

## III.—WHOLESALE PRICES.

1. **General.**—The data upon which this investigation as to Wholesale Prices is based were obtained mainly from reports of Melbourne market prices published in the ordinary press and in special trade reviews. In any case of doubt as to the reliability of the figures, the records thus obtained were verified by reference to well-known and important business firms dealing in the articles in question. Every care was taken to ensure that the prices quoted for each article refer to a uniform quality, and, in cases where more than one source of information was utilised for obtaining prices of single commodities, special precautions were taken to ensure substantial continuity of quality or grade. In nearly every case monthly prices were obtained and arithmetic averages for the several years were computed. In regard, however, to a few commodities, such as coal, tea, cotton, wool and silk, monthly prices were not available; yearly averages, based in each case upon expert opinion, were secured.

It was at first intended to obtain records, on the lines indicated, for a uniform list of commodities for the capital town of each State. Owing, however, to the difficulty experienced in obtaining regularly the prices of anything like a uniform representative list of commodities from the papers and journals published in some of these towns, this idea has for the present been abandoned. The amount of work involved in taking out the prices since 1871 for Melbourne alone and in performing the necessary arithmetical calculations was very considerable, and the inclusion of similar information for the other capital towns (if it were ultimately found that satisfactory data could have been secured) would have unduly delayed the publication of this Report.

For future months particulars of wholesale prices, with corresponding index-numbers, on uniform lines with the information given herein, will be furnished in the periodical publications to be issued by the Labour and Industrial Branch of this Bureau.

2. **Commodities Included, Sources of Information and Mass Units.**—From the list given below it may be seen that the commodities included in this investigation embrace a large number of the staple articles of Australian consumption and production. The 80 commodities have been distributed into eight groups, and index-numbers have been computed for each group separately, and for all groups together, thus facilitating any analysis of the course of prices or examination as to the cause of fluctuations. It should be observed that, for reasons already indicated (see pp. 16, 18), articles of clothing, boots and shoes and furniture and house furnishing have been excluded.

(i.) *Commodities included and Sources of Information.*—The first three columns of the tabular statement given on pp. 44-6 shew the commodities comprised in each group, the particular brand, grade, or quality (if any) to which the prices refer, and the sources of information from which the prices of each commodity are derived. It may be seen that the commodities included are generally in the nature of raw materials, i.e., materials in which the labour cost is relatively low. Any examination into the relative fluctuations of price in raw materials, as compared with manufactured articles, must for the present be omitted.

(ii.) *Units of Measurement and Mass-Units.*—In the fourth column of the statement given on pages 44-6, the unit of measurement of each

commodity is set out, while in the following column the relative quantities of each commodity (in thousands and in the corresponding units of measurement); are shewn. The last column shews the mass-units adopted in the computation of the index numbers, that is to say it shews the relative extent to which each commodity is used. The meaning of the term "mass-unit," and the application of the mass-unit in the computation of index-numbers by the aggregate expenditure method, have already been explained in Sections I. and II. of this Report. For the rest, it may be said that the method here followed for the computation of the wholesale price index-numbers is the same as that adopted in regard to Retail prices.

**Melbourne Wholesale Prices, Commodities included, Sources of Information, Quantities Consumed, and "Mass-Units."**

Commodity.	Brand.	Sources of Information.	Unit.	Quantities Consumed. (1000 omitted.)	Mass Unit.
<b>GROUP I.—METALS AND COAL (12 COMMODITIES).</b>					
Iron—					
Pig	Mixed Nos.	Trade Journals*	ton	64	6½
Rod & Bar	Stafford	" "	"	34	3½
Angle & T	"	" "	"	34	3½
Plate	"	" "	"	31	3
Hoop	"	" "	"	6	½
Galvanized	26 gauge	" "	"	52	5
Fencing Wire	No. 8	" "	"	60	6
Zinc, Sheet	"	" "	"	8	1
Lead, Sheet	"	" "	"	7	¾
" Pipes	"	" "	"	6	¾
Copper Sheet	"	" "	lb.	20,000	2,000
Coal	Newcastle on Wharf	{ Journal of Commerce 1871 and 1872, quoted in Bay Melbourne Papers, 1873 to 1900 Federated Steamship Owners, 1901 to 1912 }	ton	6,004	600
				Total	2,630½
<b>GROUP II.—JUTE, LEATHER, WOOL, ETC. (9 COMMODITIES).</b>					
Branbags		Trade Journals*	doz.	1,080	110
Cornsacks		" "	"	2,500	250
Woolpacks		" "	each	2,000	200
Leather Kip		" "	lb.	10,710	1,070
" Calf		" "	"	6,948	700
" Basils		" "	doz.	257	25
Cotton	Raw	London Prices	lb.	243,200	24,000
Silk	"	" "	"	2,635	250
Wool	"	(Australasian Wool)	"	122,000	12,200
				Total	38,805
<b>GROUP III.—GRAINS, ETC. (13 COMMODITIES).</b>					
Wheat			bushel	4,853	500
Flour			ton	477	48
Bran		Trade Journals* and Melbourne Papers	bushel	14,350	1,400
Pollard		" "	"	14,350	1,400
Oats		" "	"	12,365	1,200
Oatmeal	Feed	" "	ton	16	1½
Barley	Colonial	Trade Journals * and Melbourne Papers, 1891 to date	bushel	1,500	150
"	Malting	" "	"	1,000	100
Maize	Feed	" "	"	9,824	1,000
Hay	Best Manger	Melbourne Papers	ton	2,385	270
Straw	Victorian	" "	"	265	25
Peas		Trade Journals*	bushel	554	55
Potatoes		Melbourne Papers	ton	402	40
				Total	6,189½

\* When "Trade Journals" is mentioned it signifies the Journal of Commerce, 1861, 1866, 1871, 1872, and 1888 to 1912, and the Australasian Trade Review 1871 to 1882, and occasionally to 1892.

Melbourne Wholesale Prices, Commodities included, Sources of Information, Quantities Consumed, and "Mass-Units."—continued.

Commodity.	Brand.	Sources of Information.	Unit.	Quantities Consumed. (000 omitted.)	Mass Unit.
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GROUP IV.—DAIRY PRODUCE (7 COMMODITIES).

Ham	Best Fresh In Bladders Ordinary	Melbourne Papers	lb.	8,000	800
Bacon			"	32,500	3,200
Cheese			"	15,000	1,500
Butter			"	95,000	9,500
Lard			"	2,000	200
Eggs			doz.	18,000	1,800
Honey			lb.	5,847	600
				Total	17,600

GROUP V.—GROCERIES (21 COMMODITIES).

Currants	Sultanas		lb.	14,000	1,400
Raisins			doz. 1 lb.	14,000	1,400
Herrings			tins	500	50
Salmon	"	Trade Journals*	doz. halves	500	50
Sardines	Plantation		lb.	1,000	100
Coffee	Taylor's		"	2,100	200
Cocoa	No. 1A or		"	1,000	100
Sugar	its equivalent in former years		ton	220	22
Macaroni			lb.	2,000	200
Sago			ton	7,750	800
Rice	Patna	"	22	2	
Salt	Liverpool fine	"	70	7	
Salt	Rock	"	10	1	
Mustard	1871-83	doz. 1 lb			
	D.S.F. In	tins	64	6	
	1884- 1 lb				
	1911 tins				
	Coleman's				
Starch	Coleman's } White }	London Prices Trade Journals*	lb.	1,000	100
Blue	Keen's }		lb.	500	50
Matches	Wooden Safety		gross	860	90
Candles	Gouda	lb.	18,000	1,800	
Tobacco	Two Seas in Pocket Pieces	lb.	13,000	1,300	
Tea		lb.	30,000	3,000	
Kerosene		gallon	17,500	1,700	
				Total	12,178

GROUP VI.—MEAT (5 COMMODITIES).

Beef	Average quality.	† Metropolitan Meat Market Reports	100 lbs.	3,875	390
Mutton	"		lb.	332,000	33,000
Veal	"		lb.	20,000	2,000
Lamb	"		each	2,047	200
Pork	"		lb.	37,000	3,700
				Total	39,290

\* See footnote \* on opposite page. † Gippsland Mercury, 1890-1892, Melbourne Papers, 1893-1912

## Melbourne Wholesale Prices, Commodities included, Sources of Information, Quantities Consumed, and "Mass-Units."—continued.

Commodity.	Brand.	Sources of Information.	Unit.	Quantities Consumed, (000 omitted.)	Mass Unit.
<b>GROUP VII.—BUILDING MATERIALS (9 COMMODITIES).</b>					
Timber :—	Flooring	Trade Journals*	100 ft. lin.	300	30
	" 6 x 1 $\frac{1}{2}$ "		"	300	30
	" 6 x 2		"	300	30
	" 6 x 3		"	300	30
	Weatherboards		"	2,000	200
Cement	Oregon Shelving	Trade Journals*	1,000 ft. sup	200	20
	Portland		"	100	10
	White Lead		" cask ton	312	30
			8	3	
			Total		380 $\frac{1}{2}$
<b>GROUP VIII.—CHEMICALS (4 COMMODITIES).</b>					
Cream of Tartar Carbonate of Soda Saltpetre Sulphur	In Kegs	Trade Journals*	lb.	4,030	400
	Refined		ton	3	3
			"	2 $\frac{1}{2}$	2 $\frac{1}{2}$
			Total		400 $\frac{1}{2}$

\* See footnote \* on page 44.

