## CHAPTER II-WHOLESALE PRICES AND PRICE INDEXES.

## § 1. Melbourne Wholesale Price Index.

I. General.-The data on which this chapter is based relate almost entirely to wholesale prices in Melbourne. An index of Sydney wholesale prices is compiled by the Government Statistician of New South Wales, and published in the Year Book and the Monthly Summary of Business Statistics of that State.

The index of Melbourne wholesale prices was first computed in 19I2, and has been coritinued on the same lines since that year. The items included in the (old) Melbourne wholesale price index comprise chiefly basic materials which in the form of raw material, food, or as a source of power, enter into production for bome constmption. The purpose of the index, therefore, is to measure the changes in the prices of these particular materials rather than the changes in prices generally. As Australia does not, to any extent, manufacture from imported raw materials commodities for export, the local consumption appears to give the most appropriate weighticg. Any lack of uniformity in the variations of the index-numbers for these wholesale prices and for retail prices would indicate broadly changes in the relation of manufacturing and distributing charges to the cost of basic materials.

The scope of this wholesale price index can best be understood by an examination of the list of commodities included which is given on page 4 I . This list is, to a large extent, comparable with that used in the compilation of the Economist and Statist index-numbers for Great Britain, but differs largely from that used for the wholesale price index-numbers of the United States (Bureau of Labour) or Canada (Department of Labour).
2. The Grouping of the Commodities.-The commodities are divided into eight groups, as set out on page 4I. The descriptions of the groups are given in the following tables with the proportional cost of each group for the year 1939. These proportions may be used with fair accuracy as "weights" to combine any group index-numbers at the present time, but would give unsatisfactory results if used for a time when prices were relatively much different.

Groups of Commodities.

| Group. | Description. | Percentage of Aggregato Cost (1939). |
| :---: | :---: | :---: |
| I. | "Metais and Coal" | 15 |
| II. | "Wool, Cotton", also jute, leather, \&c. | 11 |
| III. | "Agricultural Produce" .. | 31 |
| IV. | "Dairy Produce" | 9 |
| V. | " Groceries" | 16 |
| VI. | " Meat" | 10 |
| VII. | " Building materials" (mostly timber) | 7 |
| VIII. | "Chemicals" (excluding fertilizers) | 1 |

It will be noticed that the group " Chemicals" is practically negligible.
The index relates chiefly to basic materials, but a certain proportion of Australian manufacturing costs enters into all groups. The amount is small in Meat (VI.), Agricultural Produce (III.), and Wool, Cotton (II.), and greater in others, but the difference is not sufficient to justify any inference as to different changes of the price-level for manufactured goods and farm products. The number and weight of manufactured commodities included are too small to warrant deductions of this nature from any possible grouping.

Many of the commodities included are affected by the tariff. Wool, Cotton (II.), Agricultural Produce (III.), and Meat (VI.), are little affected, and Dairy Produce (IV.) not greatly, but in the other groups the tariff is a dominating influence.

Melbourne Wholesale Price Index : Commodities included, Units of Measurement, and "Mass-Units".

