

FOOD SUPPLY AND COST OF LIVING.

CONSIDERING the comparatively high rate of wages which prevails, food of all kinds is fairly cheap in Australasia, and articles of diet which in other countries are almost within the category of luxuries are largely used even by the poorer classes. The average annual consumption per inhabitant of the principal articles of common diet, based on the experience of the last ten years, is given below :—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
Grain—	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Wheat	360·2	330·8	344·0	380·0	474·1	418·1	357·2	400·1	364·4
Rice	9·4	7·3	17·7	9·3	18·2	5·9	9·9	8·8	9·8
Oatmeal	6·1	6·9	4·3	5·5	10·2	15·6	6·6	9·3	7·1
Potatoes	181·4	239·3	157·0	126·1	187·7	624·7	212·3	522·5	264·4
Sugar	109·0	95·0	128·9	102·1	110·1	96·1	105·7	96·7	104·2
Tea	7·7	6·8	7·3	8·3	9·9	6·2	7·4	6·4	7·2
Coffee	0·5	0·7	0·5	0·7	0·8	0·4	0·6	0·4	0·6
Cheese	3·6	3·2	4·2	2·7	6·0	1·6	3·5	4·4	3·7
Butter	20·6	13·7	13·3	12·9	28·5	17·4	16·7	17·8	16·9
Salt	42·1	15·4	63·7	17·0	19·2	19·7	31·7	34·4	32·1
Meat—									
Beef	159·7	117·3	280·0	127·0	141·8	117·8	155·5	90·0	144·4
Mutton	120·4	71·8	90·0	75·0	133·9	84·9	94·1	110·0	96·8
Pork and Bacon	12·2	12·2	13·3	11·4	31·4	14·0	13·0	12·5	12·9

It will be seen that the consumption of wheat in the Commonwealth is 357 lb., ranging from 331 lb. in Victoria to 474 lb. in Western Australia, the average consumption for Australasia being 364 lb. per head. There is in all the states a tendency towards reducing the consumption of bread-stuffs, the place of bread being taken by potatoes and other vegetables. In Western Australia and in Tasmania the large influx of miners some years ago materially increased the consumption of breadstuffs, as shown by the high figures in the above table, but of late years the tendency in these, as in the other states, is towards a smaller consumption. The consumption of rice remains about the same from year to year, the average being 9·8 lb., varying from 5·9 lb. in Tasmania to 18·2 lb. in Western Australia. The use of tea is universal in Australia, but there has been a perceptible decline in the quantity used during the last fifteen years. The consumption is largest in Western Australia, with 9·9 lb. per head, while South Australia comes

next with 8·3 lb. per head. Sugar also enters largely into consumption, the average in the two principal states being 109 lb. per head in New South Wales and 95 lb. in Victoria. The figure for Queensland is based on the returns of production and export; the consumption for 1902 appears to have been only 94·1 lb. per head. Coffee is not a universal beverage in Australasia, the consumption being only one-twelfth that of tea. It is used most largely in Western Australia, where the annual demand amounts to 12·8 oz. per head; but, like tea, the consumption of this beverage is not now so great as formerly.

In some of the states the consumption of potatoes per head of population may be less than is shown in the table. It is probable that the high average consumption of 624·7 lb. in Tasmania and 522·5 lb. in New Zealand is caused by the failure of the New South Wales and other continental markets to absorb the production of potatoes in excess of local requirements in those states, with the result that a quantity has to be given to live stock and poultry. Under these circumstances, it is impossible to determine with exactitude the quantity entering into the food consumption of the population.

The consumption of meat has been ascertained with exactness for five of the states, but these may be taken as fairly representing the whole group. The average quantity of beef annually consumed in the Commonwealth amounts to 155·5 lb. per head; of mutton, to 94·1 lb.; and of pork, 13·0 lb.; in all, 262·6 lb. It would thus appear that each inhabitant requires daily nearly three-quarters of a pound of meat, and that during the year two sheep are killed for each member of the community, and one bullock to every five persons. It is obvious, therefore, that much meat must be wasted. The consumption in New Zealand cannot be accurately determined, but it is probable that about 212·5 lb. of meat is the average annual consumption per inhabitant, of which beef comprises 90·0 lb.; mutton, 110·0 lb.; and pork, 12·5 lb.

The quantity of meat used by the Australasian people, as shown by the above figures, is the most remarkable feature of their diet. The consumption per inhabitant in Germany is 64 lb., while in Australia it is nearly four times that quantity. In the United States, a meat exporting country, the consumption is about three-fifths of that of Australasia. The following table shows the meat consumption per head for the principal countries of the world:—

Country.	Per Inhabitant.	Country.	Per Inhabitant.
	lb.		lb.
Great Britain.....	109	Holland	57
France	77	Sweden	62
Germany	64	Norway.....	78
Russia	51	Denmark	64
Austria	61	Switzerland	62
Italy	26	United States	150
Spain	71	Canada	90
Belgium	65	Australasia	254

Judged by the standard of the food consumed, the lot of the population of Australasia appears to be far more tolerable than that of the people of most other countries. This will be seen most clearly from the following table, the particulars given in which, with the exception of the figures referring to Australasia, have been taken from Mulhall's *Dictionary of Statistics* :—

Country.	Lb. per Inhabitant.						Tea and Coffee— Oz.
	Grain.	Meat.	Sugar.	Butter and Cheese.	Potatoes.	Salt.	
United Kingdom	378	109	75	19	380	40	91
France	540	77	20	8	570	20	66
Germany	550	64	18	8	1,020	17	78
Russia	635	51	11	5	180	19	6
Austria	460	61	18	7	560	14	28
Italy	400	26	8	4	50	18	20
Spain	480	71	6	3	20	17	6
Portugal	500	49	12	3	40	17	18
Sweden	560	62	22	11	500	28	112
Norway	440	78	13	14	500	40	144
Denmark	560	64	22	22	410	25	140
Holland	560	57	35	15	820	20	240
Belgium	590	65	27	15	1,050	...	142
Switzerland	440	62	26	11	140	...	110
Roumania	400	82	4	9	80	...	8
Servia	400	84	4	9	80	...	8
United States ...	370	150	53	20	170	39	162
Canada	400	90	45	22	600	40	72
Australasia	381	254	104	21	264	32	125

Taking the articles in the foregoing list, with the exception of tea and coffee, and reducing them to a common basis of comparison, it will be found that the amount of thermo-dynamic power capable of being generated by the food consumed in Australasia is only exceeded by that eaten in Germany, Holland, and Belgium. For the purpose of comparison the figures of Dr. Edward Smith, F.R.S., in his well known work on *Foods*, have been used, and the heat developed has been reduced to the equivalent weight lifted 1 foot high. In estimating the thermo-dynamic effect of food, grain has been reduced to its equivalent in flour, and regard has been paid to the probable nature of the meat consumed. The figures for potatoes are given as they appear in the *Dictionary of Statistics*; but it is a probable supposition that but a small proportion of the quantity over 400 lb. set down for any country is required for human consumption, and the figures relating to some of the countries—notably the three just mentioned—are therefore excessive. The substances specified above are largely supplemented by other foods, both in America and in Europe, but not more so than in these states, and the figures in the

table may be taken as affording an accurate view of the comparative quantity and food value of the articles of consumption in the countries mentioned. To make such a comparison perfectly just, however, the average amount of work which each individual in the community is called upon to perform should be taken into consideration. In Australasia the proportion of women and children engaged in laborious occupations is far smaller than in Europe and America, and the hours of labour of all persons are also less, so that the amount of food-energy required is reduced in proportion. In his *Dictionary of Statistics*, under the heading of "Diet," Mulhall gives a measure of the aggregate amount of work performed by persons doing physical and mental labour, and it would appear that when burnt in the body the food of an average man should be equal to at least 3,300 foot tons of work daily; of a woman, 2,200; and of a child, 1,100 foot tons. For Australasia the average of all persons would be about 2,000 foot tons, whereas from the table just given it would appear that the amount of work to which the daily food consumed by each individual in Australasia is equivalent is not less than 4,146 foot tons.