**3. Relative Importance of Groups**—The relative importance of any group is, of course, gauged by computing the relative expenditure thereon, that is by taking the sum of the products of the prices of the commodities in each group and their corresponding "mass-units," and comparing this sum with the total expenditure on any other group or on all groups. The relative expenditures thus obtained, and the percentage of the expenditure on each group, on the total expenditure, are shewn in the subjoined table. The relative, as well as the total expenditures, depend, of course, upon the prices, the mass-units being constant. In the computation of the figures shewn in the following table, the relative importance of the groups is shewn for both 1871 and for 1911. It will be seen, of course, that they are not quite identical, since the variations of the prices for each group are not identical.

**Wholesale Prices, 1871 and 1911, Relative Importance of Groups.**

Particulars.	Group I. Metals and Coal.	Group II. Jute, Leather, &c.	Group III. Agricultural Produce.	Group IV. Dairy Produce.	Group V. Groceries, &c.	Group VI. Meat.	Group VII. Building Materials.	Group VIII. Chemicals.	All Groups.	
Relative Expenditure	1871	23,515	44,460	61,912	12,580	40,096	19,148*	9,190	724	211,634
	1911	21,447	35,378	50,111	14,574	25,350	16,640	8,802	514	172,816
Percentage on Total Expenditure	1871	11.1	21.0	29.3	6.0	19.0	9.0	4.3	0.3	100.
	1911	12.4	20.5	29.0	8.4	14.7	9.6	5.1	0.3	100.

\* 1884 prices.

From this table it may be seen that Group III. (Agricultural produce), is by far the most important, the expenditure thereon amounting to no less than 29.0 per cent. of the total expenditure. The next group in order of importance is No. II., the expenditure thereon being 20.5 per cent. of the total, followed in the order named by Groups V. (14.7 per cent.), I. (12.4 per cent.), VI. (9.6 per cent.), IV. (8.4 per cent.), VII. (5.1 per cent.), and VIII. (0.3 per cent.).

The expenditure on food stuffs in 1911 (Groups III., IV., V., and VI.), amounted in all to 61.7 per cent. on the total expenditure, and it will be seen hereinafter that the variations in the prices of the commodities included in these groups have often, and especially in times of drought and consequent high prices, a predominating influence on the level of the index-numbers for all groups.

**4. Index-Numbers and Graphs.**—As already stated index-numbers have been computed for each group of commodities, as well as for all groups together. The index-numbers for the several groups and for all groups together are shewn in the table on page 48. In regard to Group VI. it should be observed that reliable and uniform records as to prices of meat could not be obtained further back than 1890 (except for the years 1884 and 1885). Index-numbers were accordingly worked out for the full period since 1871 for the seven groups, *excluding* meat, and also for the period since 1890, for the eight groups, *including* meat. The figures shewn in the last column of the subjoined table for years prior to 1890 (except for 1884 and 1885) have accordingly been adjusted (on the basis of the results for succeeding years) so as to include meat.

(i.) *Table of Index-Numbers.*—The index-numbers have in each case been computed with the prices in the year 1911 as base; that is to say, they shew the amount which would have had to be expended in each of the years specified in order to purchase what would have cost £1000 in 1911, distributed in purchasing the relative quantities (indicated by the mass-units) of the several commodities included in each group and in all groups respectively. Thus in the last column it may be seen that the cost of the relative quantities of the various commodities was 1229 in 1871, and 974 in 1901, as compared with 1000 in 1911 and 1174 in 1912. In other words, prices were lower in 1911 than in either 1871 or 1912, and the purchasing power of money in 1911 was accordingly greater. Again, prices were higher in 1911 than in 1901, and the purchasing power of money in the former year was accordingly less.

It should be observed that the figures for 1912 are based on the prices for the first nine months only, and that in some cases the results are incomplete.

Melbourne Wholesale Prices, Index Numbers, 1861, 1866, and 1871 to 1912,  
Computed to Year 1911 as Base.

YEAR.	I. Metals and Coal.	II. Fibre, Leather, &c.	III. Agricultural Produce, &c.	IV. Dairy Produce.	V Groceries	VI. Meat.	VII Building Materials.	VIII. Chemicals.	All com- modities together.
1861	1,438	1,381	1,583	1,008	1,963	—	1,070	2,030	1,538
1866	1,225	1,902	1,892	1,749	1,889	—	931	1,741	1,752
1871	1,096	1,257	1,236	864	1,596	—	1,044	1,409	1,229
1872	1,456	1,394	1,246	1,019	1,606	—	1,097	1,537	1,335
1873	1,816	1,362	1,422	1,032	1,581	—	1,446	1,601	1,461
1874	1,635	1,240	1,456	1,160	1,476	—	1,138	1,608	1,387
1875	1,487	1,250	1,361	1,345	1,435	—	1,009	1,554	1,387
1876	1,406	1,146	1,440	1,415	1,462	—	1,054	1,532	1,350
1877	1,400	1,149	1,347	1,303	1,502	—	1,047	1,509	1,311
1878	1,329	1,094	1,260	1,112	1,378	—	886	1,411	1,216
1879	1,266	1,060	1,298	1,146	1,371	—	852	1,444	1,210
1880	1,347	1,101	954	900	1,412	—	943	1,626	1,108
1881	1,178	1,115	1,012	935	1,421	—	1,091	1,587	1,121
1882	1,297	1,032	1,444	1,347	2,414	—	1,005	1,493	1,289
1883	1,231	1,021	1,237	1,114	1,408	—	910	1,484	1,183
1884	1,208	997	1,124	1,156	1,320	1,151	876	1,471	1,132
1885	1,216	921	1,156	1,316	1,158	1,042	880	1,432	1,105
1886	1,164	835	1,222	1,286	1,139	—	730	1,305	1,089
1887	1,053	883	1,184	1,091	1,128	—	790	1,401	1,055
1888	1,216	870	1,123	1,210	1,122	—	937	1,375	1,074
1889	1,061	886	1,505	1,082	1,152	—	940	1,223	1,171
1890	1,402	911	1,022	1,099	1,074	1,007	880	1,257	1,063
1891	895	847	1,024	995	1,032	888	780	1,194	945
1892	880	800	971	1,066	907	901	704	1,140	918
1893	856	783	834	842	1,033	816	739	1,018	850
1894	752	721	644	708	1,057	695	731	934	749
1895	720	684	734	712	1,016	682	789	1,003	760
1896	808	749	1,116	875	1,021	808	780	1,065	922
1897	813	706	1,063	937	1,000	1,072	766	971	925
1898	842	683	920	1,034	1,000	1,091	838	933	895
1899	933	717	670	814	1,003	960	805	892	809
1900	1,042	861	703	838	1,030	1,168	911	908	894
1901	1,061	774	928	1,029	1,048	1,345	841	917	974
1902	1,007	756	1,192	1,215	945	1,447	837	881	1,051
1903	923	834	1,200	1,059	936	1,443	875	921	1,049
1904	821	835	754	876	916	1,427	845	875	890
1905	772	850	894	980	942	1,209	801	850	910
1906	882	978	916	972	923	1,110	896	864	948
1907	1,037	1,017	973	1,020	948	1,294	968	961	1,021
1908	1,033	901	1,312	1,198	968	1,335	935	891	1,115
1909	1,014	907	1,000	1,119	978	1,088	911	815	993
1910	1,004	1,052	969	1,100	999	1,008	966	898	1,003
1911	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1912*	1,015	1,057†	1,263	1,248	1,085‡	1,291	1,041	944	1,174

\* First 9 months, January to September (inclusive).  
† Omitting Cotton, Silk and Wool. ‡ Omitting Tea.

(ii.) *Reversibility of Index-Numbers.*—It has already been pointed out that these index-numbers are *reversible*; that is to say if it is desired to take any year, other than 1911, as base, the necessary index-numbers may readily be computed, by dividing each index-number by the index-number in the base year and multiplying the result by 1000. Thus, referring to the last column, if it be desired to compare prices in 1912 with those in 1900 as base (= 1000 instead of 894), the index number for the former year (1912) is