| Commodity. | Quallty. | Unit. | Maga Unit. | Cornmodity. | Quallty. | Unlt. | Mass Unit. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grour 1. (Metals and Coal). |  |  |  | Group II <br> (Wool, Cotton, aloo Jute, Leather, ©c.) |  |  |  |
| Lron- Pig Bod and Bat | Mixed Nos. Staflord | Ton | 61 | $\begin{array}{ll}\text { Dranbage } \\ \text { Cornsacks } & \text {.- } \\ \text { Woolpacke } & \text { - }\end{array}$ | .. | Doz. E**h | 150 250 300 |
| Rod and Bar Angle | Staflord | " | 31 | Woolpacke Leather ${ }^{\text {a }}$ - |  | Each | 300 |
| Plate $\quad$. | " | " | 3 | Chrome Box | -• | ft. | 1,200 |
| Hoop - * | 16 nauge | * | ${ }^{2}$ | Hide |  |  |  |
| Gejvenized .. | 26 garige | * | 5 | Rouxh Tanned | . | 1 b . | 600 |
| Fenclug Wire .. | No. 8 | Ton | 6 | Sole Ieather- |  |  | 600 |
| Tinned Platee .. | I.C. Coke | Box | 60 | Factory | $\ldots$ | " | 60 |
| Zinc, sheet .. | .. | Ton | 1 | Sldes |  |  |  |
| Lead, sheet •... | . | " | 4 | Cotton | Raw | ** | 24,000 |
| ** plpes .. | . | * | 1 | Wool | Greasy.. | * | 12,200 |
| Copper, sheet .. | . | Ib. | 2,000 | Twise | Reaper | ** | 150 |
| Quicksllver .. | ... | ** | 12 |  | Bnd |  |  |
| Canl .. .. | Newcagtle, on wher! | Tob | 600 | Tailow | Mutton Prime | Tod | 14 |

## Melbourne Wholesale Price Index: Commodities included, Units of Measurement, and "Mass-Units"-continued.

| Cormmodity. | Quality. | Unit. | Mass <br> Unit. | Commedity. | Quality. | Ualt. | Masa <br> Uait. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Group III.
(Agricultural Produce),

| Wheat | .. |  | Bus. | 500 48 |
| :---: | :---: | :---: | :---: | :---: |
| Flour | .. | $\cdots$ | Ton | 48 |
| Bran . | .. |  | " | 14 |
| Pollard | $\cdots$ |  |  | 14 |
| Onta | . | Malilig., | Bua, | 1,200 |
| Oatmeal | $\cdots$ | Colontal | Ton | 31 |
| Barley | $\cdots$ | English | Rus. | 150 |
| Mäze. . | . | Cape .. | " | [100 |
| Bay .. | $\cdots$ | Begt İIngr. | Ton | 135 |
| Chafi, | $\cdots$ | Prime.. | , | 135 |
| Straw | .. | Vietorian |  | 25 |
| Peas ${ }^{\text {P }}$ | $\cdots$ | .. | Hus | 55 |
| Potatoea |  |  | Ton | 40 |
| Malt . ${ }^{\text {Onlone }}$ | $\because$ | Vletoriad | Bus. Ton | 140 3 |
|  |  |  |  | 3 |

(Dairy Produce).

| Ham. | .- | lb . | 800 |
| :---: | :---: | :---: | :---: |
| Bacon |  | " | 3,200 |
| Cheese |  | " | 1,500 |
| Butter | Best Fresh | . | 9,500 |
| Lard .. | Bulk ... |  | ${ }^{300}$ |
| Eggs . | Ordinary | Do8. | 1,800 |
| Honey |  |  | 600 |
| $\underset{\text { Condensted Mus }}{\text { M }}$ |  |  | $4{ }^{40}$ |
| Condensed Mul | Bacchus Marsh | Doz. 1 l . | 160 |

Group V .
(Grocertes).

| Currants | $\cdots$ |  | Jb. | 1,400 |
| :---: | :---: | :---: | :---: | :---: |
| Ealsins | - | Sultanas |  | 1.400 |
| Eerrings | . | 1-lb. freel | $\begin{aligned} & \text { Doz. I-lb. } \\ & \text { tins } \end{aligned}$ | 50 |
| Salmon | . | r-lb. tall Alaska | " | so |
| Sardines | $\cdots$ | Halves | Dox. halves | 100 |
| Ten. | . |  | lb. | 3,000 |
| Coffee | $\cdots$ | Plantation | " | 200 |
| Cocoa | $\cdots$ | Mekenzie's |  | 100 |
| Sugar | $\cdots$ | No. IA | Ton | 22 |
| Macaronl | . | . | 1 b. | 200 |
| Tapioca | $\cdots$ | . | cwt. | 7 |
| Hice | $\cdots$ |  | Ton | 3 |
| Salt + | . | Australlan fine | , | 7 |
| Salt. . Mustard | $\ldots$ | Rock ${ }_{\text {Goteman }}$ | Doz. 1 - ${ }^{\text {b }}$ + | 8 |