It must be admitted, however, that the method of comparison adopted in the preceding paragraph is not entirely satisfactory, as the functions of various kinds of food have not been considered. Experiments and observations made in Europe show that a standard may be set up by which the amount of nutrients required to maintain different classes of people may be measured. Professor Voit, of Munich, has ascertained that to sustain a labouring man engaged in moderately hard muscular work there are required 118 grams of protein and quantities of carbo-hydrates and fats sufficient with the protein to yield 3,050 calories of energy. There are 454 grams in a pound avoirdupois, and the calorie is the amount of heat that would raise the temperature of 4 lb. of water 1° Fahrenheit. Applying the ascertained values of the various foods, the consumption of which has just been given, it will be found that the daily consumption per inhabitant is equivalent to 105 grams of protein and 3,195 calories, or about the quantity Professor Voit declares to be sufficient for a labouring man. If allowance be made for the fact that only 29 per cent. of the population are adult males, 24 per cent. women, and 47 per cent. children, the quantity of food consumed in Australasia would appear to be far in excess of the actual requirements of the population, and though the excess may be looked upon as so much waste, it is none the less evidence of the condition of a people whose circumstances permit them to indulge in it.

The consumption of many other articles of common use can be ascertained with some exactness, and this is given for the seventeen specified in the following list. In all cases where the commodities are wholly imported the actual quantities entering into consumption can be given; where there is a local manufacture it has been necessary in some instances

to make an estimate, but as the data for such are ample the figures given may be taken as fairly reliable.

The principal feature of the table is the high consumption of Western Australia of most of the articles comprised in the list. Amongst the most notable of these are tinned fish, 8·83 lb. per inhabitant, compared with the Commonwealth average of 4·38 lb.; preserved milk 27·82 lb., compared with 3·68 lb.; onions 27·96 lb., compared with 16·82 lb.; candles 10·43 lb., compared with 4·7 lb.; kerosene oil 7·4 gallons, compared with 3·51 gallons; and soap 18·38 lb., compared with 14·24 lb.

The annual consumption per inhabitant based on the experience of the last four years was :—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Cocoa and chocolate ...	0·83	0·78	0·41	1·08	0·93	0·72	0·78	0·69	0·77
Currants and raisins ...	4·09	4·30	4·16	5·10	5·51	4·16	4·34	6·57	4·72
Dates	1·41	1·42	0·80	0·68	1·06	0·37	1·20	0·60	1·10
Fish (tinned)	5·01	3·40	4·22	3·62	8·83	3·50	4·38	3·77	4·28
Honey	1·72	0·73	1·36	2·10	1·27	0·53	1·32	0·60	1·20
Maizena (cornflour)	2·39	1·58	0·74	1·23	1·88	0·55	1·70	1·58	1·68
Milk (condensed)	3·52	1·50	2·86	1·39	27·82	1·39	3·68	1·87	3·37
Mustard	0·27	0·20	0·24	0·26	0·37	0·19	0·24	0·28	0·25
Onions	12·79	22·71	17·17	9·50	27·96	10·23	16·82	...	...
Pepper	0·21	0·36	0·26	0·39	0·29	0·26	0·29	0·30	0·29
Sago	0·29	0·30	0·85	0·29	0·21	0·56	0·38	0·61	0·42
Tapioca	1·63	1·73	1·24	1·48	1·71	1·04	1·58	1·98	1·64
Blue (washing)	0·38	0·30	0·25	0·27	0·36	0·31	0·32	0·24	0·31
Candles	4·43	4·51	3·76	4·00	10·43	6·29	4·70	6·38	4·99
Soap	15·10	12·39	15·52	12·00	18·38	16·78	14·24	13·92	14·18
Starch	4·61	4·70	3·15	2·18	2·24	2·33	3·78	2·50	3·56
Kerosene oil	galls. 3·04	galls. 3·58	galls. 3·77	galls. 3·45	galls. 7·40	galls. 2·01	galls. 3·51	galls. 3·27	galls. 3·47

The following table gives the annual consumption of tobacco in Australasia and the principal countries of the world. The use of tobacco is more prevalent in Western Australia and Queensland than in any of the other states, but not to the extent which the figures of consumption would indicate, as both Western Australia and Queensland have a larger proportion of adult males amongst their population than the other states, and the proportionate number of smokers is larger, though the actual consumption per smoker may not be so. Compared

with other parts of the world, the average consumption of Australasia will not appear excessive :—

Country.	lb.	Country.	lb.
Australasia.....	2·52	Austria-Hungary.....	3·77
New South Wales.....	2·70	Italy.....	1·34
Victoria.....	2·22	Spain.....	1·70
Queensland.....	2·97	Holland.....	6·92
South Australia.....	2·00	Belgium.....	3·15
Western Australia.....	4·81	Switzerland.....	3·24
Tasmania.....	2·05	Sweden.....	1·87
New Zealand.....	2·30	Denmark.....	3·70
United Kingdom.....	1·41	Turkey.....	4·37
France.....	2·05	United States.....	4·40
Germany.....	3·00	Canada.....	2·11
Russia.....	1·23	Brazil.....	4·37

Taking Australia as a whole, the consumption of tobacco per inhabitant is slightly less than it was ten years ago ; but there has been a considerable change in the consumption in some of the states. In Queensland there has been a fall in amount consumed per inhabitant of nearly half a pound, in New South Wales one-fifth, in Tasmania one-seventh, in South Australia one-eighth, and in Victoria one-twelfth of a pound. In Western Australia there has been an increase of nearly three-fourths of a pound, and in New Zealand of one-eighth of a pound. In regard to the description of tobacco used, the chief point noticeable is the large increase in the consumption of cigarettes. In 1890 about 88·4 per cent. of the total consumption was of ordinary tobacco ; in 1902 the proportion had fallen to 84·1 per cent. ; of cigars, the consumption in 1890 was about 8·5 per cent. ; compared with 5 per cent. at present, and of cigarettes 3·1 per cent. in 1890, compared with 10·9 per cent. for the year 1902.

