908				

The quantity of honey and beeswax produced naturally varies from year to year according to the condition of the seasons. During the last five years New South Wales has produced 8,578,466 lb. of honey and 130,586 lb. of beeswax, while the Victorian figures amounted to 13,643,665 lb. and 168,896 lb. respectively for honey and beeswax. These two States together accounted for 62.95 per cent. of the total production of honey, and 64.30 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 small quantity is available for export. During the past five years the value of the exports amounted to only £25,363, or an annual average of £5,073, owing to the decrease in production. The more general use of frame hives 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, 1923-24 TO 1927-28.

Particula	ırs.		1923–24.	1924–25.	1925–26.	1926–27.	1927-28.
			E	IONEY.			
Imports		lb.	772	1,008	4,684		922
Funcata	• •	£   lb.	$\begin{array}{c} 22 \\ 41.584 \end{array}$	$\begin{array}{c c} & 33 \\ & 137,116 \end{array}$	$\begin{array}{c} 211\\113,401\end{array}$	$\begin{array}{c} 20 \\ 402,745 \end{array}$	$\frac{43}{281,090}$
Exports	• •	£ .	2,060	3,807	3,756	9,157	6,912
Net Exports	• •	lb.	40,812	136,108	108,717	402,088	280,168
."	• • •	£	2,038	3,774	3,545		6,869
			В	EESWAX.			
Imports		lb.	76,478	109,816	22,937	75,104	96,101
,,		£	4,759	8,288	2,195	6,951	8,413
Exports		lb.	2,046	1,956	1,577	326	3,596
,,		£	149	187	131	29	346
Net Exports		lb.	-74,432	-107,860	-21,360	-74,778	-92,505
**		£	- 4,610	- 8,101	-2,064	6,922	-8,067

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

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

The value of the farmyard, dairy and bee products raised in Australia in 1927-28 was as follows:—

FARMYARD, DAIRY, AND BEE PRODUCTS.—VALUE, 1927-28.

Products.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Fed. Cap. Ter.	Australia.
	£	£	£	£	£	£	£	£	£
Milk, consumed as such Butter Cheese Condensed & concentrated milk Bacon and ham Pork Lard Live Stock Poultry and eggs Honey and wax		2,630,179 6,675,734 244,147 b1,906,715 { 1,193,623 426,119 39,136 4,760,000 65,643	$\left. \begin{array}{c} 701,376\\ 5,652,554\\ 637,499\\ 1,092,407\\ 208,103\\ 29,005\\ 6,214\\ 598,467\\ 7,563 \end{array} \right.$	$\begin{cases} 454,675\\ 1,096,020\\ 127,259\\ \\ \\ \\ 344,743\\ 146,227\\ 12,659\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	436,167 358,129  182,048 124,041 4,591  426,422 6,967	331,098 { 492,831 38,974  145,546 96,299 7,139 2,135 300,000 2,261	607	9,320 1,208  1,758  4,098	7,681,714 21,852,177 1,365,215 6,430,470 1,438,570 113,303 8,349 11,247,869 122,861

<sup>(</sup>a) Includes other Milk Products made.