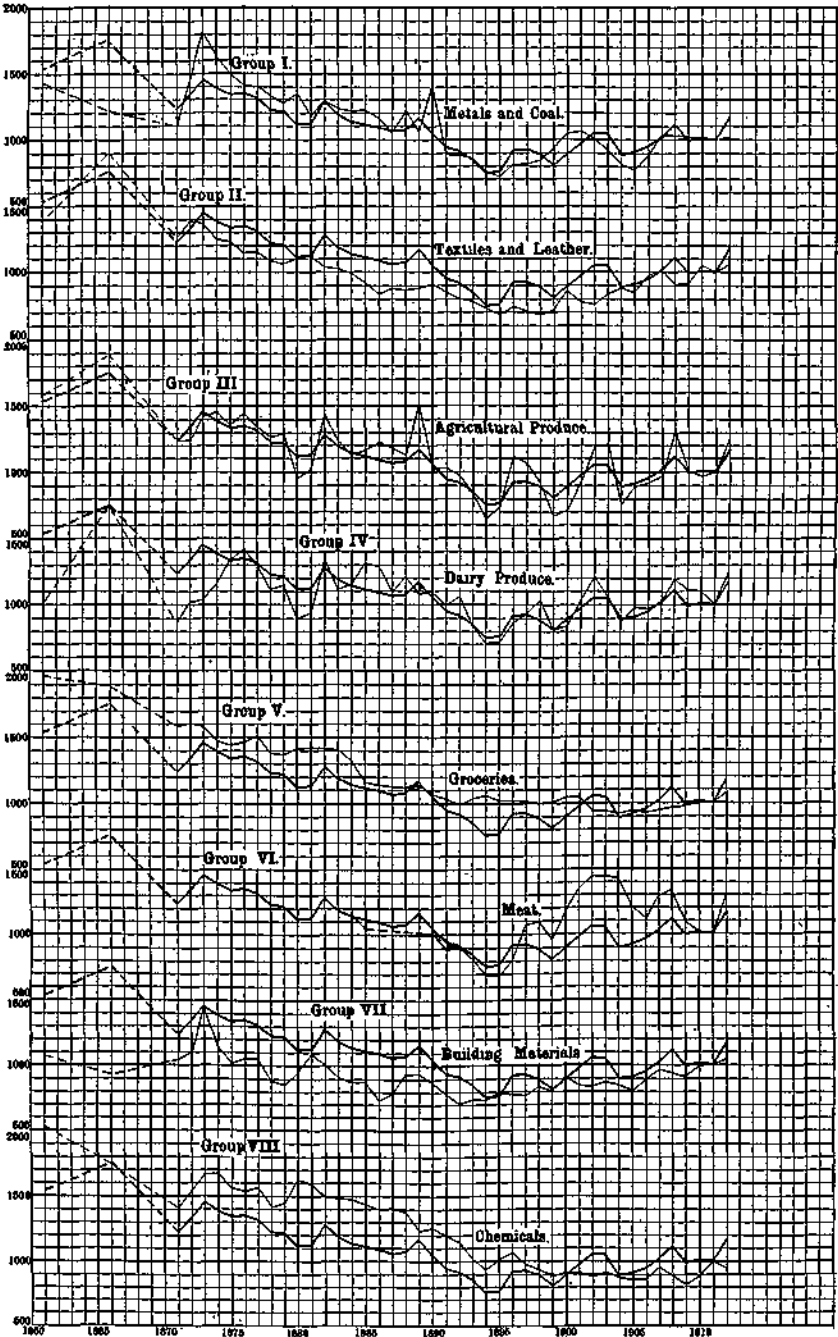
1174

— × 1000 = 1313, an increase on 1900 of 31.3 per cent.

894

(iii.) *Graphs.*—The index-numbers are shown for each group and for all groups together in the following graphs. The heavy line in each graph represents the index-numbers for the weighted average of

MELBOURNE WHOLESALE PRICE INDEX-NUMBERS, 1861 TO 1912.\*



\* Numbers for 1912 are based on average prices in the first nine months only.

all groups, and is shewn so that comparison may be made between the price levels for all commodities and those for the commodities comprised in each group separately. The index-numbers for the individual groups are represented by the light lines. The broken lines at the commencement of each graph shew the index-numbers for the years 1861 and 1866, the continuous records commencing with the year 1871.

(iv.) *Tables of Prices.*—The average annual prices of each commodity included in this investigation are shewn in Appendix VI. hereof.

5. **General Results of Investigation.**—(i.) *From 1871 to 1880.*—Referring to the index-numbers given on page 48, and to the graphs thereof on page 49, it will be noticed that, in regard to the index-numbers for all commodities (disregarding the figures given for the years 1861 and 1866), the first noticeable feature is the rise from 1871 to 1873, followed by a rapid fall until 1880, with the exception of a small rise in 1876. From 1869 to 1873 there was a world-wide boom in trade, which in England and other countries carried prices to a level which had not been reached for fifty years. This boom constituted a period of great inflation of credit and business, as well as of prices, and has variously been attributed to excessive speculation, to extensive and injudicious construction of railroads in the United States of America, Central Europe, and Russia, to the opening of the Suez Canal, and to the Franco-German war. On reference to the graphs of the individual groups it will be seen that this rise was most marked in the case of metals and coal (Group I.), and it was these commodities that the boom chiefly affected, for the stimulus imparted by the developments of the 'fifties and 'sixties chiefly took the form of a demand for railways, ships and machinery. The index-numbers for all other groups, except, perhaps, that for groceries (Group V.), shew a distinct upward movement at this period. It may be seen that in regard to agricultural and dairy products (Groups III. and IV.), this rise did not reach its maximum until a few years later, viz., in 1874 and 1876 respectively. This was largely owing to local conditions and especially to the severe drought of 1876-7.

It will be seen hereinafter (see Section VI. hereof) that the decline in prices which set in in 1873 was world-wide. This fall has been ascribed to the same factors as are generally recognised as the causes of similar downward movements. When trade is good a state of affairs is created in which a downward movement of prices is said to be sooner or later inevitable. A great stimulus is given to production, capital is employed in establishing new factories or in extending works or plant, workers are attracted to certain favoured industries by increased wages; then at a certain stage the demand is found to be less than the supply, the prices of the manufactured articles fall, and in time the raw materials and labour employed are at a discount. It is stated, moreover, that the fall is often precipitated by the inability of speculative holders of stocks to hold on in face of falling markets. At each new stage of the decline new sales become necessary till there is apparently no limit to the fall, just as before there seemed to be no limit to the rise. By sympathy almost all markets tend to be affected, the low prices in one market attracting capital to it, and so weakening other markets, while



speculators who are hit in one branch of trade seek to cover their losses by sales of some commodity or stock which has not depreciated. This is often stated to be the ordinary explanation of a general fall in prices.\* The consideration of what is commonly alleged to be another important factor, viz., the gold supply, is dealt with in a later part of this Report (see Section IX.).

(ii.) *From 1881 to 1890.*—The chief features of the graph during this period are the rises in 1882 and 1889. These rises appear to be largely due to local conditions, though, as will appear later, they occur to a smaller extent in the price-indexes of other countries. They are especially noticeable in the prices of agricultural and dairy produce and building materials (see graphs of Groups III., IV., and VII.), and were to a large extent brought about by the droughts in the seasons 1880-1 and 1888-9 (see graph of Rainfall on p. 58). In the opinion of some observers the causes which brought about these temporary rises in 1882 and 1889 may eventually have helped to accentuate the decline which did not terminate until 1894. It is commonly recognised that unfavourable weather and bad seasons have a most potent influence in conducing to depression in trade and a consequent fall in prices. One bad season among several good ones may not, of course, have much visible influence, but a succession of them is recognised as a powerful cause of mischief. The usual explanation has been that a bad season, leading directly to a high price of certain necessities of life, causes immediate distress among the masses of the consumers, whose purchases of manufactured commodities fall off, with the result that the persons employed in the trades so affected are also impoverished, and so by a quick round all trades tend to be adversely affected. In Australia, a country whose wealth is largely dependent upon primary industries, the effect of bad seasons is well known. In the year 1910 the value of the Commonwealth production from the agricultural, pastoral, dairying, etc., industries was £114,132,000, or no less than 60.8 per cent. on the estimated total value of production (£187,734,000). In earlier years, before the development of manufacturing industries, this percentage was probably greater. It may readily be understood, therefore, that in the case of even one bad season, resulting in a falling off of say 20 per cent. in the production of these primary industries, the cumulative effect on the spending powers of the community, and hence on prices, may be considerable.

(iii.) *From 1891 to 1901.*—This period is one of low prices, the decline which set in in 1889 continuing until the year 1894, when the index-number reached the low value of 749. Since 1873, that is in twenty-one years, the index-number fell from 1451 to 749, a decline of nearly 50 per cent. As will be seen later, *this decline was world-wide*, and the statement has been ventured by some economists that it was, in extent and character, without precedent in the modern world's history. On reference to the group diagrams on page 49, it may be seen that the decline in Australia was common to all groups. The fact, however, that the prices of some commodities fell much more than those of other

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\* See "Economic Inquiries and Studies," by Sir Robert Giffen, K.C.B., Vol. I., p. 134. (London, 1904)

commodities had the effect of accentuating the economic disturbance, which manifested itself by numerous signs of industrial, commercial and agricultural depression.

In 1896 the index-number rose to 922, but fell again in 1899 to 809. The next year marks the commencement of another rise. The increase in prices in 1896 is again attributable to local conditions, and occurs mainly in commodities comprised in Groups III., IV. and VI., viz., agricultural and dairy products and meat. Reference to the graph of Rainfall on page 58 again shews that this period was one of severe drought.

(iv.) *From 1901 to 1910.*—The rise which began in 1898-9 continued for three years, and again the increase is most noticeable in regard to the groups comprising foodstuffs, viz., Groups III., IV. and VI. This rise followed on the severe drought of 1901-2, and after being maintained for one year was succeeded by a sudden fall from 1049 in 1903 to 890 in 1904. In that year a rise again set in, and was maintained for several years, culminating in 1908, when there was again a drought. In 1909 the price-index fell to a level which was substantially maintained for two years.

(v.) *From 1911 to Present Time.*—During the year 1912 there was a sharp rise in the index-number, the figure 1174 being computed on the average prices for nine months only of the year. The increase is again most marked in the groups comprising foodstuffs, and was no doubt largely due to the drought in the earlier part of the year.