All the states except Tasmania manufacture tobacco, and the following figures show the average consumption of the locally-made and of the imported article during the last three years. The imported tobacco is inclusive of tobacco made in other Commonwealth states :—

State.	Consumption of locally-made—			Consumption of imported—		
	Tobacco.	Cigars.	Cigarettes	Tobacco.	Cigars.	Cigarettes.
	lb.	lb.	lb.	lb.	lb.	lb.
New South Wales.....	2,512,134	45,892	476,400	787,471	186,943	58,119
Victoria.....	1,867,313	94,318	200,515	736,087	121,424	51,128
Queensland.....	617,668	1,246	20,189	792,968	63,290	80,469
South Australia.....	324,500	35,468	34,843	238,107	29,521	29,388
Western Australia.....	103,565	13,719	7,208	625,597	62,142	71,904
Tasmania.....	*	*	*	355,562	19,663	18,054
New Zealand.....	47,120	2,084	240	1,647,174	83,468	169,998

* Information not available.

Australasia as a whole compares very favourably with most European countries in the average quantity of intoxicants consumed, as the following statement shows. The figures, which are reduced to gallons of proof spirit from data given in Mulhall's *Dictionary of Statistics*, would appear even more favourable to Australasia were the fact of the large preponderance of males over females in these states made a feature of the comparison :—

Country.	Proof gallons.	Country.	Proof gallons.
United Kingdom	3·57	Portugal	3·00
France.....	5·10	Holland.....	4·00
Germany.....	3·08	Belgium	4·00
Russia.....	2·02	Denmark	5·00
Austria	2·80	Scandinavia	4·36
Italy	3·40	United States	2·65
Spain	2·85	Australasia	2·50

The following table shows the average consumption for all the states during the last three years :—

Stato.	Spirits.		Wine.		Beer, &c.		Equivalent in Alcohol (proof) per Inhabitant
	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant.	
	galls.	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales.	1,203,353	0·88	905,798	0·66	14,777,499	10·75	2·44
Victoria	953,534	0·79	1,469,004	1·22	15,260,957	12·70	2·74
Queensland	516,254	1·03	189,862	0·38	5,584,377	11·14	2·57
South Australia ...	172,732	0·48	466,599	1·29	3,261,121	8·99	1·95
Western Australia.	293,151	1·55	164,699	0·87	4,891,940	25·83	5·13
Tasmania	88,551	0·51	28,378	0·16	1,596,315	9·18	1·75
Commonwealth.	3,227,575	0·85	3,224,340	0·85	45,372,209	11·93	2·61
New Zealand	582,675	0·75	122,077	0·16	7,230,358	9·27	2·00
Australasia.....	3,810,250	0·83	3,346,417	0·73	52,602,567	11·48	2·50

The largest consumption of spirits per inhabitant is in Western Australia, Queensland being second. Wine is used most freely in South Australia and Victoria, and beer in Western Australia. The average consumption of alcohol in the Commonwealth for the

last three years amounted to 2·61 gallons of proof spirit per inhabitant, ranging from 5·13 gallons in Western Australia to 1·75 gallons in Tasmania. There was a great diminution in the quantity of alcohol consumed in Australasia in the year immediately following the bank crisis, and in 1895 the consumption fell to 2·1 gallons, as compared with 2·94 gallons in 1891. From 1895 there was a gradual increase, and the consumption for the last seven years has ranged between 2·4 and 2·5 gallons.

During the last ten years there has been a considerable change as regards some of the states in the character of the beverages consumed. This change is most noticeable in the consumption of beer in Victoria and Western Australia. In the first-named state during the year 1892 there was a consumption of 16,817,930 gallons of malt liquors; this is equal to 14·47 gallons per head; in 1902 the total consumption had fallen to 15,519,211 gallons, equal to 12·86 gallons per head. In Western Australia the experience was of the opposite character, as the accompanying table shows:—

State.	Consumption of Malt Liquors in 1892.		Consumption of Malt Liquors in 1902.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.
New South Wales.. .. .	12,889,059	10·91	14,564,552	10·45
Victoria	16,817,930	14·47	15,519,211	12·86
Queensland	3,939,618	9·47	5,482,246	10·69
South Australia	3,762,818	11·36	3,231,355	8·85
Western Australia	635,921	11·36	5,354,877	26·12
Tasmania	1,486,621	9·72	1,699,945	9·68
Commonwealth	39,531,967	11·98	45,852,186	11·88
New Zealand	5,013,781	7·81	7,380,883	9·25
Australasia	44,545,748	11·30	53,233,069	11·43

The consumption per inhabitant of malt liquors for the Commonwealth showed a slight decrease during the ten years, but there was an increase in New Zealand. The consumption of spirits has declined in all the states of the Commonwealth, but in New Zealand there has been an increase in the volume per inhabitant. For the Commonwealth the decline during the ten years is strikingly evidenced by the fact that the total consumption of spirits in 1892 exceeded that of 1902 by

145,478 gallons. The following is a statement of the consumption in 1892 and 1902 respectively :—

State.	Consumption of Spirits in 1892.		Consumption of Spirits in 1902.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.
New South Wales.....	1,184,042	1·00	1,260,438	0·90
Victoria	1,164,750	1·00	708,341	0·59
Queensland	446,146	1·07	492,272	0·96
South Australia.....	204,907	0·62	181,037	0·50
Western Australia	86,865	1·55	314,114	1·53
Tasmania.....	104,759	0·69	89,789	0·51
Commonwealth	3,191,469	0·97	3,045,991	0·79
New Zealand	454,036	0·71	602,021	0·75
Australasia	3,645,505	0·92	3,648,012	0·78

The consumption of wine can be determined only approximately. Wine is an article of local production not subject to excise duty, and it is quite possible some wine may be consumed without its production being noted. The following statement gives the probable consumption for the periods named :—

State.	Consumption of Wine in 1892.		Consumption of Wine in 1902.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.
New South Wales.....	1,021,144	0·86	1,019,460	0·73
Victoria	1,414,965	1·22	2,249,909	*1·85
Queensland	231,025	0·56	202,114	0·39
South Australia.....	486,229	1·47	554,517	1·52
Western Australia	124,618	2·23	159,141	0·78
Tasmania.....	31,155	0·20	36,503	0·21
Commonwealth	3,309,136	1·00	4,221,644	1·09
New Zealand	111,707	0·17	126,450	0·16
Australasia	3,420,843	0·87	4,348,094	0·93

* Consumption in 1901 was 1·29 gallons.

Several descriptions of Australian wines have a natural strength of 30 per cent. of proof spirit, while from analyses which have been made it would appear that the strength of these wines offered for sale varies from 24 to 37 per cent. of spirit. Imported beers range from 13·88 per cent. to 15·42 per cent. in the case of English, and from 9·58 per cent. to 11·76 per cent. of proof spirit in Lager, while the local manufacture varied according to the make from 6·1 to 13·8, the average being 9·97 per cent. Four of the states manufacture spirits, and

five make wine, while beer is brewed in all of them. The average consumption of locally-manufactured spirits, wine, and beer for the last three years has been estimated, and will be found in the following statement :—

State.	Spirits.		Wine.		Beer, &c.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales	47,844	0·03	789,488	0·57	13,278,116	9·67
Victoria	170,928	0·14	1,419,575	1·18	14,674,543	12·22
Queensland	72,780	0·14	132,536	0·26	5,047,158	10·04
South Australia	29,545	0·08	459,014	1·26	3,108,858	0·86
Western Australia.....	.....	...	107,379	0·57	4,337,080	22·90
Tasmania.....	.....	...	.....	...	1,523,822	8·76
Commonwealth	321,097	0·08	2,907,992	0·76	41,969,577	11·04
New Zealand .....	.....	...	.....	...	7,041,813	9·03
Australasia	321,097	0·07	2,907,992	0·63	49,011,390	10·69

If the figures in this table be subtracted from those in the table on page 531 the consumption of imported goods will be found.

