## SECTION VI.—WHOLESALE PRICES.

1. General.—The results of an investigation into wholesale prices in Melbourne from 1871 to 1912 were given in some detail in Reports Nos. 1, 2, 5, and 6. In this Section results are now included for the year 1916.

The data upon which the investigation 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 most cases, monthly prices were obtained (but where daily or weekly quotations were available, these were adopted), and arithmetic averages for the several years were computed. In regard, however, to a few commodities, such as coal, tea, cotton and wool, since monthly prices were not available for back years, 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 large amount of work involved, and 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.

2. Commodities Included and Methods Adopted.—Retail prices have the advantage that a comparatively small list of commodities suffices to represent a large proportion of the average expenditure. They are; however, subject to the difficulty that their variations depend largely upon local conditions, and it is, therefore, ordinarily necessary to collect the data over a wide area. Wholesale prices, on the other hand, are fixed usually at one or two centres, but a much larger list of commodities must be covered.

The index-numbers up to the year 1911 are based on the prices of eighty commodities, but since that year the number has been increased to ninety-two.\* The methods followed for the computation of the wholesale price index-numbers are the same as those adopted in regard to retail prices. The commodities included, the units of measurement for which the prices are taken, and the mass-units, indicating the relative extent to which each commodity, in the units of measurement specified, is used or consumed, are shewn in the following statement.

<sup>\*</sup> In the computation of the index-numbers for years prior to 1911, the aggregate expenditure on 80 commodities in 1911 is taken as base (=1000), while for later years the aggregate expenditure on 92 commodities in 1911 is taken.

Melhourne Wholesale Prices, Commodities included, Units of Measurement, and "Mass-Units."

			, muss-c					
Commodity.	Brand,	Unit,	Mass Unit.	Commoditý,	Brand,	Unit.	Mass Unit.	
	GROUP	I.	GROUP V.					
Iron— Pig Rod and Bar	M'x'dNos. Stafford	ton "	61 31 31	Currants Raisins Herrings	Suitanas 1-lb, fregh		1,400 1,400 50	
Angle and T Plate Hoop	"	2) 29		Salmon	1 lb. tall Alaska	tins ,,	50	
Gaivanized Tipped Plates	26 gauge I.C. Coke No. 8	ewt. ton	5 60 6	Sardines Coffee Cocoa	Halves Plantation Taylor's	doz.halves lb.	100 200 .100	
Fencing Wire Zinc, Sheet Lead, Sheet Pipes		15	1	Sugar Macaroni Sago	No. 1A	ton lb. cwt.	22 200	
Copper Sheet Quicksilver Coal	Newc'stle	l lb. ton	2,000 12 600	Rice Salt	Patna Liverpool fine	ton	7 2 7	
	on Wharf	m. 4 1		Salt Mustard	Rock Coleman's	doz,"l lb.	6	
	<u> </u>	Total	2,7021	Starch Blue	Coleman's White Keen's	lb,	100 50	
	GROUP I	1	1	Matches	Aust'ln. Safety	gross	90	
Branbags Cornsacks Woolpacks		doz. each	110 250 200	Candles Tobacco Tea	Gouda Two Seas in Po'ket Pcs.	16,	1,600 1,300 8,000	
Leather, Waxed Rip Waxed Split	i	lb.	600 600	Kerosene		gallon	1,700	
Medium Crop Cotton Wool	Raw Greasy	"	600 24,000 12,200	<u></u>	GROUP VI	Total	11,386	
Twine	Reaper and Binder		150	Beef	Average	100 lbs, ·	390	
Tallow	Mutton Prime	. ton	12	Mutton Yeal	quality.	lb.	83,000	
	[	Total	38,7111	Lamb Pork	"	17	2,000 6,600 3,700	
	GROUP 11	1		'	"	Total	44,690	
Wheat Flour		bushel ton	500 48	<u></u>	GROUP VI	<u>                                      </u>	<u> </u>	
Bran Pollard Oats Oatmeal Barley	Feed Colonial Malting	bushel ton bushel	14 14 1,200 11 150	Timber:	Flooring 6 x 1; , 6 x ;	100 ft, lin.	30 30 30	
Maizė Hay Chaff	Feed BestM'ng'r Good oaten	ton	100 1,000 135 135		Weather- boards	)? ??	30 200	
Straw Peas Potatoes	Victorian	bushel ton	25 55 40	Cement	Oregon Shelving Portland	1000 ft, snp cask	20 10 30	
Malt Onions	Victorian	bushel ton	140	White Lead Slates	Welsh 20 x 10	ton 1,000	•	
	<u> </u>	Total	3,560}		<u> </u>	Total	3811	
	GROUP I	<del>v.</del> — — –			GROUP VI	n. ·		
Ham Bacon Cheese Rutte	Best Fresh	. Jb. 	800 3,200 2,500 9,500 200	Cream of Tartar Carbonate, of Soda	In Kegs	lb. ton	` 400 °	
Lard Eggs Honey	In Bladders Ordinary	doz. Ib.	1,800	Saltpetre Sulphur Caustic Soda	Refined	 cwt.	7	
Beeswax	Da	doz,"lb,	160	Alum Cyanide	Lump	ton lb.	570 <sup>1</sup>	
Condensed Milk	Bacchus Marsh	doz. 10,	100	Potassium	1	[** <u>*</u> ******	017	