| Starch | . | Coleman's White | lb. | 100 |
| :---: | :---: | :---: | :---: | :---: |
| Blue.. Matches | $\cdots$ | Keen's | Grose | so |
|  | .. | Anstraltan Safety | Gross | 90 |
| Candles Tobaceo Kerogene | $\cdots$ | Rangoon | tb. | 1.600 |
|  | $\cdots$ | $\cdots$ | Gäl. | 1,300 |
|  | .. | . | Gall. | 1,700 |
| Grove VI. (Meat). |  |  |  |  |
|  |  |  |  |  |
| Beef |  | Averagequality | 100 lb. | 390 |
| Muttou | * |  | lb. |  |
|  | $\because$ | ", |  | 53,600 |
| YealPort | $\cdots$ | $\because$ | " | 3,000 |
|  | . | * | " | 3,700 |

Grove V.-combinued.
(Groceries).

GROUP VI.
(Meat).

Grote VII.
'(Bullding Materlals).


GBODP VIII.
(Chemicals).

## Sream of Tartar

| In kegs | Jb. | 400 |
| :---: | :---: | :---: |
| $\begin{gathered} \text { Reflned } \\ \ldots \\ \text { Luapp .. } \end{gathered}$ | $\begin{aligned} & \text { " } \\ & \text { ewt. } \\ & \text { Ton } \\ & \text { lb. } \end{aligned}$ | $\begin{aligned} & 1-20 \\ & 370^{\frac{1}{3}} \end{aligned}$ |

3. Index Numbers.-Index-numbers for each group of commodities, as well as for all groups combined, are shown in the following table :-

Melborme Wholesale Price Inder-Numbers, 1861 to 1840.
(Base of each Group: Year $\mathbf{1 g I I}=1,000$.)


NoTE.-The fgures given in thla table ars comparable in the vertical columas, but are not directly eomparsble horizontally.
4. Variations since 1914.-The variations in the index-numbers of the separate commodity groups for the years 1915 to 1940 , are shown in the following table, taking July, I9I4, as base $(=1,000)$ for each group :-

Melbourne Wholesale Price Index-Numbers.
(Base of each Group: July, $1914=1,000$.)


## § 2.-Basic Materials and Foodstuffs.

I. General.-As mentioned above, the Melbourne Wholesale Price Index was first computed in Igr2. Neither the component items nor the weighting have been varied. Consequently the index is a measure of changes in wholesale price levels based on usages which have altered substantially since the period on which the woighting was determined. As such it is useful as an indication of long-term trends over the past 80 years which it covers, on the assumption that the relative importance of component items remained constant. But it no longer serves as a measure of price variations from month to month or from year to year of commodities weighted in accordance with present day consumption. Reference to the description of the index in § I above will indicate that animal fodders preponderate in the "Agricultural Produce" group, while "Building Materials" include little besides imported timber. In other groups, some principal items have increased in consumption while others have decreased. It was resolved, therefore, at the Conference of Statisticians at Brisbane in r930 that the time had come to revise and extend the items included in order to bring the index into line with changed conditions. An investigation to that end was commerced, and in the conrse of the past few years, many new price-series have been collected on a monthly basis back to January,
1928. Some of these have been incorporated in a new index of the prices of basic materials and foodstuffs, proliminary index-numbers of which are currently published in the Monthly Review of Busmess Statistios. Others are being incorporated in a number of "special-purpose" indexes, which it is hoped to publish in the future. Their construction has been delayed in order to make use, for weighting purposes, of the larger amount of information which is now becoming available as the result of the collection of more extensive statistics of factory production. The price quotations have in the main been obtained directly from manufactuers and dealers, and, with a few important exceptions, from Melbourne sources. Apart from home-produced building materials, coal and one or two minor commodities, however, the price movements may be taken as representative of fluctuations in wholesale prices of basic materials in most Australian markets. The weighting system adopted is based on average annual consumption during the years 1928-29 to 1934-35 inclusive. In the meantime, however, the original index has been cortinued on existing lines, as set out in § I of this chapter.
2. Index Numbers--lndex-numbers for eact grouf of commodities and for all groups combined for this new index of wholesale prices of basic materials and foodstuffs are given in the following table:-