EXPENDITURE ON LIVING.

In previous issues of this volume statements appeared showing the annual expenditure of the people of New South Wales and of the other states of the Commonwealth on food, clothing, house rent, and other services usually grouped together under the term "cost of living." The necessity for some such table arose from the circumstance that the states lived under separate tariffs, which in various ways influenced the prices of commodities. But with the uniform system of Customs that prevails throughout Australia, the conditions governing the cost of commodities are, so far as they are affected by the operation of tariff charges, made practically the same.

The explanation of the differences that exist in the total expenditure of the peoples of the various states will be found rather in difference of consumption than of prices, and the extent of this difference in consumption will be seen from a scrutiny of the tables relating to the annual consumption of thirty-four articles of common use given in the earlier part of this chapter.

The cost of providing food, and beverages other than intoxicants, consumed in Australia during the year 1902 may be set down at £64,057,000. This sum represents the price to the consumer, and covers all charges except that of cooking and preparing the food for the table. The expenditure on wines, spirits, and beer amounted to £15,058,000, so that the total expenditure for all food and beverages

was £79,115,000, equal to £20 10s. per inhabitant, or 1s. 1·3d. daily. Excluding intoxicants, the yearly expenditure per inhabitant was £16 12s., and the average per day, 10·9d. Compared with the cost of food supply in other countries, this may appear considerable, but the year 1902 was an abnormal one, while allowance must also be made for the profusion with which flesh meat is consumed and wasted in Australia.

Of the total cost of food and beverages, viz., £79,115,000, the expenditure on fresh meat is the largest item, being 23·92 per cent. of the whole; bread is 9·48 per cent.; milk, butter, and cheese, 14·89 per cent.; vegetables and fruits, 11·92 per cent.; sugar, 5·16 per cent.; tea, coffee, cocoa, 2·87 per cent.; and wines, beers, and other spirituous liquors, 19·03 per cent. The following is the approximate retail cost of the chief articles that enter into daily consumption:—

	£
Bread	7,498,000
Fresh meat	18,927,000
Vegetables and fruits	9,428,000
Milk, butter, cheese, etc.	11,777,000
Other farm produce	1,742,000
Sugar	4,085,000
Tea, coffee, etc.	2,271,000
Other foods	6,803,000
Non-alcoholic beverages	1,526,000
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Total expenditure on food	£64,057,000
Wines, beer, and spirituous liquors	15,058,000
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Total expenditure on food and beverages...	£79,115,000

The total expenditure on food just given works out at an average of £16 12s. per inhabitant, which is considerably higher than in ordinary years, but the high prices of meat, butter, etc., are accountable for the increase. The amount is probably higher than in any other country, but the mere statement of expenditure affords but a partial view of the question, as the earnings of the people must be taken into consideration, otherwise the comparison is of little value. If this be done it will be found that few countries approach Australia in the small proportion of income absorbed in providing food for their people, for although in 1902 the ratio amounted to 44·5 per cent. of the total earnings, it must be borne in mind that the prices of foods of all kinds were abnormally high in that year; in an ordinary year the proportion would be about 37 per cent. The following table taken from Mulhall's *Dictionary of Statistics*, shows that while the actual cost of food and drink is £20 10s. in Australia, as against £14 4s. 9d. in Great Britain, the earnings required to pay for that food are not larger proportionately than in the countries which show most favourably in the table. The number of working days in the year is assumed to be 300, allowing for thirteen days' sickness and fifty-two Sundays. It should, however, be borne in mind that comparisons of this kind are more or less fanciful. The economic condition of a

people is more readily and conclusively ascertained by reference to the actual quantities of foods of various kinds entering into consumption, than by the nominal value of such foods and the proportion of the average income spent in their attainment:—

Country.	Average annual cost of food and beverage.	Ratio of cost of food to earnings.	Days' earnings equal to annual cost of food.
	£ s. d.	per cent.	days.
United Kingdom ...	14 4 9	42·2	127
France	12 4 5	44·0	142
Germany	10 18 5	49·1	148
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	153
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	135
United States.....	9 17 7	25·3	76
Canada.....	8 9 0	32·5	97
Australia.....	20 10 0	44·5	133

The expenditure of Australia coming under the designation "cost of living" amounted in 1902 to £43 13s. 2d., made up of the following items. The expenditure of New Zealand is not included.

Division of Expenditure.	Total Expenditure.	Per Inhabitant.
	£	£ s. d.
Food and non-alcoholic beverages	64,057,000	16 12 0
Fermented and spirituous liquors	15,058,000	3 18 0
Tobacco	3,554,000	0 18 5
Clothing and drapery	20,667,000	5 7 1
Furniture.....	1,856,000	0 9 8
Rent or value of buildings used as dwellings	19,057,000	4 18 9
Locomotion	6,642,000	1 14 5
Fuel and light.....	5,281,000	1 7 4
Personal attendance, service, and lodging	6,944,000	1 16 0
Medical attendance, medicine, and nursing.....	4,579,000	1 3 8
Religion, charities, education (not including state expenditure)	2,830,000	0 14 8
Art and amusement	4,380,000	1 2 8
Books, newspapers, etc.	1,831,000	0 9 6
Postage and telegrams, not incidental to earning the incomes	1,079,000	0 5 7
Direct taxes not falling on trade	1,810,000	0 9 5
Household expenses not included elsewhere.....	5,314,000	1 7 7
Miscellaneous expenses.....	3,557,000	0 18 5
Total	£168,496,000	43 13 2

According to Mulhall, the expenditure per inhabitant in the leading countries of Europe and in America is as follows :—

Country.	Expenditure per Inhabitant.	Country.	Expenditure per Inhabitant.
	£ s. d.		£ s. d.
United Kingdom	29 14 9	Norway.....	19 0 0
France.....	23 19 4	Denmark	28 11 5
Germany.....	20 3 4	Holland	20 17 4
Russia.....	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland	18 0 0
Italy	11 11 0	United States	32 16 2
Spain	15 12 6	Canada	23 6 2
Portugal	11 5 6		
Sweden	20 8 4	Australia	43 13 2

The expenditure of Australia as compared with population is, according to this table, largely in excess of that of other countries, but as expenditure depends upon income, a table such as the above has little meaning unless regard be paid to the amount of income available for expenditure and the purchasing power of money. This latter question is too involved to be dealt with, so far as European and American countries are concerned, within the limits at disposal in this volume. It may, however, be mentioned that so far as the primary food requirements are concerned the purchasing power of money is greater in Australia than in any of the countries mentioned in the foregoing list: house rents, however, are higher, as well as the price of most descriptions of wearing apparel. The question of cost of living is further dealt with in another place.

PRICES OF COMMODITIES.