# § 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, 1923-24 TO 1927-28.

Partic		1923-24.	1924–25.	1925–26.	1926-27.	1927-28.	
			QUANTITY	τ.			
Beeswax	 	1b.	1,902	782	1,577	326	3,59
Butter	 	,,		145,281,326	97.899.824	76,516,497	99,164,94
Cheese	 •	",	3.787.714	10,353,950	6,872,761	3,643,832	6,926,69
Egg albumen and yolk		",	(a)	(a)	(a)	(a)	(a)
Eggs	 	doz.	655,215	691,740	1,531,744	3,151,965	1,104,00
eathers, undressed	 • • •		(a)	(a)	(a)	(a)	(a)
Honey	 	lb.	41,584	137,116	113,401	402,745	281.09
Lard	 	,,	645,930	1,523,530	1,953,796	1,315,831	1,359,74
Meats	 • •	"	,	-,,	_,,	_,,	_,,
Bacon and Ham	 	,,	1,548,670	1,664,556	1,678,643	1.833,468	1.533.96
Frozen Poultry	 	pair	10,882	10,898	22,381	19,980	9,57
Frozen Pork	 	Ib.	53,142	61,393	88,058	481,330	158,32
lilk, concentrated and		,,	17,762,106		23,626,795	17,752,506	20,622,7
Pigs, living	 	No.	38	65	320	418	32
Poultry, living	 	"	VALUE	1	3,418	1,833	2,56
			VALUE.	1	3,418	1,833	2,56
				1	3,418	1,833	2,56
	···	,,	VALUE.		£ 131	.£	
Beeswax			VALUE.	£ 69	£ 131	.£	£
Beeswax	 		VALUE.	£ 69 10,006,081	£	.£	£ 6,905,9
Beeswax Butter	 ···		VALUE. £ 137 4,874,921	£ 69 10,006,081 363,757	£ 131 7,006,830	.£ 29 5,447,224	£ 6,905,9 260,2
Beeswax Butter Cheese	 ···		VALUE.  £ 137 4,874,921 140,715 210 52,715	£ 69 10,006,081 363,757 53,518	£ 131 7,006,830 270,712 95 116,681	.£ 29 5,447,224 131,168	£ 6,905,93 260,23 85,84
Poultry, living	 ···		VALUE.  £ 137 4,874,921 140,715 210 52,715 303	£ 69 10,006,081 363,757  53,518 1,112	£ 131 7,006,830 270,712 95 116,681 1,089	.£ 29 5,447,224 131,168 56 233,670 774	£ 6,905,9 260,2 85,84
Beeswax Butter Cheese Egg albumen and yolk Eggs	 ···		VALUE.  £ 137 4,874,921 140,715 210 52,715 303 2,060	£ 69 10,006,081 363,757 53,518 1,112 3,807	£ 131 7,006,830 270,712 95 116,681 1,089 3,756	.£ 5,447,224 131,168 56 233,670 774 9,157	£ 6,905,9 260,2 85,8 4 6,9
Beeswax Butter Cheese Egg albumen and yolk Eggs	 		VALUE.  £ 137 4,874,921 140,715 210 52,715 303	£ 69 10,006,081 363,757 53,518 1,112 3,807	£ 131 7,006,830 270,712 95 116,681 1,089 3,756	.£ 5,447,224 131,168 56 233,670 774 9,157	£ 6,905,91 260,2: 85,84 4,9,9
Beeswax Butter Cheese Egg albumen and yolk Eggs Feathers, undressed Honey Lard	 		Value.  £ 137 4,874,921 140,715 210 52,715 303 2,060 23,809	£ 10,006,081 363,757 53,518 1,112 3,807 42,744	£ 131 7,006,830 270,712 95 116,681 1,089 3,756 56,630	.£ 29 5,447,224 131,168 233,670 774 9,157 37,995	£ 6,905,9: 260,2: 85,8: 4: 6,9: 37,3:
Beeswax Butter Cheese Egg slumen and yolk Eggs slumer Feathers, undressed Honey Lard	 		VALUE.  £ 4,874,921 140,715 210 52,715 303 2,060 23,809 132,581	£ 10,006,081 363,757 53,518 1,112 3,807 42,744	£ 131 7,006,830 270,712 95 116,681 1,089 3,756 56,630	.£ 29 5,447,224 131,168 56 233,670 774 9,157 37,995	£ 6,905,9; 260,2; 85,8; 4; 6,9; 37,3;
