## SECTION VI.-WHOLESALE PRICES.

1. General.-The resulte of an investigation into wholesale prices in. Melbourne from 1861 to 1919 were given in some detail in Reports Nos. 1, 2, 5. 6, 7, 8, 9 and 10 . In this Section results are now included for the year 1920.

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 subatantial 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, cötton and wool, since monthly prices were not available for back years, yearly averages, based in each case on reliable data, 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 diffculty 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 amall 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 pricen 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 unite of measurement for which the prices are taken, and the mass-unite, indicating the relative extent to which each commodity, in the units of measurement specified, is used or consumed, are shewn in the following statement.

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


3. Index Numbers.-Index-numbers have been computed for each group of commodities, as well as for all groups. These index-numbers are shewn in the following table :-

Molbourne Wholesale Prices, Inder-Numbers, 1861 to 1920, Computed to Year 1811
as Base ( $=1000$ ).

| Year. |  | 1. Metals and Coal. | $\begin{gathered} \text { II } \\ \text { Jute, } \\ \text { Ienther, } \\ \text { ece. } \end{gathered}$ | III. <br> Agricul. tural Produce, \&c. | IV. Dalry Produce. | V. <br> Arocer. <br> les. | VI. <br> Beat. | VII. Building Materialis | VIII. Ghemicals. | All Commodittea together. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1861 |  | 1,438 | 1,881 | 1,588 | 1,008 | 1,963 | $\ldots$ | 1,070 | 2,030 | 1,688 |
| 1871 |  | 1,096 | 1,257 | 1,238 | 804 | 1,586 |  | 1,044 | 1,409 | 1,28) |
| 1881 |  | 1,178 | 1,115 | 1,012 | 985 | 1,421 |  | 1,091 | 1,587 | 1.121 |
| 1891 |  | 898 | 847 | 1,024 | 995 | 1,032 | 888 | 780 | 1,104 | 945 |
| 1001 | . | 1,061 | 774 | 928 | 1,029 | 1,048 | 1,345 | $8 \$ 1$ | 917 | 874 |
| 1011 |  | 1.000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,090 | 1,000 | 1.000 |
| 1912 | + | 1,021 | 991 | 1,370 | 1,206 | 1,052 | 1,367 | 1,057 | 978 | 1,170 |
| 1913 | +. | 1,046 | 1,070 | 1,097 | 1,054 | 1,024 | 1,252 | 1,128 | 995 | 1,088 |
| 1914 | $\ldots$ | 1,009 | 1,032 | 1,207 | 1.137 | 1.021 | 1,507 | 1.081 | 1,253 | 1,149 |
| 1016 | $\ldots$ | 1,284 | 1,017 | 2,163 | 1,630 | 1,133 | 2,435 | 1,275 | 1,528 | 1,604 |
| 1016 |  | 1,895 | 1,429 | -1,208 | 1,485 | 1,922 | 2,515 | 1,401 | 1,760 | 1,504 |
| 1917 |  | 2,120 | 2,008 | 1,167 | 1,423 | 1,343 | 2,408 | 1,884 | 2,171 | 1,688 |
| 1918 | $\cdots$ | 2,410 | 2,360 | 1,444 | 1,454 | 1,422 | 2,385 | 2,488 | 3,225 | 1,934 |
| 1019 |  | 2,125 | 2,863 | 1,985 | 1,651 | 1,516 | 2,348 | 2,851 | 2,898 | 2,055 |
| 1020 |  | $2+298$ | 2,624 | 2,439 | 2,209 | 1,918 | 9,279 | 3,226 | 2,825 | 2,480 |

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

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 $\mathfrak{f l 0 0 0}$ in 1911 distributed in purchasing the relative quantities (indicated by the mass-units) of the several commodities included in such 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 2480 in 1920. In other words, prices were lower in 1911 than in either 1871 or 1920, and the purchasing-power in 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.

The general index-number for the year 1920 shews an increase of 20.6 per cent. compared with that for 1919. With the exception of Group VIII. (Chemicals), which shows a decrease of 2.5 per cent., all groups shew increases, ranging from 8.3 per, cent. in the case of Group I. (Metals and Coal) to 39.5 per cent. in the case of Gronp VI. (Meat).