The area of Australia is so extensive, and the population, except on the sea-board, so scattered, that the determination with any exactness of the average prices of the various commodities consumed is almost a matter of impossibility. No attempt has therefore been made to ascertain the average for the whole continent, and in the following pages the prices refer to the Sydney markets alone. There is a further reason. Until the discovery of gold there were virtually only two important markets in all Australia—Sydney and Hobart—and of these Sydney was much the more considerable. Any comparisons of the prices of commodities extending back beyond 1852 must be based mainly upon the experience of Sydney, although from 1840 onwards there is sufficient information in the chapter on the Industrial Progress of Australia in this volume to enable Sydney prices to be adjusted for Melbourne, Hobart, Adelaide, and the other chief centres of population. For the earlier years the authority of contemporary newspapers has been followed where the official records are obscure or silent, but since 1836 these records have been available, and have for the most part been followed.

The accompanying table exhibits the average prices of eight commodities during each year since 1820 :—

Year.	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.	Cheese per lb.	Sugar per lb.	Tea per lb.	Potatoes per cwt.	Maizo per bushel.
	d.	d.	s. d.	s. d.	d.	s. d.	s. d.	s. d.
1820	5	5½	2 9	1 1	.....	.....	7 3	5 6
1821	6	5½	2 8	1 2	.....	.....	7 3	5 0
1822	5	5½	2 6	1 3	.....	.....	5 9	4 9
1823	3½	5½	2 2	1 2	.....	.....	6 1	2 6
1824	5	5½	3 0	1 4	.....	.....	6 10	4 10
1825	4½	6	2 2	1 5	.....	.....	8 4	5 6
1826	5½	5½	2 4	0 10	.....	.....	9 0	4 0
1827	4½	6½	2 3	1 1	.....	.....	8 0	5 0
1828	6	5	2 6	1 4	.....	.....	18 6	9 0
1829	7	6	1 10	1 1	.....	.....	12 6	7 9
1830	4½	3½	1 0	0 11	3½	2 6	8 0	3 10
1831	4	4½	1 8	0 6	3½	2 6	5 0	3 8
1832	5	5	2 3	0 7	3½	2 6	5 0	4 7
1833	4	3½	1 5	0 6	3½	2 6	10 0	2 11
1834	5	4	1 6	0 6	3½	2 6	14 0	4 4
1835	4	3½	1 10	0 5	3½	2 6	10 0	4 6
1836	5½	3	1 9	0 8½	3½	2 6	7 0	6 9
1837	3	4½	1 9	0 7½	3½	2 6	10 0	4 2
1838	5	5½	1 6	0 8½	3½	1 5	6 0	3 7
1839	11½	4½	2 6	1 1	3½	1 6	10 0	9 0
1840	7½	6½	2 0	1 0	3½	2 6	10 0	5 3
1841	4½	6½	2 6	0 10	3½	3 3	10 0	2 10
1842	5	4½	2 6	1 1½	3½	2 0	7 0	4 9
1843	3½	2½	1 9	0 9	3	2 6	5 0	2 9
1844	2½	2½	1 5	0 4½	2½	1 6	4 0	1 5
1845	2½	2½	1 6	0 6	3	1 6	4 6	2 11
1846	3½	2½	1 8	0 6	4	2 3	3 0	4 1
1847	3½	2½	1 2	0 7	4	2 4	5 10	2 1
1848	3½	2½	1 1	0 8	3½	2 0	4 4	1 8
1849	2½	2½	1 2	0 6½	3½	1 9	3 0	3 9
1850	4½	2½	1 3	0 7	3½	1 10	4 0	4 1
1851	5	2½	1 3	0 7	3½	1 4	6 0	3 7
1852	4½	3	1 3	0 7	3½	1 4	6 0	3 11
1853	6½	3½	1 5½	0 7½	3½	1 4	13 0	9 3
1854	7½	4½	2 3	0 9	5	2 6	18 6	10 0
1855	9	6	2 4	1 3	7	2 5	21 4	8 7
1856	7½	3½	1 11	1 2	5½	2 2½	10 0	3 8
1857	5	3½	2 0	1 0	7½	2 6	14 6	8 2
1858	6	4	2 0	1 0	7	2 6	15 6	6 5
1859	6	4	1 10	1 0	5	2 6	8 0	3 5

FOOD SUPPLY AND COST OF LIVING.

Year.	Broad per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.		Cheese per lb.		Sugar per lb.	Tea per lb.		Potatoes per cwt.	Maize per bushel.		
			s.	d.	s.	d.		s.	d.		s.	d.	
1860	6½	4	1	6	1	10	5½	2	3	7	6	2	10
1861	6½	3	1	8	0	9	5½	2	4	7	3	5	1
1862	4½	4½	2	3	0	9	4½	2	0	8	0	5	0
1863	4	4½	1	6	0	10	4½	2	0	7	0	3	10
1864	5½	4	1	6	0	8	4½	2	0	5	0	3	11
1865	7½	3	1	9	0	9	4½	2	0	8	0	3	7
1866	6½	3	1	3	1	0	4	2	6	6	0	4	1
1867	3½	2½	1	6	0	7½	4	2	0	7	0	2	5
1868	4	3½	1	3	0	9	4	2	0	9	0	2	11
1869	3½	2	1	6	0	6	4	2	0	4	0	3	8
1870	3½	3½	1	3	0	6	4	2	0	5	0	3	4
1871	3½	2½	1	3	0	7½	4	2	3	4	0	3	0
1872	3½	2½	1	0	0	9	4	1	9	5	0	2	2
1873	4	2½	1	3	0	5	4	1	9	3	6	3	1
1874	3½	4	1	7	0	6	4	1	9	4	9	4	6
1875	3	3½	1	3	0	9	4½	1	9	5	6	4	3
1876	3½	5½	1	3	0	7	4	1	9	4	9	3	1
1877	4	4½	1	6	0	6	4	2	0	4	9	3	4
1878	4	4	1	3	0	6	4	1	9	5	10	4	0
1879	3½	4	0	10½	0	6	3½	1	6	6	0	3	1
1880	3	3½	0	10	0	7	4	2	0	4	3	2	6
1881	3½	3½	0	10½	0	6½	3½	2	0	4	0	3	7
1882	4	4½	1	3	0	8	4	2	0	5	6	5	4
1883	3½	4	1	4	0	10	4	2	0	6	0	4	0
1884	3	4½	1	3	0	9	3½	1	6	6	6	5	0
1885	3	4½	1	9	1	0	3	1	9	5	6	3	11
1886	3½	4½	1	9	1	1	3½	1	9	6	3	3	9
1887	3½	4	1	4	0	10½	3½	1	9	5	0	3	11
1888	3	4	1	7	0	8½	3½	1	6	6	0	3	4
1889	3½	3	1	4	0	9	3½	1	6	9	0	3	7
1890	3½	4	1	0	0	8	3½	1	6	6	0	3	10
1891	3½	4	1	1	0	9	3¼	2	0	5	0	2	11
1892	3½	4	1	3	0	8	3	1	6	5	6	3	4
1893	3½	4	1	1½	0	8	2½	1	6	6	4	4	0
1894	2¾	3	1	0	0	8	2½	1	6	4	6	2	6
1895	2¾	3	1	0	0	8	2½	1	6	4	3	2	9
1896	3	3	1	0	0	8	2½	1	6	5	6	2	7
1897	3	2½	1	0	0	8	2½	1	6	5	3	2	3
1898	2½	2½	1	0	0	8	2	1	6	9	0	2	9
1899	3	3	1	0	0	8	2	1	6	9	4	3	4
1900	3	3½	0	11	0	7½	2¼	1	4	6	9	3	0
1901	3	5	1	0	0	8	2¼	1	3	7	6	3	6
1902	3¼	6	1	2	0	10	2½	1	3	7	6	5	10