3. Index-Numbers.— 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 following table. 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 have, accordingly, been adjusted (on the basis of the results for succeeding years), so as to include meat.

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 1504 in 1916. In other words, prices were lower in 1911 than in either 1871 or 1916, 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, therefore, less.

Melbourne Wholesale Prices, Index-Numbers, 1861 to 1916, Computed to Year 1911 as Base.

YEAR.		I. Metals and Coal.		III. Agricul- turalPro- duce, &c.	IV. Dairy Produce.	V. Grocer- ies.	VI. Meat.	VII. Building Materials	VIII. Chemi- cals.	All Com- modities together.
- 1861 1871 1881	• • • • • • • • • • • • • • • • • • • •	1,438 1,096 1,178	1,381 1,257 1,115	1,583 1,236 1,012	1,008 864 935	1,963 1,586 1,421	••	1,070 1,044 1,091 780	2,030 1,400 1,587	1,538 1,229 1,121
. 1891 1901 1902 1903	•••	895 1,061 1,007 923	847 774 756	1,024 928 1,192 1,209	995 1,029 1,215 1,059	1,032 1,048 945 926	888 1,345 1,447 1,443	780 841 837 875	1,194 917 881 921	945 974 1,051 1,049
1904 1905 190 <del>8</del>		821 772 882	834 885 850 978	754 894 916	876 980 972	916 942 923	1,427 1,209 1,110	845 801 896	875 859 864	910 948 1,021
1907 1908 1909	::	1,037 1,033 1,014 1,004	1,017 901 907 1,052	978 1,312 1,000 969	1,020 1,198 1,119 1,100	948 968 978 999	1,294 1,335 1,088 1,008	968 985 911 996	961 891 815 898	1,021 1,115 993 1,000
1910 1911 1912	• • •	1,000 1,021	1,000	1,000 1,370	1,000 1,206	1,000 1,052	1,000 1,357	1,000 1,057	1,000 978	1,000 1,170
1913 1914 1915 1916	• • • • • • • • • • • • • • • • • • • •	1,046 1,099 1,284 1,695	1,070 1,032 1,017 1,423	1,097 1,207 2,162 1,208	1,054 1,137 1,530 1,485	1,024 1,021 1,133 1,322	1,252 1,507 2,435 2,515	1,128 1,081 1,275 1,491	995 1,253 1,528 1,760	1,088 1,149 1,604 1,604

NOTE.—The figures given in this table are comparable in the vertical columns, but are not directly comparable horizontally. The index-numbers are reversible.

The general index-number for the year 1916 shews a decrease of 6.2 per cent. compared with that for 1915. With regard to the various group index-numbers, two groups, viz., III. (Agricultural Produce), and IV. (Dairy Produce), shew decreases of 44.1 and 2.9 per cent. respectively, while the remaining six groups shew increases, Group I. (Metals and

Coal) 32.0 per cent., II. (Jute, Leather, etc.) 39.9 per cent., V. (Groceries) 16.7 per cent., VI. (Meat) 3.3 per cent., VII. (Building Materials) 16.9 per cent., and VIII. (Chemicals) 15.2 per cent.

The index-numbers for the full period since 1871 (and for 1861 and 1866) are given in Report No. 1, page 48. On page 411 hereinafter a graph is given shewing the index-numbers since 1901 for all groups taken together.

4. Variations in Price Levels of Commodity Groups for each Quarter of 1916.—In the following table are shewn the index-numbers for the four quarters of 1916, together with those for the fourth quarter of 1915 and the percentage increase or decrease of the index-numbers for the fourth quarter of 1916 compared with those for the third quarter:—