## Wholesale Price Index-Numbers-Basic Materials and Foodstufis, 1928 to December, 1940.

(Base of each Group : Year $1928=1,000$. )

| Premi. |  | Mr:Culs and toal. | Chls, fats fand Wases | Texthles. | Glemicall. | Rubser athl Under | thild ing \$2terials. | Foms. atutis and TODisceo. | ctooufn priner$\mathrm{pmil} \mathrm{y}^{\prime}$ [!11ported. | Goods prinespally Home Produced. | $\underset{\text { Groups. }}{\text { All }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1928 |  | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1.000 | 1,000 | 1,000 | .1,000 | 1,0040 |
| 1929 |  | 1,000 | 1,019 | 831 | 977 | $76 y$ | 980 | 1,070 | t,0. 1 | 1,033 | 8,028 |
| $t 930$ |  | 954 | 1,082 | 612 | 955 | 548 | 995 | 951 | 1,053 | 917 | 951 |
| 1935 | $\cdots$ | 890 | I+ 16 | 575 | 979 | 581 | 1,or2 | 812 | 1,159 | 79 r | 873 |
| 1932 | . | 827 | 1,069 | 339 | 981 | 530 | 984 | 792 | $1+082$ | 762 | 842 |
| 1933 |  | 818 | 882 | 621 | 949 | $5{ }^{6} 4$ | 995 | 778 | 1,009 | 746 | 812 |
| 1934 | , | 785 | 816 | 664 | 885 | 601 | 979 | 308 | 989 | 752 | 852 |
| 1939 |  | 740 | 877 | 620 | 817 | 593 | 971 | 849 | 1.025 | 761 | 827 |
| 1936 | $\cdots$ | 725 | 909 | 765 | 815 | 724 | 984 | 906 | 1,945 | 807 | 867 |
| 1937 | . | 791 | 952 | 872 | 817 | 889 | 1,102 | 929 | 1,126 | 843 | 914 |
| 1938 | $\ldots$ | 801 | 949 | 507 | 831 | 664 | 1,041 | $90 \%$ | 1,094 | 852 | 911 |
| 1939 | $\cdots$ | 814 | 972 | 650 | 835 | 779 | 1,047 | $9+8$ | 1,112 | 852 | 9 th |
| 1940 . |  | 836 | 1,229 | 776 | 969 | 934 | 1,269 | 98.4 | 1,331 | 894 | 1,001 |
| 1938 - |  |  |  |  |  |  |  |  |  |  |  |
| Jamatar | $\cdots$ | 803 | 955 | 665 | 822 | 708 | 1,078 | 895 | 1,108 | 812 | $\mathrm{By}_{5}$ |
| Pebruary | . | 799 | 954 | 644 | 831 | 646 | 1,071 | 904 | 1. 102 | 816 | 886 |