The most noteworthy feature of the history of prices in Australia—the great range of some of the commodities during the year—is not disclosed by the foregoing table. This variation is most noticeable during the early years, and amongst articles of local production, and was the result of the almost complete isolation of the country from the markets of the world. Prior to the discovery of gold, communication by letter with the outside world was at best uncertain, and as late as 1878 the regular mails were made up but once a month. The establishment of telegraphic communication, amongst other results, has had a marked effect on prices, so that except in rare instances, and for goods produced in excess of the demand, the production of Australia no longer determines the prices of goods required for the local markets. Exception must, of course, be made for perishable produce, which is still liable to a great range in price during the course of a single year, as will be shown by some examples hereafter given.

Potatoes have varied in price from year to year. The lowest average for a whole twelvemonth was 3s. 6d. per cwt. in 1873, and the highest was 21s. 5d. in 1855, shortly after the discovery of gold; and it may not be without interest to note that from 1853 to 1855 the price of potatoes was extraordinarily high. Commencing with the year first named, the averages were 13s., 18s. 6d., 21s. 4d., 10s., 14s. 6d., and 15s. 6d. per cwt. With regard to the variation in a single year, the following examples may be cited:—In 1820, from 4s. 6d. to 10s. per cwt.; in 1825, from 4s. to 12s.; in 1829, from 9s. to 26s.; in 1834, from 9s. to 19s.; in 1839, from 7s. to 25s.; in 1854, from 11s. to 24s.; in 1856, from 3s. to 11s.; and in 1888, from 2s. to 24s.

The price of maize has not been subject to very great fluctuation, since, being little used except for horse-feed, this grain is capable of being replaced by other products; nevertheless the prices have ranged from 1s. 5d. in 1844 to 10s. in 1854.

In the list given on pages 538 and 539 are included quotations for bread at per 2-lb. loaf. In most years the price varied somewhat regularly with that of wheat. There are, however, exceptions to this rule, chiefly in the years during which wheat brought an unusually high figure, when the price of bread was generally less than might have been expected. The lowest price at which bread has been retailed was 2½d. in 1849, and the highest was 14d. the 2-lb. loaf, which figure was paid for a short time in 1839.

In addition to the eight commodities which are given on pages 538 and 539, the following list of the average retail prices of articles largely used may not be without interest. The information begins with 1836, beyond which year it is difficult to determine the exact average.

Year.	Bacon per lb.	Eggs per doz.	Rice per lb.	Oat- meal per lb.	Coffee per lb.	Salt per lb.	Beer (Col.) per gal.	Soap per lb.	Starch per lb.	Tobacco per lb. (Col.)	Tobacco per lb. (imp.)
	s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.	s. d.
1836	...	2 2	9	...	...	...	...	4½	...	...	3 3
1837	...	2 6	...	...	1 6	1	1 0	...	...	...	4 0
1838	...	4 0	3	...	...	...	...	...	...	...	...
1839	...	3 0	3	...	1 6	...	...	4½	...	...	3 3
1840	0 10	2 9	2½	...	1 4	...	...	4½	...	...	3 3
1841	0 11	2 3	2½	...	1 4	...	...	4½	...	...	3 3
1842	0 10½	1 11	2	...	1 4	1	1 9	4½	...	...	3 6
1843	0 10	2 0	1½	...	0 10	0½	1 3	...	...	1 4	3 6
1844	0 5½	0 11	1½	...	0 8½	1½	1 3	3¾	...	1 6	3 6
1845	0 6½	1 1	3	...	0 7½	1½	1 1	3½	...	1 6	4 6
1846	0 9½	1 3	1½	...	0 10	1½	2 0	5	...	1 9	4 6
1847	0 6½	1 1	3¾	6	1 1	1½	3 4	5	1 0	1 9	4 4
1848	0 9	1 3	3½	6	1 1	1½	3 3	5	1 0	1 9	4 4
1849	0 8½	1 1	3¾	5½	1 0	1½	2 8	5½	1 1	2 0	4 7
1850	0 8½	1 4	4	6	1 2	1¾	2 9	5½	1 0	2 7	4 10
1851	0 9½	1 8	4	6	1 3	1½	2 6	5¾	1 0	3 8	7 9
1852	1 1	1 6	4	6	1 3	1½	2 6	6	1 0	4 0	8 0
1853	1 2½	2 3	4½	6	1 3	1½	2 4½	6	1 0	4 0	7 6
1854	1 4½	2 9	5	7½	1 6	2½	3 6	8	1 6	4 0	5 6
1855	0 11½	2 8	6	9	1 8	4	4 7	8	1 6	3 0	5 0
1856	0 10	2 2	5½	7	1 7½	3	3 6	7½	1 1	2 6½	5 3
1857	0 9½	1 11	5	7	1 8	2¾	4 0	7	1 0	2 7	5 0
1858	0 7½	2 3	6	7	1 8	4½	4 3	7	1 5	2 6	5 0
1859	0 8½	1 10	4½	7	1 8	2½	4 0	6½	1 0	2 6	5 0
1860	1 0	1 3	5	6	1 6	2½	3 6	7	1 0	2 3	5 0
1861	0 10	1 6	4	6	1 6	2½	3 6	6	0 10½	2 0	5 6
1862	0 10	1 5	3	5	1 5	1½	2 0	4½	0 8	4 6	6 0
1863	0 10½	1 7	3	4	1 4	1½	1 6	4	0 7	3 0	7 6
1864	0 10	1 6	3	4	1 4	1½	2 0	4	0 8	1 6	5 6
1865	0 9¾	1 6	3	4	1 4	1½	2 0	4	0 8	2 6	5 6
1866	1 0	1 6	4	4	1 4	1½	2 0	4½	0 7	2 6	5 0
1867	0 10	1 7	3½	4	1 4	1	1 6	4	0 7	1 9	4 6
1868	0 9½	1 2	4	4	1 4	1½	2 0	4	0 7	1 9	5 0
1869	0 10	1 3	3	4	1 0	1	1 4	4	0 8	1 0	3 6
1870	0 10½	1 4	3	4	1 2	1	1 4	4	0 7	1 3	3 6
1871	0 9½	1 4	2½	2½	1 0	0½	2 3	3	0 4½	1 0	3 0
1872	0 9	1 1	3	3	1 1	0½	1 4	3	0 5	1 4	3 6
1873	0 9	1 4	2½	2¾	1 2	0½	2 3	3	0 5	2 0	3 6
1874	0 8¾	1 6	3	3½	1 4	0½	2 0	2¾	0 6	1 9	3 3