Beeswax Butter Cheese Egg albumen and yolk Eggs . Feathers, undressed Honey Lard . Meats— Bacon and Ham Frozen Poultry	 		VALUE.  £ 1.37 4,874,921 140,715 2.10 52,715 303 2,060 23,809 132,581 11,270	£ 10,006,081 363,757 53,518 1,112 3,807 42,744 124,891 14,141	£ 131 7,006,830 270,712 95 116,681 1,089 3,756 56,630 139,864 25,242	.£ 29 5,447,224 131,168 56 233,670 9,157 37,995 147,861 30,259	£ 3,6,905,9,260,2; 85,8,4,6,9,37,3; 129,0,8,9;
Beeswax Butter Cheese Egg albumen and yolk Eggs Feathers, undressed Honey Lard Meats— Bacon and Ham Frozen Poultry Frozen Pork	 		VALUE.  £ 4,874,921 140,715 210 52,715 303 2,060 23,809 132,581 11,270 2,099	£ 10,006,081 363,757 53,518 1,112 3,807 42,744 124,891 14,141 2,749	£ 131 7,006,830 270,712 5 116,681 1,089 3,756 56,630 139,864 25,242 3,579	.£ 29 5,447,224 131,168 233,670 774 9,157 37,995 147,861 30,259 16,608	£ 3,6,905,9; 260,2; 85,84 4,6,9; 37,3; 129,0; 8,9; 6,1;
Beeswax Butter Cheese Egg albumen and yolk Eggs Foathers, undressed Honey Lard Meats— Bacon and Ham Frozen Pork Mik, concentrated and	 		VALUE.  \$ 137 4,874,921 140,715 210 52,715 303 2,060 23,809 132,581 11,270 2,099 1,079,943	£ 10,006,081 363,757 53,518 1,112 3,807 42,744 124,891 14,141 2,749 1,694,230	£ 131 7,006,830 270,712 95 116,681 1,089 3,756 56,630 139,864 25,242 3,579 1,261,417	.£ 29 5,447,224 131,168 56 233,670 774 9,157 37,995 147,861 30,259 16,608 1,080,963	£ 6,905,9; 260,2; 85,8; 4; 6,9; 37,3; 129,0; 8,9; 6,1; 1,188,5;
Beeswax Butter Cheese Egg albumen and yolk Eggs . Foathers, undressed Honey Lard Meats— Bacon and Ham Frozen Poultry Frozen Pork Mike, concentrated and Pigs, living	 		VALUE.  \$ 137 4,874,921 140,715 210 52,715 3003 2,060 23,809 132,581 1,270 2,009 1,079,943 288	£ 69 10,006,081 363,757  53,518 1,112 3,807 42,744 124,891 1,141 2,749 1,994,230	£ 131 7,006,830 270,712 95 116,681 1,089 3,756 56,630 139,864 25,242 3,579 1,261,417	.£ 29 5,447,224 131,168 56 233,670 774 9,157 37,995 147,861 30,259 16,608 1,080,963 2,506	£ 3. 6,905,92 260,22 85,84 6,9 37,3; 129,0 8,9; 6,1; 1,188,5;
Beeswax Butter Cheese Egg albumen and yolk Eggs . Foathers, undressed Honey Lard Meats— Bacon and Ham Frozen Poultry Frozen Pork Mike, concentrated and Pigs, living	 		VALUE.  \$ 137 4,874,921 140,715 210 52,715 303 2,060 23,809 132,581 11,270 2,099 1,079,943	£ 69 10,006,081 363,757  53,518 1,112 3,807 42,744 124,891 1,141 2,749 1,994,230	£ 131 7,006,830 270,712 95 116,681 1,089 3,756 56,630 139,864 25,242 3,579 1,261,417	.£ 29 5,447,224 131,168 56 233,670 774 9,157 37,995 147,861 30,259 16,608 1,080,963	£ 34
Beeswax Butter Cheese Egg albumen and yolk Eggs Feathers, undressed Honey Lard Meats— Bacon and Ham Frozen Poultry Frozen Pork Milk, concentrated and	    		VALUE.  \$ 137 4,874,921 140,715 210 52,715 3003 2,060 23,809 132,581 1,270 2,009 1,079,943 288	£ 10,006,081 363,757 53,518 1,112 3,807 42,744 124,891 14,141 2,749 1,694,230 676 1,527	£ 131 7,006,830 270,712 116,681 1,089 3,756 56,630 139,864 25,242 3,579 1,261,417 1,951	.£ 29 5,447,224 131,168 233,670 774 9,157 37,995 147,861 30,259 16,608 1,080,963 2,506	£ 3. 6,905,92 260,22 85,84 6,9 37,3; 129,0 8,9; 6,1; 1,188,5;