(vi.) *Average Level of Index-Numbers in Quinquennial Periods.*—The net results of this investigation may be more clearly indicated by a consideration of the average level of the index-numbers over periods of several years. The somewhat violent fluctuations seen in the graphs indicate that the significance of comparisons between any particular years is not apparent. In order to illustrate the method which may be employed in making comparisons between the average price level over different periods, the average level of the price-indexes during each quinquennial period and during the years 1911 and 1912 (first nine months only) have been computed for each group and for all groups together. Each average thus obtained has then been taken as the base (= 1000), and the corresponding index-number for 1911-12 has been computed. These index-numbers for 1911-12 are shewn in the following table; each number represents (for its respective group or for all groups together, as the case may be) *the index-number for 1911-12 compared with the average expenditure for each quinquennium as base*; that is to say, it represents the amount which would have had to be expended according to the average prices in 1911 and 1912 in order to purchase such relative quantities (indicated by the mass-units) of each commodity as would have cost 1000 units at the prices prevailing in the corresponding base period.

**Index-Numbers for 1911-12, with Average Expenditure in each successive  
Quinquennial Period, as base (= 1,000).**

Base Period (Prices =1,000)	I. Metals and Coal.	II. Jute, Leather, &c.	III. Agricultural Produce	IV. Dairy Produce.	V. Groceries	VI. Meat.	VII. Building Materials	VIII. Chemicals.	IX Groups together.
1871-5 ..	672	792	841	1,037	678	—	889	621	806
1876-80 ..	746	926	895	957	731	—	1,067	641	877
1881-85 ..	821	1,012	946	957	775	—	1,071	651	932
1886-90 ...	854	1,172	934	974	928	—	1,193	730	999
1891-95 ..	1,225	1,340	1,345	1,299	1,015	1,438	1,362	917	1,288
1896-1900 ..	1,134	1,383	1,265	1,249	1,028	1,122	1,244	1,019	1,222
1901-05 ..	1,008	1,224	1,137	1,089	1,089	833	1,214	1,001	1,115
1906-10 ..	1,013	1,059	1,094	1,039	1,032	981	1,084	1,097	1,070

The above table shews, for example, in regard to the index-numbers for the whole of the commodities included (see last column), that, taking the average price level in 1871-5 as 1000, prices had fallen in 1911-12 to 806, and similarly, taking the average level for the period 1876-80 as 1000, prices had fallen in 1911-12 to 877. Compared with the average for each quinquennial period up to, and including, 1886-90, prices in 1911-12 had fallen, but in comparison with the average for succeeding periods it is seen that prices in 1911-12 had risen. Thus, the price level in the latter period (1911-12) compared with the average for 1891-5 was 1288, and with that for the next period 1222, with the next 1115, and with the five years immediately preceding the year 1911 was 1070. In other words, wholesale prices in Melbourne in 1911-12 were 28.8 per cent. higher than the average for 1891-5, 22.2 per cent. higher than in 1896-1900, 11.5 per cent. higher than 1901-5, and 7.0 per cent. higher than 1906-10. In a subsequent report it is intended to shew the yearly progression of the quinquennial average.

**6. Metals and Coal (Group I).**—This group comprises twelve commodities, the prices of which, except perhaps in the case of coal, depend almost entirely upon the prices in the world's markets, though in some cases they vary to a certain extent according to the amount of import duty imposed. The average annual prices of each commodity comprised are specified in Appendix VI.

In order to shew the relative fluctuations in price for certain of the more important commodities comprised in this group, the prices given in the tables in Appendix VI. have, in the case of pig-iron and coal, been converted into price-ratios, taking the price in 1911 as the base. That is to say, taking the price of each commodity as 1000 in 1911, the relative prices for other years have been computed; the results therefore shew the variations in price compared with 1911. These price-ratios are shewn in the following table:—

## Melbourne Wholesale Prices, 1871 to 1912.

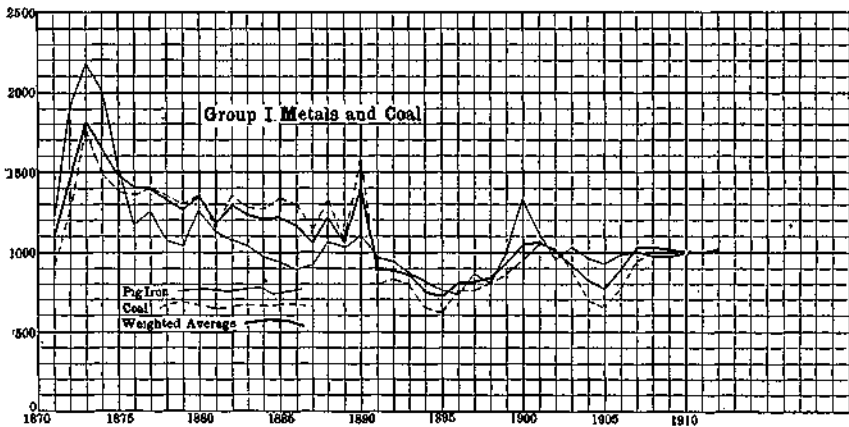
## PRICE-RATIOS FOR PIG IRON AND COAL, AND PRICE-INDEX FOR WHOLE GROUP II.

Year.	Pig Iron.	Coal.	Index-Number for whole Group	Year.	Pig Iron.	Coal.	Index-Number for whole Group.	Year.	Pig Iron.	Coal.	Index-Number for whole Group.
1871	1,221	922	1,096	1885	935	1,333	1,216	1899	1,005	867	933
1872	1,910	1,265	1,456	1886	891	1,300	1,164	1900	2,336	950	1,042
1873	2,180	1,766	1,816	1887	921	1,144	1,053	1901	1,113	1,055	1,091
1874	2,016	1,493	1,635	1888	1,063	1,331	1,216	1902	965	1,022	1,007
1875	1,530	1,380	1,487	1889	1,030	1,067	1,031	1903	1,036	885	923
1876	1,170	1,857	1,406	1890	1,109	1,578	1,402	1904	961	699	821
1877	1,258	1,402	1,400	1891	964	800	895	1905	924	644	772
1878	1,072	1,352	1,329	1892	939	830	889	1906	903	767	882
1879	1,038	1,300	1,266	1893	868	800	856	1907	1,001	955	1,037
1880	1,260	1,361	1,347	1894	818	648	752	1908	978	1,000	1,033
1881	1,126	1,154	1,178	1895	756	613	720	1909	978	1,000	1,014
1882	1,076	1,361	1,297	1896	731	759	808	1910	998	1,000	1,004
1883	1,038	1,278	1,231	1897	807	759	813	1911	1,000	1,000	1,000
1884	971	1,268	1,208	1898	805	804	842	1912*	1,023	1,000	1,015

\* For first 9 months only.

The fluctuations in the above figures may be more readily seen by reference to the following graphs, in which the thin continuous line represents the price-ratios for pig-iron, the broken line those for coal, while the heavy continuous line shows the price-index for the whole group.

MELBOURNE WHOLESALE PRICES 1871 TO 1912.\*—METALS AND COAL (GROUP I.).  
GRAPH SHEWING PRICE-RATIOS FOR PIG IRON AND COAL AND PRICE-INDEX FOR WHOLE GROUP.



\* Average price for first nine months only of year 1912.

It may be seen that prices rose rapidly from 1871 to 1873, reaching a maximum in the latter year. This increase was due to the boom in these years, which was especially marked in the iron and coal trades. Broadly speaking, prices fell until 1895, but there were temporary increases, which were especially marked in 1888 and 1890. After 1895, when prices reached their minimum value for the period under review,

there was a marked recovery, in 1900 a high level being reached. There was then a decline until 1905, followed by a sharp rise in 1906 and 1907. Since the latter year prices have remained fairly constant. During the nine months to which the figures for 1912 relate, prices of metal were on the upward grade, more especially during the latter part of that period.

The average level of the prices of commodities included in this group in 1911-12 compared with each preceding quinquennium may be seen by reference to the table on page 53 hereinbefore.

The figures in the first column of that table shew that average prices in this group were lower in 1911-12 than in any of the quinquennial periods from 1871 to 1890, and higher than from 1891 to 1910. For example, it may be seen that, compared with the average level in 1871-5, the prices-index for 1911-12 was 672, that is to say prices were 328 (1000—672) less in 1911-12. Similarly prices in 1911-12 were 1.3 per cent. higher than in 1906-10, 9.8 per cent. higher than in 1901-5, and so on.

**7. Textiles and Leather (Group II).**—This group includes nine commodities (see p. 44), of which three are manufactured jute goods, three are leather and three are raw materials (cotton, silk and wool).

The relative fluctuations in the price-ratios of some of the more important commodities (leather, cotton and wool) in this group are shewn in the following table in relation to the price-index for the whole group. It should be observed that these ratios are computed with the price in 1911 as the base (1000), and also that the figures for 1912 are incomplete.

#### Melbourne Wholesale Prices, 1871 to 1912.

PRICE-RATIOS FOR LEATHER, COTTON, AND WOOL, AND PRICE-INDEX FOR WHOLE GROUP II.