Year.	Bacon per lb.	Eggs per doz.	Rice per lb.	Oat- meal per lb.	Coffee per lb.	Salt per lb.	Beer (Col.) per gal.	Soap per lb.	Starch per lb.	Tobacco per lb. (Col.)	Tobacco per lb. (imp.)
	s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.	s. d.
1875	0 9½	1 6	3	3	1 2	1½	3 0	3	0 5	2 0	3 9
1876	0 9	1 0	3	3	1 2	1	2 0	2¾	0 5	1 9	3 0
1877	0 8½	1 6	3	3½	1 3	1	2 0	2¾	0 5	2 0	3 9
1878	0 9	1 3	3	3	1 3	0½	2 0	2	0 5	1 6	3 9
1879	0 8	1 7	2½	2¼	1 0	0½	2 0	2	0 5	1 6	3 0
1880	0 7½	1 4	3	3	1 5	0¾	2 0	3	0 5½	2 0	4 0
1881	0 7½	1 0	3	3	1 5	0¾	2 0	3	0 5½	2 0	4 0
1882	1 0	2 0	3½	4	1 5	1	2 0	2½	0 6	3 0	5 0
1883	1 0	1 11	3	4	1 9	1	2 0	3	0 7	3 0	6 0
1884	0 11½	1 11	2½	3	1 4	1	2 0	3	0 6	3 0	5 0
1885	0 10½	1 10	3	3	1 5	0¾	2 0	3	0 6½	3 0	6 0
1886	0 10½	1 8	3½	2¾	1 6	1	2 0	4	0 6½	4 0	5 6
1887	0 10	1 7	3	2¾	1 6	1	2 0	3½	0 6½	4 0	5 6
1888	0 10½	1 7	3	2½	1 6	1	2 0	3¼	0 6	4 0	5 6
1889	0 11	1 8	3	3¼	1 6	1	2 0	3½	0 6	4 0	5 6
1890	1 0½	1 6	4	3	2 0	1	2 0	3½	0 5	4 0	6 0
1891	0 10	1 6	3	2½	2 0	1	2 0	3½	0 5	4 0	6 0
1892	0 9	1 6	3	2½	1 10	0¾	2 0	3	0 4½	4 0	6 0
1893	0 11	1 6	3	2¼	1 10	0¾	2 0	3	0 4½	4 0	6 0
1894	0 7	1 3	3	2¼	1 10	0¾	2 0	3	0 4½	4 0	6 0
1895	0 7½	1 0	2½	2	1 9	0¾	2 0	2	0 4	4 0	6 0
1896	0 7½	1 0	2	2	1 9	0¾	2 0	2	0 4	4 0	6 0
1897	0 8	1 0	2½	2½	1 9	0¾	2 0	2½	0 4	4 0	6 0
1898	0 8½	1 0	2	2½	1 9	0¾	2 0	2½	0 4	4 0	6 0
1899	0 8	0 11	2	2¼	1 10	1	2 0	2½	0 3¾	4 0	6 0
1900	0 7½	0 11	2¼	2¼	1 6	0½	2 0	3	0 3½	4 0	6 0
1901	0 8½	1 3	2½	2¼	1 6	0½	2 0	3	0 4	4 0	6 0
1902	0 10	1 6	2½	2¼	1 6	0½	2 0	3	0 4	4 0	6 0

In the quotation of prices in the foregoing tables the figures given are those charged in the retail shops. It is quite possible that produce of all kinds may have been bought at cheaper rates than those stated, but higher rates were also paid, and the figures will be found to represent the fair average rates, having regard to the class of goods consumed. It is of importance to take into consideration the quality of the produce consumed, for very considerable changes in the direction of improvement have taken place in this respect. Thus, the ordinary sugar now used, and obtainable for about 2d. per lb., is a good white sugar, whereas some years ago only a common quality of moist sugar was found on the tables of the people. A very material improvement has been effected in the quality of flour, a large proportion of the present consumption being roller-made. Salt-butter still forms the bulk

of the supply, but it is usually of recent make ; while formerly the butter was imported from Great Britain, and was several months old before reaching the dining-table. The candles now used are made of stearine, but the time is not remote when only the common tallow candle was in general use ; and so with many other articles of ordinary consumption. The retail prices are those actually paid from day to day, irrespective of the nominal wholesale rates of the commodities in the metropolitan markets.

PRICE-LEVELS OF ARTICLES OF COMMON USE.

A consideration of retail prices would not be complete without a statement of the price-level in different years. This can be given for foods ; but at present the data are hardly sufficient to establish an exact series of price-levels, taking into consideration all the elements of ordinary expenditure. The information in regard to foods is given below, the assumption being made that the quantities entering into consumption were the same formerly as at the present day. This assumption, however, is in some respects erroneous ; but there appear to be no other means within reach to effect a just comparison. Sugar, tea, coffee, butter, cheese, and potatoes are now more largely used than (say) prior to 1870 ; but bread, or other forms in which flour is used, and meat, are not consumed so largely. However, when full allowance is made on this score, the following table will still be found to approximate closely to the truth. The price-level is calculated on the prices ruling for beef, mutton, bread, sugar, rice, potatoes, tea, beer, and tobacco :—

Period.	Price-level of principal Articles of Consumption.	
	1821-37 prices =1,000.	1901-02 prices =1,000.
1821 to 1825	1,000	1,223
1826 „ 1830	1,000	1,223
1831 „ 1835	802	980
1836 „ 1840	930	1,137
1841 „ 1845	676	826
1846 „ 1850	669	818
1851 „ 1855	1,038	1,269
1856 „ 1860	1,153	1,410
1861 „ 1865	959	1,173
1866 „ 1870	753	921
1871 „ 1875	709	867
1876 „ 1880	759	928
1881 „ 1885	756	924
1886 „ 1890	730	892
1891 „ 1895	670	819
1896 „ 1900	646	790
1901 „ 1902	818	1,000

During the past forty years prices of food stuffs have changed very slightly, such changes as there have been tending in the direction of a reduction. The average of 1896-1900 was less than in any previous period, but in 1901-2 there was a considerable increase, and prices ruled higher than in any period since 1861-65. Little practical good can be gained by comparing the prices of one period with those of another, unless regard is also paid to the earnings of labour, and as means of comparison are afforded in the chapter of this work dealing with wages, it will be unnecessary to pursue the subject further in this chapter.

PRICE-LEVELS OF IMPORTS AND EXPORTS.

The following tables have been compiled with the object of showing to what extent Australia has been affected by the variation in the prices of commodities imported and exported during the past forty-one years. The figures refer to New South Wales alone, but they may be accepted as also indicating in a fairly accurate degree the position in which the other states of Australasia stand in regard to this matter. The total value of the exports of each of the states is greatly affected by the prices obtained for certain leading lines of raw produce, of which wool, wheat and flour, tallow, silver and silver lead, hides, leather, tin, copper, coal, fruit, butter, sugar, meat and timber are the most important. The value of these articles represents a total of about seventeen and a half millions or ninety per cent. of the total export of domestic produce.