| March | . | 800 | 952 | 625 | 831 | 637 | 1,065 | 921 | 1,098 | 827 | 893 |
| April |  | 800 | 950 | 612 | 831 | 620 | 1,065 | 941 | 1,097 | 840 | 903 |
| Mtas | $\cdots$ | 798 | 949 | 613 | 831 | 600 | 1,053 | 960 | 1,090 | 853 | 911 |
| June | . | 796 | 947 | 587 | 831 | 594 | 1,055 | 995 | 1.092 | 874 | 928 |
| July | , | 800 | 948 | 606 | 831 | 651 | 1,013 | 1.021 | 1.084 | 894 | 941 |
| Augusi | , | 8 fol | 947 | 599 | 831 | 670 | 1,017 | 1,0.4 6 | 1, $\operatorname{tos}$ | 906 | 955 |
| Septembers |  | 802 | 946 | 577 | 831 | 670 | 1,0:0 | 1,005 | 1,094 | 880 | 932 |
| Octasher |  | 803 | 946 | 587 | 832 | 735 | 1,022 | 977 | 1,085 | 868 | 921 |
| Noveminet |  | 805 | 946 | 595 | 812 | 729 | 1.022 | 930 | 1,082 | 836 | 896 |
| December | $\ldots$ | S02 | 945 | 574 | \$32 | 702 | 1,022 | 95 | 1,085 | 825 | 889 |
| $1939-$ |  | 810 |  |  |  |  |  |  |  |  |  |
| E'ehruary | $\cdots$ | 794 | 947 | 587 |  | 703 | 1,022 | 971 | 1,103 | 8 | 900 |
| March | $\cdots$ | 83 | 947 | 573 | 835 | 7 I | 1,022 | 1,032 | r,075 | 910 | 950 |
| Arril | - | 813 | 948 | 574 | 835 | 697 | 1,010 | 1,005 | 1.075 | 890 | 935 |
| 3fy |  | 813 | 949 | 578 | 835 | 702 | 1,016 | 929 | 1.079 | 837 | 896 |
| June | $\cdots$ | 813 | 950 | 597 | 835 | 710 | t,007 | 928 | 1,078 | 837 | 896 |
| July |  | 814 | 949 | 65 | 835 | 699 | 1,007 | 4)18 | $\mathbf{1}_{1} 075$ | 833 | 891 |
| Auguat. | $\cdots$ | 815 | 947 | 610 | 835 | 727 | 1,007 | 907 | 1,076 | 824 | 880 |
| Septeninter | , | 815 | 951 | 728 | 835 | 797 | 1,031 | 921 | 1,12 | 836 | 906 |
| Octaler |  | 815 | 996 | 786 | 835 | 886 | 1,092 | 948 | 5,158 | 855 | 930 |
| Novesmier | . | B28 | 1,042 | 795 | 835 | 977 | 5,127 | 938 | t, 200 | 852 | 937 |
| Decerelowr |  | 828 | 1.0.030 | 770 | 839 | 1,011 | 1.178 | 934 | 1,276 | $\mathrm{B}_{4} 7$ | 943 |