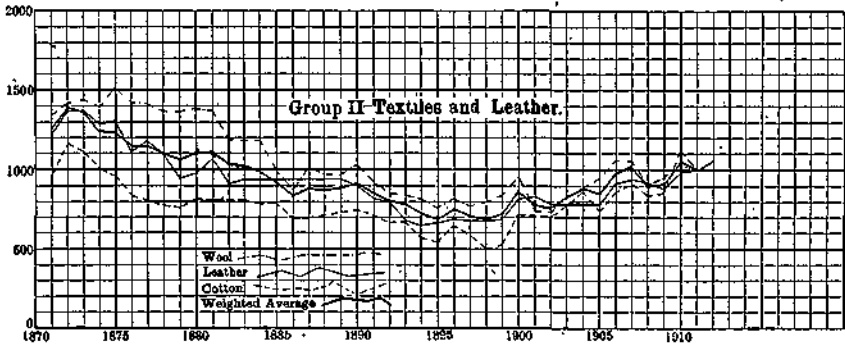
Year	Leather (Kip.)	Cotton	Wool.	Index- No. for whole Group	Year	Leather (Kip.)	Cotton.	Wool.	Index- No. for whole Group.
1871	1,229	975	1,341	1,257	1892	791	661	847	800
1872	1,360	1,169	1,412	1,394	1893	679	669	835	783
1873	1,369	1,105	1,435	1,362	1894	640	572	812	721
1874	1,281	1,000	1,394	1,240	1895	660	540	759	684
1875	1,304	960	1,517	1,230	1896	686	645	817	749
1876	1,108	839	1,423	1,146	1897	679	581	770	706
1877	1,176	806	1,412	1,149	1898	679	500	800	683
1878	1,091	774	1,365	1,094	1899	686	524	835	717
1879	941	758	1,359	1,060	1900	817	718	953	861
1880	974	814	1,382	1,101	1901	827	710	735	774
1881	1,065	806	1,365	1,115	1902	784	701	729	756
1882	912	806	1,182	1,032	1903	784	774	835	834
1883	941	806	1,182	1,021	1904	784	863	888	885
1884	941	790	1,176	997	1905	784	734	941	850
1885	941	790	988	921	1906	918	855	1,053	978
1886	941	693	876	835	1907	941	911	1,047	1,107
1887	941	693	1,012	883	1908	918	839	906	901
1888	941	710	970	870	1909	885	855	953	907
1889	941	728	970	886	1910	987	1,121	1,023	1,052
1890	900	742	1,029	911	1911	1,000	1,000	1,000	1,000
1891	820	710	918	847	1912*	1,000	†	†	1,057†

\* Figures for first nine months. † Not available.

‡ Exclusive of Cotton, Silk and Wool.

These price-ratios and the price-index for the whole group are shewn in the following graphs, in which the heavy and light continuous lines represent respectively the price-index for the whole group and the price-ratios for leather; the upper broken line represents wool and the lower cotton.

MELBOURNE WHOLESALE PRICES, 1871 TO 1912 \*—TEXTILES AND LEATHER (GROUP II). GRAPH SHEWING PRICE-RATIOS FOR LEATHER, COTTON AND WOOL, AND PRICE-INDEX FOR WHOLE GROUP.



\* Average for first nine months only of year 1912.

Generally speaking, there is considerable similarity between these graphs. It may be seen that there was a general fall in prices until about the year 1898, and that since that year there has been a fairly marked rise. The price of cotton reached a maximum in 1872 and a minimum in 1898, while its price had so far recovered in later years that in 1910 it nearly equalled its previous maximum; the price-index for the whole group reached its maximum and minimum in the same years respectively. As regards wool, it may be seen that the average price of Australasian wool in London was highest (1s. 4½d. per lb.) in 1875 and lowest (9¾d. per lb.) in 1902, and that since the latter date there has been a considerable rise in price.

Figures shewing comparisons of the average price-level in 1911-12, compared separately with each preceding quinquennium, may be found on page 53 hereinbefore. It may be seen that the average level in 1911-12 was lower than in each of the two quinquennial periods—1871-5 and 1876-80—but was higher than in each succeeding quinquennium. It may be observed that there has been a considerable increase in prices since 1896, the level for 1911-12 being 38.3 per cent. higher than in 1896-1900, 22.4 per cent. higher than in 1901-5, and 5.9 per cent. higher than in 1906-10.

**8. Agricultural Produce (Group III.)**—This group is the most important of any, the expenditure thereon by the community amounting to about 29 per cent. of the total expenditure on all groups included in this investigation. It includes thirteen commodities, and of these the price-ratios (with the average price in 1911 as base) have been computed for wheat, flour, oats, hay and potatoes. These price-ratios are shewn in the following table, in which figures have also been included

giving the mean annual rainfall in Victoria (in inches), the production of wheat in Victoria (in 1000 bushels), the retail price-ratios for bread in Melbourne, and the price-index for the whole group.

**Melbourne Wholesale Prices, 1871 to 1912.—Price-Ratios for Various Commodities and Price-Index for Whole Group III.**

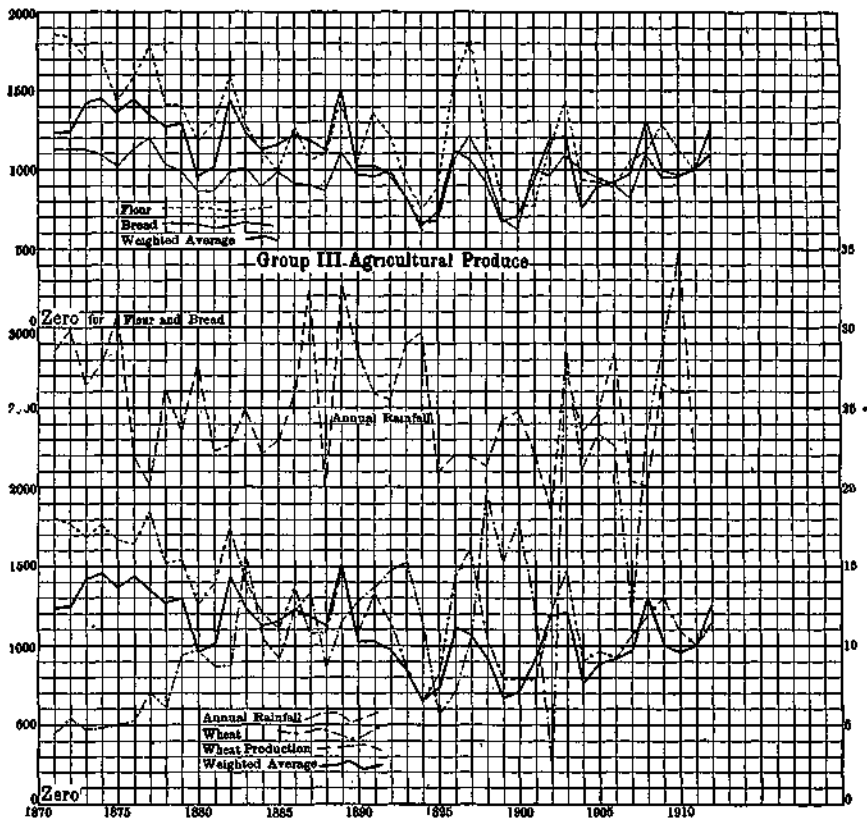
YEAR.	Victorian Mean Rain fall. Inches.	WHEAT.		FLOUR. Price Ratio.	BREAD. RETAIL. Price Ratio	OATS. Price Ratio.	HAY. Price Ratio.	POTATOES. Price Ratio.	Price Index for all Com- modities in Group III
		Victorian Pro- duction. 000 bushels.	Price Ratio.						
1871	28 56	4,501	1,806	1,861	1,121	1,460	1,046	617	1,236
1872	29.86	5,391	1,775	1,845	1,121	1,298	1,067	871	1,246
1873	26 40	4,752	1,686	1,702	1,121	1,805	1,350	746	1,422
1874	27.81	4,850	1,702	1,690	1,091	2,285	1,215	1,186	1,456
1875	30.86	4,079	1,667	1,438	1,020	1,671	1,202	1,218	1,361
1876	21.80	5,290	1,648	1,586	1,131	1,276	1,456	1,183	1,446
1877	20.11	7,018	1,850	1,791	1,201	1,572	1,164	1,028	1,347
1878	26.14	6,061	1,515	1,415	1,030	2,000	1,038	1,186	1,269
1879	23 46	9,399	1,543	1,409	990	1,373	1,207	1,331	1,298
1880	27 01	9,727	1,241	1,176	860	932	890	568	954
1881	22.25	8,714	1,397	1,300	860	1,267	844	736	1,012
1882	22.68	8,751	1,745	1,593	990	1,636	1,305	1,142	1,444
1883	24.90	15,570	1,309	1,276	1,010	1,311	1,223	785	1,237
1884	22.00	10,432	1,203	1,109	899	1,285	1,055	935	1,124
1885	22 95	9,170	1,108	993	990	1,195	1,206	776	1,156
1886	25 84	12,100	1,365	1,269	919	1,193	1,211	886	1,222
1887	32 32	13,329	1,075	1,055	909	1,099	1,278	762	1,184
1888	19 70	8,648	1,077	1,101	869	1,223	1,143	868	1,123
1889	32.77	11,496	1,472	1,437	1,111	1,524	1,578	1,310	1,505
1890	28 51	12,751	1,068	1,053	970	1,112	966	995	1,022
1891	25.90	13,679	1,331	1,362	959	1,022	928	726	1,024
1892	25 46	14,815	1,139	1,214	990	910	920	661	971
1893	28.99	15,255	859	939	836	772	742	1,089	834
1894	20.69	11,446	649	742	656	695	574	592	644
1895	20.83	5,669	818	886	677	708	698	304	734
1896	22 03	7,091	1,436	1,553	1,060	1,263	941	982	1,116
1897	21.94	10,580	1,612	1,802	1,212	919	852	718	1,063
1898	21.30	19,581	1,043	1,227	1,020	844	700	1,988	920
1899	24.22	15,238	787	812	687	703	575	514	670
1900	24 79	17,847	793	778	626	945	605	631	703
1901	22.05	12,127	787	762	1,000	956	966	1,144	928
1902	18.55	2,569	1,219	1,144	956	1,326	1,128	1,254	1,192
1903	27.44	28,526	1,473	1,444	1,090	1,123	1,185	674	1,209
1904	23 49	21,092	902	942	1,000	773	726	512	754
1905	24.53	23,418	964	926	956	968	780	1,639	894
1906	28.40	22,618	917	890	909	1,132	797	1,517	916
1907	20 40	12,100	1,065	1,052	818	1,123	949	628	973
1908	20.02	23,346	1,183	1,117	1,090	1,228	1,392	1,077	1,312
1909	26.52	28,780	1,300	1,290	956	930	865	940	1,000
1910	25.96†	34,813	1,095	1,127	956	1,009	882	1,221	969
1911	26.00	20,892	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1912*	—	—	1,151	1,093	1,098	1,372	1,192	1,953	1,263

\* First nine months 1912. † Approximate.