In the subjoined table the price-level of domestic exports is given for the forty-one years beginning with 1860. In order to ascertain the price-level, all the principal articles of domestic produce exported have been taken, the prices of 1902 have been applied to the quantities of each of the other years, and the result has been compared with the actual total of such year: the level of the year being found by dividing the actual sum obtained into the amount which would have been obtained had the prices of 1902 prevailed. The average for 1902 is assumed to be 1,000, the price-levels or index numbers of the other years being as shown in the table. In order to further facilitate comparison, the average of the five years 1870-74 has been assumed to be 1,000, and the prices of other years have been adjusted to that basis. The average of these years has been taken because the question is frequently raised as to the comparative prices of commodities before and after the demonetisation of silver by Germany in 1873. In compiling the price-level for exports, only articles of insignificant value have been omitted from consideration, and in no year does the value of articles excluded form more than 15 per cent. of the total exports, while in some years the proportion falls as low as 5 per cent., the average of all years being about 10 per cent. It is considered that this system enables a more

reliable estimate of the relative prices to be obtained than that of selecting the prices of certain articles without giving due weight to the quantities of such articles exported.

These figures show that there has been a great fall in the prices of Australian produce exported since 1860, or still greater since 1864, viz., from the index number 1,316 to 700, or nearly 47 per cent. Marked fluctuations, ranging to about 10 per cent., occurred between 1860 and 1866, when the index number was about the same as in the first-named year. From 1866 to 1870 there was a drop from 1,249 to 879, or about 30 per cent. A rise followed in 1871 to 1,075, or about 22 per cent., after which for four years prices continued fairly steady, until there was a further decline to 887 in 1878. In 1879 the level rose to 921 and for the next four years prices continued without much change, but from 1884 to 1885 there was a fall from 919 to 806. This was succeeded by a fairly even range until 1889, when the level stood at 785. From 1889 there was a steep decline to 532 in 1894, a fall of 32 per cent. for the five years, but in 1895 and 1896 prices recovered a little, and the level rose to 573—an advance of 7·7 per cent. In 1897 there was again a slight fall from 573 to 557, equivalent to 2·8 per cent., but in 1898 the level rose to 590, and in 1899 to 736, a rise of 32 per cent. for the two years. The sharp rise in 1899 was entirely due to the improved price obtained for wool, and the fluctuation in the last three years has been mainly caused by the varying price of that commodity.

Year.	Price-level of Exports.		Year.	Price-level of Exports.	
	1902 prices = 1,000.	Average of 1870-74 prices = 1,000.		1902 prices = 1,000.	Average of 1870-74 prices = 1,000.
1860	1,782	1,247	1882	1,324	926
1861	1,780	1,244	1883	1,324	926
1862	1,874	1,310	1884	1,311	919
1863	1,702	1,191	1885	1,152	806
1864	1,883	1,316	1886	1,108	775
1865	1,723	1,203	1887	1,138	797
1866	1,784	1,249	1888	1,104	773
1867	1,650	1,154	1889	1,121	785
1868	1,651	1,155	1890	1,083	758
1869	1,505	1,053	1891	985	689
1870	1,257	879	1892	933	652
1871	1,537	1,075	1893	843	590
1872	1,401	979	1894	760	532
1873	1,485	1,037	1895	779	546
1874	1,471	1,028	1896	820	573
1875	1,465	1,027	1897	796	557
1876	1,389	972	1898	842	590
1877	1,274	891	1899	1,052	736
1878	1,268	887	1900	975	682
1879	1,315	921	1901	942	659
1880	1,292	903	1902	1,000	700
1881	1,282	897			

It will be seen that the purchasing power of money has steadily increased since 1864 and that 20s. in 1902 would purchase the same articles of domestic export which in 1864 would have cost 37s. 7d., prices having fallen 46·8 per cent. during the period of thirty-eight years. The greatest decline has taken place in the three staple exports of wool, silver, and coal, many of the minor articles having maintained or increased their price during the last fifteen years.

It must not be supposed that Australia has been a loser by the fall in the prices of its exports to the extent which the price-level shows, because the power of the exports to purchase imports must also be taken into consideration. It will, therefore, be necessary to consider also the price-level of imports. As there exist no reliable data on which price-levels for imports can be based prior to 1870, the table commences with that year :—

Year.	Price-level of Imports.		Year.	Price-level of Imports.	
	1902 prices = 1,000.	Average of 1870-74 prices = 1,000.		1902 prices = 1,000.	Average of 1870-74 prices = 1,000.
1870	1,271	966	1887	1,031	783
1871	1,277	970	1888	1,026	779
1872	1,335	1,014	1889	1,069	812
1873	1,357	1,030	1890	1,058	804
1874	1,343	1,020	1891	1,011	767
1875	1,265	962	1892	969	736
1876	1,243	944	1893	932	708
1877	1,195	908	1894	885	673
1878	1,186	900	1895	877	666
1879	1,136	862	1896	912	693
1880	1,143	868	1897	921	700
1881	1,131	859	1898	932	708
1882	1,125	855	1899	927	704
1883	1,144	869	1900	989	752
1884	1,134	862	1901	972	738
1885	1,041	790	1902	1,000	760
1886	1,022	776			

It may be said generally that the fall in prices was somewhat in favour of the exports up to the year 1889. Since then the exports have fallen away on the average values at a much more rapid rate than the imports. A clearer view of the operation of the fall in prices will be obtained from the table which is given below, showing the price-levels of imports of merchandise for home consumption and exports of domestic

produce, for periods of five years to the end of 1899, and for the three years ended with 1902, with the relative fall per cent. :—

Period.	Imports.		Exports.	
	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.
1870-74	1,000	.....	1,000	.....
1875-79	915	8·5	940	6·0
1880-84	863	5·9	914	2·9
1885-89	788	8·5	787	13·8
1890-94	737	6·5	645	18·0
1895-99	694	5·8	600	7·0
1900-02	750	8·1 (rise)	680	13·3 (rise)

It will be seen that, assuming the index number of the five years 1870-74 to be 1,000, the fall in the succeeding five years was 8·5 per cent. for the imports, as compared with 6 per cent. for the exports. The average value of the imports for the five years ending with 1884 was 5·9 per cent. less than in the preceding quinquennial period, whereas the difference in the value of the exports was 2·9 per cent. During the next five years the average value of the imports declined 8·5 per cent., while the fall in the value of the exports was no less than 13·8 per cent., so that the index number for 1885-89 for both imports and exports was practically the same figure. As already mentioned, the fall for the period 1890-94 was much more heavy in regard to the exports than the imports, amounting to 18 as compared with 6·5 per cent.; but during the period 1895-99 the fall in the exports was not much greater than that in the imports, 7·0 per cent. compared with 5·8 per cent. In the last three years the exports have risen by 13·3 per cent., and the imports by 8·1 per cent., so that the last two periods were the most favourable, as far as prices go, that have been experienced in Australia for many years.

The Australian states and New Zealand are chiefly affected by the fall in prices because they are debtor countries. In the chapter on "Private Finance" will be found certain calculations showing that the annual charge payable by the states and municipalities on their indebtedness to British creditors is £12,359,000, while the earnings of investments made in Australasia by private persons, or drawn by absentees, amount to £5,250,000 per annum. As the whole of the interest on Government and municipal loans has to be paid by exports, irrespective of the fall in prices, and as a large portion also of the interest payable to private investors is in the same category, the fall is a matter of very serious importance to these states. Fortunately the increase of production, as compared with the population, has been large enough in normal seasons to counteract the fall in prices, and if the change in regard to the price of Australian produce which began in 1895 be continued, the condition of these states will be in every respect more hopeful.