The index-numbers for the full period since 1871 (and for 1861 and 1866) are given in Report No. 1, page 48. On page 74 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 1920.-In the following table are shewn the index-numbers for the four quarters of 1920 and the first quarter of 1921 :-

Melbourne Wholesale Prices, Quarterly Index-Numbera for 1920, and First Quarter. 1821 (Base $1911=1000$ ).

| GBOUP | , |  | $\begin{gathered} \text { No. of } \\ \text { Con- } \\ \text { modties } \end{gathered}$ | Index Numbitas. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { April } \\ & \text { Jo } \\ & \text { June, } \\ & \text { 1020. } \end{aligned}$ | $\begin{gathered} \text { July } \\ \text { to } \\ \text { Sep., } \\ \text { 1900. } \end{gathered}$ | $\begin{gathered} \text { Oct. } \\ \text { to } \\ \text { Dec, } \\ 10 \varepsilon 0 . \end{gathered}$ | Jan. <br> Mareh, <br> 1921. |
| 1. Metaia end Coal |  | .. | 14 | 2,350 | 2,300 | 2,318 | 2,418 | 2,310 |
| II. Textiles, Jeather, etc. |  | $\because$ | 10 | 3,040 | 2,897 | 2,627 | -1,933 | 1,398 |
| III. Agricultural Produce | : | . | 16 | 9,415 | 2,662 | 2.515 | 2,181 | 2,011 |
| IV. Dalry Produce .. |  | . | 9 | 1,819 | 2,139 | 2,331 | 2.548 | 2.488 |
| V. Grocertes -. |  | . | 21 | 1,839 | 2,009 | 2.100 | 2.024 | 2,032 |
| VII. Meat Bulding Materials | $\because$ |  | ${ }^{5}$ | 3,387 | 3,901 | 4,417 9 | 3,406 3 3,072 | 8,987 |
| VIII. Ohemichls .. |  | $\because$ | 7 | 2,8(4) | 2,984 | 2,850 | 2,004 | 2,463 |
| ALL Groupg* | .. | .. | 92 | 2,351 | 2,567 | 2,650 | 2.952 | 2,164 |

-Welghted average.
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 to 1920, and for each month from January, 1921 to July, 1921, are shewn in. the following table, taking July, 1914, the last month before the outbreak of war, as base ( $=1000$ ) for each group :-

Melbourne Wholesale Prices, Index-Numbers, July 1914, Years 1815 to 1920, and Monthly January, 1821 to July, 1921 (Base July $1914 \approx 1000$ ).