GROUP. GOM-MOD- Oct. Jan. April to Dec., 1915. 1916. 1		]		Inde	x Numbe	rs.		Percentage Increase (+) or De-
II. Textlles, Leather, etc.     10     1,181     1,342     1,290     1,430     1,624     +1       III. Agricultural Produce     10     1,751     1,334     1,185     1,159     1,142     -       IV. Dairy Produce     9     1,496     1,447     1,557     1,507     1,403     -       V. Groceries     21     1,198     1,257     1,312     1,327     1,329     +	GROUT.	MOD-	Dec.,	to March,	to June,	to Sept.,	to Dec.,	crease (—) in Fourth Quarter, compared with Third Quarter of 1916.
VII. Building Materials 10 1,375 1,417 1,487 1,541 1,520 -	II. Textlies, Leather, etc. III. Agricultural Produce IV. Dairy Produce V. Groceries VI. Meat VII. Building Materials VIII. Supplied	10 16 9 21 5 10	1,181 1,751 1,496 1,198 2,492 1,375	1,342 1,334 1,447 1,257 2,660 1,417	1,290 1,185 1,587 1,312 2,535 1,487	1,430 1,159 1,507 1,327 2,462 1,541	1,624 1,142 1,403 1,329 2,417 1,520	- 1 2 +13.6 - 1.5 - 6.9 + 0.2 - 1.8 - 1.4 - 3.4

Melbourne Wholesale Prices, Quarterly Index Numbers for 1916.

Comparing the index-numbers of the commodity groups for the fourth quarter of 1916 with those for the third quarter, only two groups shew increases, viz., Group II. (Textiles, Leather, etc.), 13.6 per cent, and Group V. (Groceries), 0.2 per cent., while the remaining groups shew small decreases, ranging from 1.2 to 6.9 per cent. The index-numbers for all groups shew an increase of 0.6 per cent.

5. Variations in Price Levels since the Outbreak of the War.—The variations in the index-numbers of the separate commodity groups for the years 1915 and 1916, and for each month from October 1916 to April, 1917, are shewn in the following table, taking July 1914, the last month before the outbreak of war, as base (= 1000) for each group:—

<sup>·</sup> Weighted average.

Melbourne Wholesale Prices, Index Numbers, July 1914, 1915, 1916 and October 1916 to April. 1917.

Particulars.	I. Metals and Coal.	II. Textiles Leather, etc.	III. Agri- culturat Produce	IV. Dairy Pro- duce.	V. Groceries	VI. Meat.	VII. Building Mater- tals.	VIII. Chemi- cals.	All Groups
July, 1914	1,000	1, <b>000</b>	1,000	1,000	1,000	1,000	1,000	1,000	1,000
" 1915	1,166	934	2,024	1,272	1,098	1,502	1,164	1,490	1,406
" 1916	1,589	1,424	1,130	1,235	1,307	1,551	1,361	1,716	1,318
October, 1916	1,593	1,417	1,074	1,158	1,294	1,580	1,384	1,715	1,330
Nov., 1916	1,591	1,519	1,065	1,163	1,288	1,450	1,392	1,701	1,325
Dec., 1916	1,579	1,588	1,069	1,174	1,294	1,446	1,390	1,697	1,829
Jan., 1917	1,604	1,475	1,126	1,157	1,290	1,449	1,397	1,714	1,330
Feb. 1917	1,627	1,507	1,007	1,182	1,290	1,376	1,420	1,736	1,330
March, 1917	1,659	1,587	1,052	1,180	1,293	1,400	1,501	1,756	1,344
April, 1917	1,725	1,637	1,033	1,216	1,289	1,416	1,525	1,856	1,361

6. Seasonal Fluctuations in Wholesale Prices, 1916.—In order to shew the seasonal fluctations in wholesale prices, index-numbers have been computed for each quarter of the year 1916. These are shewn in the following table, firstly, computed with the year 1911 as base, and secondly, with the average prices for the year 1916 as base. Corresponding figures for purchasing-power of money (retail prices and house rents) have been included for comparative purposes.

Melbourne Wholesale Prices-Quarterly Index-Numbers, 1916.

Particulars,	Jan. to March.	April to June,	July to Sept.	Oct. to Dec.	Whole Year.
Index-Numbers with 1911 as base (= 1,000) Index-Numbers with average for 1916 as base	1,502	1,493	1,505	1,514	1,504
(= 1,000)	998	992	1,001	1,007	1,000
Food, Groceries, and House Rent Index-Numbers, with average for 1916 as base (= 1,000)	1,020	1,007	994	982	1,000
- · · · · · · · · · · · · · · · · · · ·	J	<u> </u>	l		[ ' <u>.</u>

The first two lines shew that in 1916, while prices decreased during the second quarter, in the third and fourth quarters they increased.

Retail prices, on the other hand, decreased in the second, third, and fourth quarters.

7.—Table of Prices, 1915-16.—In Appendix III. particulars are given as to the average prices of the particular brands of commodities used in preparing the index-numbers in the years 1915 and 1916. Corresponding information for previous years, as far back as 1871, was given in Appendix VI. to Report No. 1; for 1912 in Appendix IV. to Report No. 2, and for 1913, 1914, and 1915 in Appendix V. to Report No. 6.