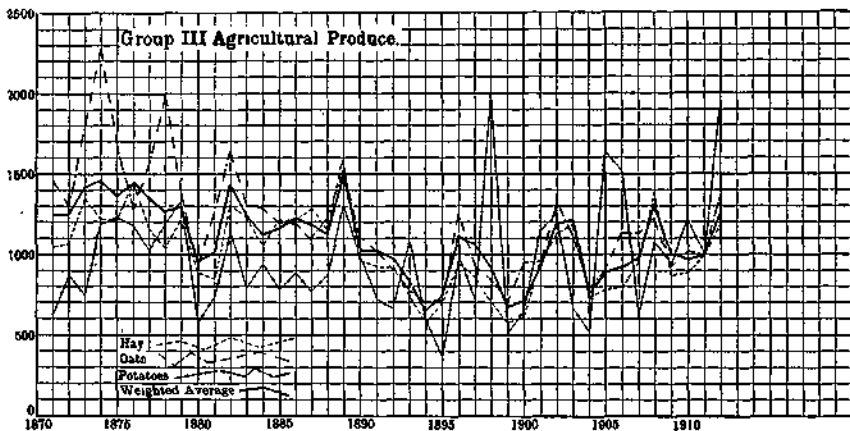
(i.) *Wheat, Flour and Bread.*—These figures may be more readily understood by reference to the graphs given on the next page. The former of these graphs shews, firstly, the price-ratios for flour and bread, together with the price-index for the whole group; secondly, the mean annual rainfall in Victoria; and thirdly, the price-ratio for wheat and the annual production of wheat in Victoria, which are again shewn in relation to the price-index for the whole group.

A glance at these graphs will suffice to shew, firstly, that the price-ratios for wheat and flour follow each other closely, and secondly that the prices of wheat and flour have a predominant effect on the price-index of the whole group. The general contour of the price-index for

MELBOURNE WHOLESALE PRICES, 1871 TO 1912 \*—AGRICULTURAL PRODUCE (GROUP III). PRICE-RATIOS FOR FLOUR, BREAD AND WHEAT, PRICE-INDEX FOR WHOLE GROUP, AVERAGE ANNUAL RAINFALL, AND PRODUCTION OF WHEAT.



AGRICULTURAL PRODUCE (GROUP III). PRICE-RATIOS FOR HAY, OATS, AND POTATOES, AND PRICE-INDEX FOR WHOLE GROUP.



\* Average for first nine months only of year 1912.



the group is the same as that of the price-ratios of wheat and flour, and further the "peaks" and "depressions" in all these three graphs occur at the same years.

The graph for the retail price-ratio for bread also follows, as might be expected, the graph for flour fairly closely, though the relative variations in price are not so great in the case of former as the latter commodity.

The graphs of the annual rainfall and the production of wheat in Victoria serve to shew the relation between the two. Thus in the drought years 1888, 1895, 1902 and 1907-8 the sudden falls in both graphs may be observed. It should be noticed, however, that the graphs do not always follow each other closely, chiefly for the reasons that the rainfall figures shew the mean annual rainfall for the whole State (and not merely for the principal wheat growing districts), and that the production largely depends, of course, on the seasons during which the rain came, as well as on the area under crop.

In reviewing the graphs of prices and production of wheat it should be borne in mind that the statistics for production relate to the twelve months ending in March of the succeeding year to that indicated in the graph, thus the production in 1910 includes that for the period between the 1st April, 1910, and the 31st March, 1911. The prices, on the other hand, are based on the monthly averages for each calendar year. Thus the effect of bad harvests may not be reflected in the graph of price-ratios until the succeeding year; for example, the bad harvests in 1885, 1888, 1895 and 1902 correspond to the high prices in 1886, 1889, 1896 and 1903 respectively. Again, the good harvests in 1883, 1891-3, 1898-1900 and 1903 are reflected in the falling prices in 1884, 1891-4, 1899-1901 and 1904 respectively. Broadly speaking, similar relations exist between the graphs of rainfall, wheat production and the price-ratios for flour, and in a smaller degree those for bread.

(ii.) *Oats, Hay, and Potatoes.*—The second graph on page 58 shews the price-ratios for oats, hay and potatoes in relation to the price-index for the whole group. In each case the price in 1911 is taken as the base (= 1000), as before. The price of oats was at its maximum (5/5½d. per bushel) in 1874, and at its minimum (1/7½d. per bushel) in 1894. It may be seen that the graph for hay follows the general index-number for the whole group more closely than either of the other graphs. The index-number for the whole group reached its maximum (1505) in 1889, and its minimum (644) in 1894. The maximum price for hay (£7 15s. 10d. per ton) was in 1889, and the minimum (£2 16s. 8d. per ton) in 1894, while the maximum for potatoes (£8 0s. 4d. per ton) was in 1898, and the minimum (£1 9s. 4½d. per ton) in 1895. The effects of the drought on the prices of these commodities is in some cases marked, especially, for example, in 1888, 1902 and 1908. It may be seen that for the first nine months of the year 1912 prices were rising rapidly.

The figures shewing comparisons between the average price levels in 1911-12 and each preceding quinquennial may be found on page 53 hereinbefore. It may there be seen that the average level for this group in 1911-12 was lower than in any quinquennial period up to 1890, but was higher than in any succeeding period.

9. **Dairy Produce (Group IV.)**—Although this group is not so important as the preceding one, the expenditure thereon amounting to only 8 per cent. of the total expenditure on all groups, it includes in all seven commodities of which some are of every day use, *e.g.*, butter, bacon and eggs.

The general graph for the group (see p. 49) shews that although the fluctuations are not so marked as in the preceding group (agricultural produce), there is a considerable similarity between the two graphs, thus the peaks in 1876, 1882, 1902, 1908 and 1912, and the depressions in 1880 and 1894 may be seen in both graphs. This similarity is due mainly to the fact that the prices in both groups are largely affected by the seasonal and meteorological conditions. It will be seen that the price-index for the whole group rose steadily from 1871 to 1876, when it reached its maximum (1415), then it fell until 1880 (except for a slight rise in recovery in 1879). The lowest point (708) was touched in 1894, and since then there have been four peaks in 1898, 1902, 1908 and 1912 (corresponding with the drought years), and three depressions in 1899, 1904 and 1911.

The price-index in 1912 (first nine months) is the highest since 1886.

#### Melbourne Wholesale Prices, 1871-1912.

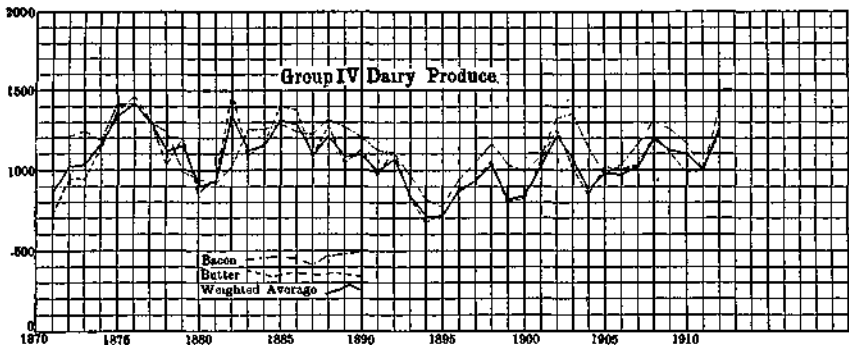
##### PRICE RATIOS FOR BACON AND BUTTER, AND PRICE-INDEX FOR WHOLE GROUP IV.