| Particulars. | I. Metals and Oobl. | II. <br> Textiles, Leather, .ttc. | III. Agricultaral Produce. | IV. <br> Dairy Produtce. | $\begin{gathered} V . \\ \text { Grocerles } \end{gathered}$ | VI. <br> Meat. | VII. Building MaterIsls. | VIII. Ohemi. cs ${ }^{2}$. | All <br> Groupe. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| July 1914 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Yeat 1916 | 1,166 | 934 | 2,024 | 1,272 | 1,098 | 1,502 | 1,164 | 1.490 | 1.400 |
| " 1916 | 1,539 | 1,307 | 1.190 | 1,235 | 1,266 | 1.551 | 1.961 | 1,716 | 1,818 |
| " 1917 | 1,919 | 1,841 | 1,084 | 1,181 | 1,308 | 1480 | 1,722 | 2,141 | 1,450 |
| , 1918 | 2,197 | 2,824 | 1,851 | 1,210 | 1.378 | 1,460 | 2,448 | 3,085 | 1,695 |
| $\cdots \quad 1919$ | 1,930 | 2,169 | 1,858 | 1,873 | 1,469 | 1,448 | 2,602 | 2,827 | 1,801 |
| " 1920 | 2,091 | 2,480 | 2,288 | 1,840 | 1,860 | 2,022 | 2,844 | 2,704 | 2,178 |
| January 1920 | 1,889 | 2,729 | 2,265 | 1,432 | 1,555 | 1,468 | 2.820 | 2.678 | 2,026 |
| Febrtary | 1,919 | 2,832 | 2,260 | 1,490 | 1,608 | 1,486 | 2,867 | 2,717 | 2,003 |
| March | 2,051 | 2,805 | 2,250 | 1,015 | 1,602 | 1,456 | 2,077 | 2.797 | 2,089 |
| Aprit | 2,051 | 2,793 | 2,389 | 1,690 | 1,924 | 1,600 | 2,977 | 2,797 | 2.173 |
| May | 2,185 | 2,648 | 2,519 | 1,705 | 1,985 | 1.695 | 3,074 | 2,972 | 2,250 |
| June | 2,135 | 9597 | 2,618 | 1,870 | 1,951 | 2,079 | 3,074 | 2,972 | 2.830 |
| July ... | 2,109 | 2,518 | 2,498 | 1,884 | 1,92? | 2,609 | 9,069 | 2,834 | 2,341 |
| August | 2,094 | 2,509 | 2,384 | 1,889 | 1,1133 | 2.8199 | \$,116 | 2.817 | 2,360 |
| September ${ }^{\text {, }}$ | 2,113 | 2,223 | 2.806 | 2,094 | 1,962 | 2.729 | 2.953 | 2.755 | 2.298 |
| October ", | 2,216 | 2,002 | 2,084 | 2,140 | 1,963 | 2,258 | 2,885 | 2,765 | 2,147 |
| November; | 2,216 | . 1,801 | 2,069 | 2,115 | 1,951 | 2,113 | 2,808 | 2,551 | 2,078 |
| December ", | 2,163 | $\therefore 1,560$ | 1,028 | 2,098 | 1,980 | 1,934 | 2,711 | 2,519 | 1,008 |
| January, 1021 | 2,151 | 1,452 | 1,972 | 2,088 | 1,087 | 1,909 | 2,802 | 2,444 | 1,048 |
| Fobruary " | 2,135 | 1,324 | 1,918 | 2,055 | 1,987 | 1,837 | 8,033 | 2.422 | 1,020 |
| March " | 2,025 | 1,066 | 1,765 | 2,086 | 1,975 | 1,781 | 8,029 | 2,340 | 1,813 |
| April | 2,016 | 1,144 | 1,088 | 1,800 | 1,963 | 1,438 | 2,889 | 2,314 | 1,706 |
| May | 1,944 | 1,076 | 1,613 | 1,754 | 1,945 | 1,402 | 2,798 | 2,243 | 1,664 |
| June | 1,947 | 1,052 | 1,595 | 1,709 | 1,880 | 1,338 | 2,496 | 2,226 | 1,617 |
| July " | 1,945 | 1,107 | 1,579 | 1,655 | 1,881 | 1,191 | 2,377 | 2,198 | 1,589 |

6. Seasonal Fluctuations in Wholesale Prices, 1920.-In order to show the seasonal fluotuations in wholesale prices, index-numbers have been compited for each quarter of the year 1920. These are shewn in the following table, firstly, computed with the year 1911 as base, and
secondly, with the average prices for the year 1920 as base. Corresponding figures for purchasing-power of money (retail prices of food, groceriet. and of house rent) have been included for comparative purposes.

Melbourne Wholesale and Retail Prices-Quarterly Inder-Numbers, 1020.

| Particulbri. | Jan. to March. | April to June. | July to Sept. | $\begin{aligned} & \text { Oct. } \\ & \text { to } \\ & \text { Dec. } \end{aligned}$ | Whole Year. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Wholesale Price Inder-Numbers with 1911 as base $(=1,000)$ <br> Wholesale Prlce Index-Numbers with average for | 2,351 | 2.567 | 2,650 | 2,952 | 2,480 |
|  | 948 | 1,035 | 1,060 | 948 | 1.000 |
| Retail Price (Nom, Index-Numbere, with average for 1920 as base ( $=1,000$ ) | 917 | , 989 | 1,059 | 1,035 | 1,000 |

The first two lines shew that in 1920 wholesale prices increased during the first three quarters, and fell during the fourth. The last line shews that retail prices also rose during the first three quarters. and fell during the fourth.
7. Table of Prices, 1919 and 1920.-In Appendix III. particulars are given as to the average prices of the particular brands of commodities used in computing the index-numbers in the years 1919 and 1920. Corresponding information for previous years, as far back as 1871, was given in the Appendixes to previous Reports.


[^0]:    - In the computation of the index-numbers for years prlor to 1911, the aggrogato expenditure on 80 commoditiea in 1911 is taken as bage $(=1000)$, while for later yearl the aggregate expenditure on 92 commodities in 1911 is taken.