Wholesale Price Index-Numbers-Baric Materials and Foodstufis, 1928 to December, 1840-continucd.
(Base of each Group : Year $1928=1,000$.)


## § 3. International Comparisons: Wholesale Price Index-Numbers.

The following table gives index-numbers of wholesale prices in the years 1933 to 1940 for Australia and other countries, the prices in each country for the year 1929 being taken as base ( $=100$ ). The figures, which have been taken chiefly from the Monthly Bulletin of Statistics published by the League of Nations, show merely the fluctuations in prices in eacb country, and are obviously not comparable horizontally.

Wholesale Price Index-Numbers: Principal Countries.
(Base: Year $1929=100$. )


Wholesale Price Index－Numbers：Principal Conntries－rontinued．
（Base：Year $1929=100$ ．）

| Feriod． | 完 | 苞 | $\begin{aligned} & \text { 藟 } \\ & \text { 畄空 } \end{aligned}$ |  | 免 | 点 |  |  | 免 | 夏 | 㫫 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { 露 } \\ & \text { 2 } \end{aligned}$ | $\begin{aligned} & \text { 遭 } \\ & \text { 会 } \end{aligned}$ | $\begin{aligned} & \text { 或 } \end{aligned}$ | $\begin{aligned} & \text { 句 } \\ & \text { 密 } \end{aligned}$ | 镸 要 |  | 产 | 怱 <br> 安 | 言 | 歌 |
|  |  |  |  |  |  | （a） |  |  |  | 70 | 91 |  |
| 1934 － | 65 | 8 BI | 63 | 83 | ${ }_{5} 8$ |  | 64 | 79 |  | 75 | ${ }_{92}$ | ${ }_{88}^{80}$ |
| 1935 | 71 | 84 | 62 | 85 | 55 | 100 | 64 | 84 | 80 | 75 | 95 | 82 |
| 1936 | 80 | 90 | 64 | 90 | 56 | $\cdots$ | 68 | 85 | $8_{4}$ | 78 | 96 | 85 |
| 1937 | 93 | 108 | 76 | 105 | 62 | 114 | 79 | 9 O | 89 | 88 | 103 | 87 |
| 1938 ．． | 100 | 114 | 72 | 103 | 58 | 111 | 76 | ${ }_{8}$ | 89 | 82 | 105 |  |
| 1939 |  | 126 | 74 | s03 |  | 115 | 79 | 81 | 39 | 79 | 108 | 8 |
| t939 VI．．． | 103 | 123 | 70 | tor | 59 | 109 | 75 | 79 | 87 | 77 | 107 |  |
| Vİ VII． | 101 | 123 | 70 | 101 | 53 | 110 | 75 |  |  | 76 | 108 | 86 |
| YIII． |  | 114 | 71 | 101 | ． | 111 | 76 | 79 | 8 | 76 | 110 | ．． |
| IX． |  | 131 | 76 88 81 | 103 120 |  | 118 | 83 <br> 85 <br> 8 | 83 | s8 | 8 | 109 |  |
|  |  |  | 81 <br> 88 | 128 118 | ． | 124 128 128 | 83 87 88 | 83 | 9 I | 83 8 8 | 110 | 9 |
| Xİ ${ }_{\text {XII }} \quad \cdots$ |  | 136 143 | 84 85 84 | 118 120 |  | 128 138 138 | 87 89 | 83 83 83 | 91 | ${ }_{8}^{8.4}$ | ${ }_{112}^{112}$ | 91 |
| 1940 I．${ }^{\text {I }}$ |  | 143 | 85 | 122 |  | 138 136 | 89 | 83 83 | ${ }_{92}$ | 88 | 113 113 | 93 |
| II．$\quad$. |  | 1.44 | 88 | 128 | ． | $\pm 38$ | 92 | 82 | 93 | 87 | 185 | 95 |
| III．． |  | 1.42 | 88 | 134 | $\cdots$ | 140 | 94 | $\mathrm{g}_{2}$ | 95 | 87 | 117 | 96 |

（a）Jiase：Year $1935=100$.
（b）Jasic Materials and Fondatugs Index．

## CHAPTER III．－WAGES．

## § 1．Operations Under Arbitration and Wages Board Acts and Industrial Legislation．

1．General．－Particulars regarding operations under the Commonwealth and State Acts for the regulation of wages and hours and conditions of labour were first compiled for the year 1913，and reviews to the end of each annual period appear in previous issues of the Labour Report and in the Quarterly Summaries of Australian Statistics．

2．Acts Regulating Industrial Matters．－The Acts in force regulating rates of wage，hours of labour，and working conditions generally in both Commonwealth and State jurisdictions are as follows：－

## Commonwealte．

Commonwealth Conciliation and Arbitration Act 1904－I934．
National Security（Industrial Peace）Regulations－Statutory Rules 1940，No． 290.
Arbitration（Public Service）Act 1920－1934．
Industrial Board Ordinance，1936－1940（Australian Capital Territory）．

## States．

New South Wales
Victoris

South Australia
Western Australia
Tasmania

Queensland ．．．．Industrial Conciliation and Arbitration Act 1932－1938．
Industrial Arbitration Act 9940.
－Factories and Shops Act 1928－1939．
．The Industrial Code 1920－1937．
．．Industrial Arbitration Act 1912－1937．
．．Wages Board Act 1920－1938．