<sup>(</sup>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 1923 to 1927:—

DAIRY PRODUCTS.—IMPORTS, UNITED KINGDOM, 1923 TO 1927.

	Pre	oducts.			1923.	1924.	1925.	1926.	1927.
Butter Cheese		::		cwt. £	5,095,511 44,234,534 2,838,546	5,287,244 49,647,492 2,887,413	5,853,245 53,204,417 3,098,702	5,818,840 48,283,312 3,014,055	5,818,611 48,204,721 2,949,082
Milk, con				£	15,260,707 2,366,532 6,716,648	13,552,406 2,333,701 6,183,530	15,696,800 2,413,350 5,756,372	13,940,648 2,556,890 5,420,167	13,493,668 2,684,019 5,561,726
Bacon an Pork (a)	d ham ''	• • • • • • • • • • • • • • • • • • • •		cwt. £ cwt.	9,540,241 46,536,807 475,963	9,509,399 45,050,619 238,206	$\begin{array}{c} 9,002,912 \\ 50,774,719 \\ 262,998 \end{array}$	8,666,467 50,146,958 303,234	9,370,696 43,333,082 234,248
,,		• •	••	£	1,898,233	952,057	1,133,648	1,396,714	912,271

<sup>(</sup>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 shipped in 1927 amounted to 488,721 cwt., or nearly 13 per cent. of the total importation. The Australian contribution was valued at £3,836,345, and was exceeded only by that shipped from Denmark, New Zealand, and Irish Free State.

RUTTER	IMPORTS	-UNITED	KINGDOM.	1027

Country from which Imported.		Quantity.	Value.	Country from which Imported.	Quantity.	Value.
		Cwt.	£		Cwt.	£
Denmark		1,994,764	17,646,132	United States of		
New Zealand		1,252,475	10,320,248	America	672	5,818
Irish Free State		586,485	4,560,157	Canada	423	3,613
Australia		488,721	3,836,345	Norway	190	1,809
Argentine Repu	ıblic	420,058	3,301,769	Union of South		1
Soviet Republic	es :	350,422	2,595,180	Africa		4
Finland		205,177	1,687,345	British Possessions.		
Netherlands		170,235	1,407,246	n.e.i.	1,015	5,700
Sweden		165,951	1,415,620	Foreign Countries.	1	Í
France		65,994	515,121	n.e.i.	2,975	22,217
Estonia		60,310	474,227			
Latvia		37,410	290,188	]		
Poland (include	ding	•		Total	5,818,611	48,204,721
Dantzig)		15,334	115,982			' '

(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, 1917 TO 1928.

Year.	Average Top Price per cwt.	Year.	Average Top Price per cwt.		
	s. d.		s. d.		
1917	(a) 206 0	1923	184 6		
1918	(b) 252 0	1924	189 6		
1919	(b) 252 0	1925	184 0		
1920	(b) 299 9	1926	169 6		
1921	234 0	1927	169 6		
1922	183 0	1928	171 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 1927 was £13,493,668, of which £7,173,947 was received from New Zealand, and £4,007,275 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 during 1927 amounted to £155,850.
- 4. Bacon and Ham.—Of a total import of bacon and ham valued in 1927 at £43,333,082, the United Kingdom received imports to the value of £23,368,461 from Denmark, £6,548,087 from the United States, and £2,954,291 from Canada. The import from Australia was small, experimental shipments only having been made during recent years.
- 5. Pork.—The value of the United Kingdom imports of pork (frozen and salted only) was £912,271 in 1927. There was only a small importation from Australia, the bulk of the supplies being forwarded from the United States, New Zealand, Canada, China, Argentine Republic, and Denmark.
- 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 £419,798, and eggs to the value of £107,049 were received from Australia in 1927.