YEAR.	Bacon.	Butter.	Group IV	YEAR.	Bacon.	Butter.	Group IV.
1871 .. ..	1,205	721	864	1891	1,121	973	995
1872 .. ..	1,205	945	1,019	1892	1,103	1,115	1,066
1873 .. ..	1,243	945	1,032	1893	963	831	842
1874 .. ..	1,186	1,136	1,160	1894	822	672	708
1875 .. ..	1,411	1,366	1,345	1895	766	721	712
1876 .. ..	1,420	1,464	1,415	1896	944	863	875
1877 .. ..	1,299	1,311	1,303	1897	1,047	940	937
1878 .. ..	1,243	1,027	1,112	1898	1,168	1,054	1,034
1879 .. ..	990	1,197	1,146	1899	1,028	803	814
1880 .. ..	944	852	900	1900	990	820	838
1881 .. ..	916	940	935	1901	1,084	1,060	1,029
1882 .. ..	1,019	1,486	1,347	1902	1,327	1,258	1,215
1883 .. ..	1,252	1,087	1,114	1903	1,355	1,005	1,059
1884 .. ..	1,252	1,161	1,156	1904	1,140	841	876
1885 .. ..	1,290	1,404	1,316	1905	972	1,016	980
1886 .. ..	1,234	1,382	1,286	1906	1,028	1,005	972
1887 .. ..	1,224	1,082	1,091	1907	1,159	1,027	1,020
1888 .. ..	1,318	1,279	1,210	1908	1,308	1,213	1,198
1889 .. ..	1,271	1,038	1,082	1909	1,261	1,109	1,119
1890 .. ..	1,205	1,126	1,099	1910	1,168	989	1,100
.. ..	..	..	..	1911	1,000	1,000	1,000
.. ..	..	..	..	1912*	1,392	1,235	1,248

\* For first nine months only.

The price ratios of bacon follow fairly closely the weighted average for the whole group, with the exception of the period 1871 to 1874, when the price of bacon remained fairly stationary, whereas the group index-number rose. The highest price for bacon was in 1876 (9½d. per lb.) and the lowest in 1895 (5½d. per lb.). The average price in the first nine months of 1912 was higher than for any year since 1876. The above figures are shewn in the following graphs:—

MELBOURNE WHOLESALE PRICES, 1871 to 1912\*.—DAIRY PRODUCE (GROUP IV).  
 GRAPH SHOWING PRICE-RATIOS FOR BACON AND BUTTER AND PRICE-INDEX  
 FOR THE WHOLE GROUP.



\* Average for first nine months only of year 1912.

The graph for butter also closely follows that for the whole group, and the comments made on the general graph apply equally well to the price-ratios for butter. The highest price for butter (1s. 4¾d. per lb.) was in 1876, and the lowest (7¾d. per lb.) in 1894. The average price of butter was slightly higher in 1902 than the average for the first nine months of 1912, but with this exception the price in 1912 was higher than at any period since 1888.

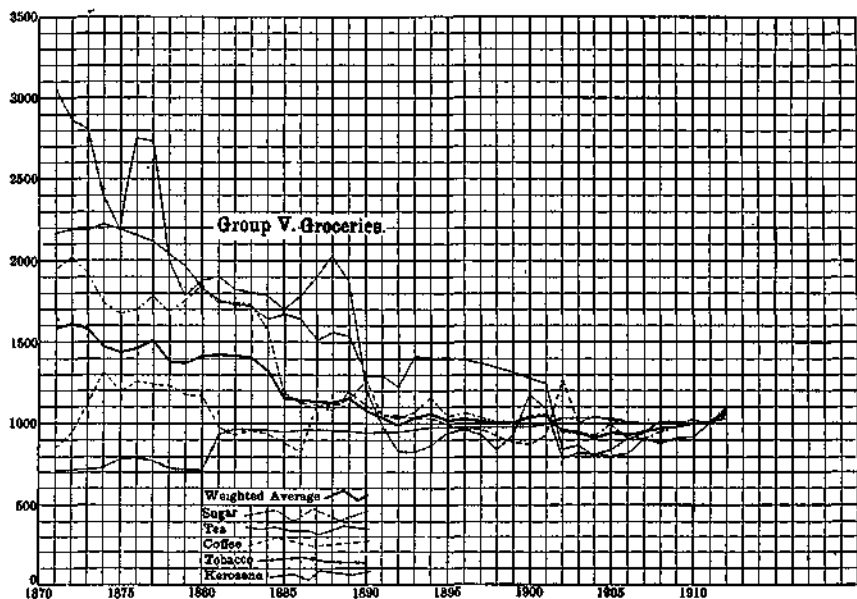
The prices of butter and of cheese fluctuate with the seasons, dry years shewing increases and good seasons decreases, but in addition to this, in the earlier years of this investigation they were affected by outside conditions, as during the whole period from 1871 to 1912, Victoria has changed from being a large importer of butter and cheese to becoming a large exporter.

From the price-indexes given on page 53 for 1911-12 compared with each quinquennial period as base it may be seen that prices in 1911-12 were higher than in 1871-5, but were lower than in either of the next three quinquennial periods. In the following period prices rose rapidly, and prices in 1911-12 were 29.9 per cent. higher than in 1891-5. They were also higher in these two years than in any of the three preceding periods.

**10. Groceries (Group V).**—This group includes 21 articles, practically the whole of which were imported during the earlier part of the period under review. In more recent years, however, several of these commodities have been manufactured in the Commonwealth. The prices are all based on quotations with the duty paid, and it should be noted that the chief alterations in the Customs Tariff were made in the years 1880, 1894, 1901 and 1907.

The general graph of this group (see p. 62) shews that there was a fairly steady fall in price-ratios from 1871 until 1892, the maximum level (1608) occurring in 1872. From 1893 to 1901 prices remained fairly constant. They fell from 1902 until 1904, reaching their minimum (916) in the latter year. They rose gradually from 1904 until 1911 and more rapidly in 1912.

MELBOURNE WHOLESALE PRICES, 1871 to 1912.—GROCERIES (GROUP V.) GRAPH  
 SHEWING PRICE RATIOS FOR SUGAR, TEA, COFFEE, TOBACCO AND KEROSENE  
 AND PRICE-INDEX FOR WHOLE GROUP V.



The price of sugar fell from its highest price in 1872 (£44 2s. 4d. per ton) until 1875; it then rose for two years, but fell again in 1878. A rise in price then took place until 1880, after which prices fell persistently until 1885, with a sharp drop in 1884 and 1885. From 1886 until 1907 the fall was gradual and fairly consistent, the minimum being reached in 1907 (£19 15s. 4d. per ton). Since that year prices have risen.

The price of tea rose slightly from 1871 to 1874, when it was at its maximum price (1s. 8d. per lb.). Until 1892 it fell steadily, but this fall was checked by a slight rise in 1893 and 1894; it again fell slowly until 1901, and there was a considerable decline in 1902. The minimum price was reached in 1904 and 1905 (7¼d. per lb.), since which year the price has been steadily rising.

The price of coffee rose from 1871 to 1874, when the maximum price (1s. 5½d. per lb.) was reached. It then fell away until 1886, when the minimum (11¼d. per lb.) was touched. From 1887 to 1890 a gradual rise took place, followed by a fall until 1900. From 1903 to 1911 prices were steady, but in 1912 there was again a sharp rise.

The price of tobacco in bond has remained practically level during the period under review, the only fluctuation of importance occurring in 1881, when the duty was raised 1s. per lb. In 1912 there was a rise of about 5 per cent.

There was a heavy fall in the price of kerosene from its maximum in 1871 (2s. 6d. per gallon) to its minimum (7¾d. per gallon) in 1902. Reference to the table on page 63 will shew that there were fairly sharp rises in 1906 and 1908. In 1912 the price increased by 2.6 per cent. on the previous year.

The price-indexes for this group with each quinquennial period as base (see page 53) shew that prices in 1911-12 were lower than in any period up to 1890, but were higher than in any of the succeeding periods.

Melbourne Wholesale Prices, 1871 to 1912.

PRICE RATIOS FOR SUGAR, TEA, COFFEE, TOBACCO, AND KEROSENE, AND PRICE-INDEX FOR WHOLE GROUP V.

YEAR.	Sugar.	Tea.	Coffee.	Tobacco.	Kerosene.	Group V.
1871 .. ..	1,947	2,166	842	709	3,057	1,586
1872 .. ..	2,016	2,194	940	715	2,866	1,608
1873 .. ..	1,927	2,187	1,101	722	2,809	1,581
1874 .. ..	1,744	2,222	1,319	723	2,395	1,476
1875 .. ..	1,674	2,194	1,194	785	2,178	1,435
1876 .. ..	1,698	2,159	1,254	790	2,752	1,462
1877 .. ..	1,784	2,111	1,241	778	2,738	1,502
1878 .. ..	1,685	2,035	1,231	726	2,000	1,378
1879 .. ..	1,746	1,965	1,176	716	1,783	1,371
1880 .. ..	1,842	1,833	1,167	714	1,879	1,412
1881 .. ..	1,737	1,756	977	930	1,902	1,421
1882 .. ..	1,737	1,729	930	963	1,822	1,414
1883 .. ..	1,726	1,722	958	959	1,803	1,408
1884 .. ..	1,562	1,639	935	959	1,783	1,326
1885 .. ..	1,185	1,673	884	950	1,700	1,158
1886 .. ..	1,130	1,639	824	959	1,783	1,139
1887 .. ..	1,110	1,507	1,106	959	1,896	1,128
1888 .. ..	1,076	1,555	1,111	955	2,025	1,222
1889 .. ..	1,190	1,535	1,148	955	1,873	1,152
1890 .. ..	1,107	1,292	1,264	944	1,210	1,074
1891 .. ..	1,048	1,298	1,046	950	993	1,032
1892 .. ..	1,028	1,229	1,046	952	828	997
1893 .. ..	1,064	1,417	1,032	966	828	1,033
1894 .. ..	1,154	1,403	1,032	977	866	1,057
1895 .. ..	1,038	1,403	995	977	943	1,016
1896 .. ..	1,063	1,396	954	977	962	1,021
1897 .. ..	1,037	1,375	963	977	930	1,009
1898 .. ..	1,005	1,347	921	977	841	1,000
1899 .. ..	1,005	1,312	889	977	930	1,003
1900 .. ..	1,034	1,277	870	977	1,171	1,039
1901 .. ..	1,045	1,243	921	998	1,089	1,048
1902 .. ..	941	837	1,264	1,032	783	945
1903 .. ..	933	861	1,000	1,032	828	936
1904 .. ..	920	805	1,041	1,032	809	916
1905 .. ..	994	805	1,018	1,032	834	942
1906 .. ..	918	819	1,000	1,012	904	923
1907 .. ..	903	903	1,000	1,000	943	948
1908 .. ..	945	882	1,000	1,000	1,006	968
1909 .. ..	975	910	1,000	1,000	1,006	978
1910 .. ..	1,024		1,000	1,000	1,000	999
		917				
1911 .. ..	1,000	1,000	1,000	1,000	1,000	1,000
1912* .. ..	1,098	†	1,074	1,054	1,028	†1,085

\* First nine months only.

† Price not available.

‡ Omitting Tea.

11. **Meat (Group VI).**—This group includes five kinds of meat. The figures are continuous since the year 1890, and particulars for 1884 and 1885 have also been included. Reliable and comparable records as to the wholesale prices of meat for other years are not available.

Referring to the graph on page 65, it will be seen that price-index for the whole group fell from 1890 to 1895, when the minimum (682) was reached. The price level then rose until 1902, with the exception of a small decline in 1899. The maximum level (1447) was reached in 1902, a year of severe drought. There was but little change during 1903 and 1904, but prices again fell during 1905 and 1906, and then rose during 1907 and 1908, only to fall again until 1911. In 1912 a sharp rise took place, especially during the third quarter of that year.

**Melbourne Wholesale Prices, 1884, 1885, and 1900 to 1912.**

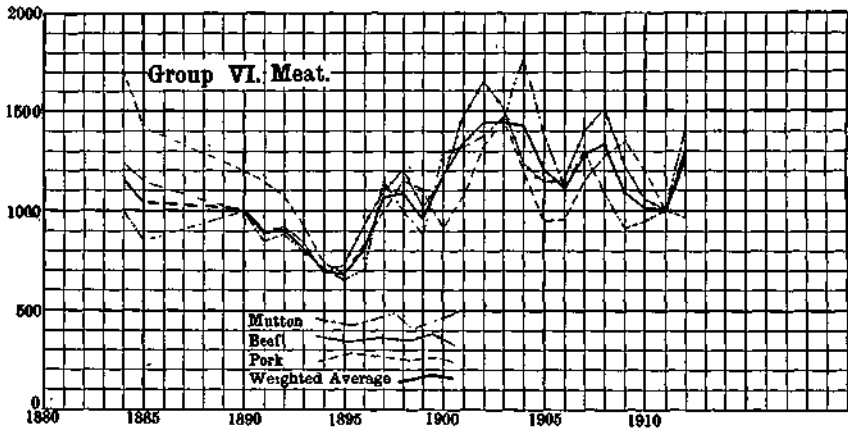
PRICE-RATIOS FOR BEEF, MUTTON AND PORK, AND PRICE-INDEX FOR WHOLE GROUP VI.

YEAR.	Beef.	Mutton.	Pork.	Group VI.
1884 .. .. .	1,238	1,000	1,714	1,151
1885 .. .. .	1,148	853	1,414	1,042
1890 .. .. .	984	1,000	1,200	1,007
1891 .. .. .	882	853	1,143	888
1892 .. .. .	919	882	1,071	901
1893 .. .. .	846	794	923	816
1894 .. .. .	693	706	743	695
1895 .. .. .	721	647	686	682
1896 .. .. .	931	706	828	808
1897 .. .. .	1,095	1,147	1,000	1,072
1898 .. .. .	1,207	1,000	1,143	1,091
1899 .. .. .	1,016	882	1,100	960
1900 .. .. .	1,153	1,298	914	1,168
1901 .. .. .	1,482	1,323	1,071	1,345
1902 .. .. .	1,651	1,382	1,328	1,447
1903 .. .. .	1,510	1,470	1,457	1,443
1904 .. .. .	1,238	1,765	1,214	1,427
1905 .. .. .	1,139	1,382	943	1,209
1906 .. .. .	1,149	1,118	957	1,110
1907 .. .. .	1,396	1,298	1,143	1,294
1908 .. .. .	1,503	1,088	1,271	1,335
1909 .. .. .	1,222	911	1,357	1,088
1910 .. .. .	1,051	941	1,200	1,008
1911 .. .. .	1,000	1,000	1,000	1,000
1912* .. .. .	1,301	1,412	971	1,291

\* First nine months.

The wholesale price of beef fell from 1890 to 1894, when it reached its minimum (13s. 0¾d. per 100 lb.). It then rose steadily until 1898, and in 1899 it again fell. During the next three years it continued to rise, and attained its maximum in 1902 (31s. 1¼d. per 100 lb.). After this it fell till 1905, and rose again during 1907 and 1908. In 1909, 1910 and 1911 prices fell, but in 1912 a rise of 30 per cent. took place.

MELBOURNE WHOLESALE PRICES, 1884, 1885 and 1900 to 1912.\*—MEAT (GROUP VI.)  
 GRAPH SHEWING PRICE-RATIOS FOR BEEF, MUTTON AND PORK, AND PRICE-  
 INDEX FOR WHOLE GROUP VI.



\* Average of first nine months only of year 1912.

The price of mutton fell from 1890 to 1895, when it reached its minimum (1½d. per lb.). During the next two years it rose and then fell for another two years until 1899, when a pronounced rise took place, culminating in 1904 in a maximum price of 3¾d. per lb. It is interesting to note that while beef fell in price immediately after the drought in 1902, the price of mutton continued to rise until 1904. With the exception of an increase in 1907, the price of mutton fell from 1904 until 1909, then commenced to rise, and in 1912 a large increase, amounting to over 41 per cent., took place.

The price of pork has fluctuated greatly. During the period 1890 to 1912 there are three peaks, viz., in 1898, 1903, when the maximum (6¾d. per lb.) was reached, and 1909, and three depressions, viz., in 1895 (minimum price 3d. per lb.), 1900, and 1905. In contradistinction to other meats, the price of pork fell in 1912.

In the table on page 53, shewing the index-numbers for 1911-12 compared with preceding quinquennial periods as bases, it may be seen that the average level in 1911-12 was higher than in either of the two first quinquennial periods, but lower than in the two other periods.

**12. Building Material (Group VII.).**—This group comprises nine articles. The graph (see page 49) shews that the price-index for the group rose rapidly in 1872 and 1873, reaching the maximum (1446) in the latter year. The minimum level (704) was touched in 1892, and from that year onward until 1912 a fairly steady rise took place.

The price-indexes for 1911-12, taking each preceding quinquennial period as base (see p. 53), shews that prices were lower in 1911-12 than in 1871-5, but were higher in these two years than in any other period.

13. **Chemicals (Group VIII).**—Four articles are included in this group, the price-index for which shows that after a rise in 1872 and 1873 the maximum (1454) was reached in the latter year. Prices then began to fall, and, with the exception of recoveries in 1880, 1890 and 1896, continued to decline until 1909, when the minimum (815) was reached. Prices recovered again in 1910 and 1911, but fell in 1912. This is the only one of the eight groups which shows a fall in prices for 1912 (see graph on page 49).

The table on page 53 shows that in spite of the fall which occurred in 1912, the average price level for 1911-12 was higher than in either of the three preceding quinquennial periods.

#### IV.—IMPORT AND EXPORT INDEX NUMBERS.

1. **General.**—Retail and wholesale prices having been dealt with in Sections II. and III. respectively of this Report, the question of import and export values now remains to be investigated. The data upon which the index-numbers given in this part of the Report are based have generally been computed by dividing the total *value* of the imports or exports, as the case may be, in any particular year of each commodity included in the investigation, by the total *quantity* imported or exported in the same year. The data thus obtained are, therefore, of the nature of average values rather than prices. They refer to all grades or qualities included in the imports and exports and not to any special grade or quality, as in the case of retail and wholesale prices.

The average import values have generally been taken for those commodities which are either wholly or mainly imported into Australia, such as tea, cotton and kerosene; while for commodities which are largely produced in Australia, such as wheat, meat, butter and hides, export values have generally been taken. In regard, however, to coal, the imports and exports of which are comparatively small in relation to the local consumption, the average value at the pit's mouth has been taken, while for raw sugar, a commodity which is largely produced in Australia, the average import values have been selected in view of the incomplete nature of the returns available as to the value of the local production.

2. **Scope of Investigation.**—The values have been computed from the import and export values for the whole Commonwealth, as obtained from the Trade and Customs returns. These returns were first compiled and published as a whole for all the States on a uniform basis in the year 1903. In order to furnish the index-numbers for the whole of the Commonwealth period (since 1901) special investigations were made to secure the values based on the imports and exports for the whole Commonwealth for the two years (1901 and 1902) immediately preceding the year for which the classified returns were first available. In a few cases where the returns for the several States could not be satisfactorily co-ordinated for these years, values based on the trade of Victoria alone have been taken.

Owing to the difficulty in securing reliable data for the whole Commonwealth, and to the large amount of work involved, the investigation has not for the present been pursued for years prior to 1901.