# CHAPTER XIII.-LABOUR, WAGES, AND PRICES. <br> <br> A. PRICES. 

 <br> <br> A. PRICES.}

## § 1. Wholesale Prices.

1. General.-The results of an investigation into wholesale prices in Melbourne from 1871 to the end of September, 1912, were given in some detail in Report No. 1 of the Labour and Industrial Branch, while summarized results for later years are included in subsequent Reports.

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 similar to 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 is used or consumed, are shown in a tabular statement in Labour Report No. 13 (page 62).
2. Index-Numbers.-Index-numbers bave 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 shown in the following table, and in each case were computed with the prices in the year 1911 as base. They show, for each of the years specified, the expenditure necessary, if distributed in purchasing the relative quantities (indicated by the mass-units) of the several commodities concerned, to purchase what would have cost $£ 1,000$ in 1911. Thus, from the last column it will be seen that the cost of the relative quantities of the various commodities was 1,229 in 1871, and 974 in 1901, as compared with 1,000 in 1911, 1,903 in 1921, and 1,885 in 1924. In other words, prices were lower in 1911 than in either 1871, 1921 or 1924, and the purchasing power of money in 1911 was, accordingly, greater. Again, prices were lower in 1901 than in 1911, and the purchasing-power of money in the former year was, therefore, greater.

INDEX-NUMBERS.-WHOLESALE PRICES, MELBOURNE, 1861 TO 1924.

|  | Year. | I. <br> Metals. and Caal. | II. <br> Jute, Leather, etc. | III. <br> Agricultural Produce, etc. | IV. <br> Dairy Produce. | V. <br> Groceries. | VI. Meat. | VII. <br> Building Materials. | VIII. <br> Chemi- <br> cals. | All Com modities together |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1861 | -. | 1,438 | 1,881 | - 1,583 | 1,008 | 1,963 | -. | 1,070 | 2,030 | 1,538 |
| 1871 |  | 1,096 | 1,257 | 1,236 | 864 | 1,586 | . | 1,044 | 1,409 | 1,229 |
| 1881 |  | 1,178 | 1,115 | 1,012 | 935 | 1,421 | - | 1,091 | 1,587. | 1,121 |
| 1891 |  | 895 | 847 | 1,024 | 995 | 1,032 | 888 | 780 | 1,194 | 945 |
| 1901 |  | 1,061 | 774 | 928 | 1,029 | 1,048 | 1,345 | 841 | 917 | 974 |
| 1902 |  | 1,007 | 756 | 1,193 | 1,215 | ,945 | 1,447 | 837 | 881 | 1,051 |
| 1903 |  | 923 | 834 | 1,209 | 1,059 | 936 | 1,443 | 875 | 921 | 1,049 |
| 1904 |  | 821 | 885 | 754 | , 878 | 916 | 1,427 | 845 | 875 | 890 |
| 1905 |  | 772 | 850 | 894 | 980 | 942 | 1,209 | 801 | 859 | 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 | 998 | 898 | 1,003 |
| 1911 |  | 1.000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000. |
| 1912 |  | 1,021 | 1.991 | 1,370 | 1,206 | 1,052 | 1,357 | 1,057 | 978 | 1,170 |
| 1913 |  | 1,046 | 1,070 | 1,097 | 1,054 | 1,024 | 1,252 | 1,128 | 995 | 1,088 |
| 1914 |  | 1,099 | 1,032 | 1,207 | 1,137 | 1,021 | 1,507 | 1,081 | 1,253 | 1,149 |
| 1915 | . 0 | 1,284 | 1,017 | 2,182 | 1,530 | 1,133 | 2,435 | 1,275 | 1,528 | 1,604 |
| 1916 |  | 1,695 | 1,423 | 1,208 | 1,485 | 1,322 | 2,515 | 1,491 | 1,760 | 1,504 |
| 1917 |  | 2,129 | 2,008 | 1,157 | 1,423 | 1,343 | 2,403 | 1,884 | 2,171 | 1,662 |
| 1918 |  | 2,416 | 2,360 | 1,444 | 1,454 | 1,422 | 2,385 | 2,686 | 3,225 | 1,934 |
| 1919 |  | 2,125 | 2,363 | 1,985 | 1,651 | 1,516 | 2,348 | 2,851 | 2,898 | 2,055 |
| 1920 |  | 2,298 | 2,624 | 2,439 | 2,209 | 1,918 | 3,279 | 3,226 | 2,825 | 2,480 |
| 1921 |  | 2,173 | 1,362 | 1,767 | 2,000 | 1,976 | 2,158 | 2,733 | 2,303 | 1,903 |
| 1922 |  | 1,942 | 1,681 | 1,628 | 1,648 | 1,869 | 1,787 | 2,005 | 1,965 | 1,758 |
| 1923 |  | 1,826 | 2.148 | 1,778 | 1,837 | 1,746 | 2,579 | 2,025 | 1,983 | 1,944 |
| 1924 | . $\cdot$ | 1,835 | 2,418 | 1,647 | 1,655 | 1,721 | 2,223 | 1,815 | 1,806 | 1,885 |

[^0]3. Fluctuations, July, 1914, to May, 1925. -Since the outbreak of war, prices of many commodities have increased considerably. This is shown in the following table in which the index-numbers are given for each group for the months of July, 1921 to 1924, and May, 1925, taking July, 1914, the last month before the outbreak of war, as base ( $=1,000$ ) for each group :-
INDEX-NUMBERS.—WHOLESALE PRICES, MELBOURNE, JULY, 1914, to 1924, AND MAY, 1925.

| Particulars. | $\begin{gathered} \text { I. } \\ \text { Metals. } \\ \text { and } \\ \text { Coal. } \end{gathered}$ | II. <br> Jute. Leather, etc. | III. <br> Agricultural Produce, etc. | IV. <br> Dairy Produce. | V. <br> Groceries. | VI. Meat. | VII. <br> Building Materials. | VIII. <br> Chemicals. | All <br> Groups. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| July, 1914 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| , 1921 | 1,945 | 1,107 | 1,579 | 1,655 | 1,881 | 1,191 | 2,377 | 2,198 | 1,589 |
| ,, 1922 | 1,764 | 1,555 | 1,532 | 1,564 | 1,810 | 1.185 | 1,681 | 1,091 | 1,569 |
| ,, 1923 | 1,658 | 1,876 | 1,691 | 1,668 | 1.698 | 2,229 | 1,780 | 1,923 | 1,799 |
| ", 1924 | 1,666 | 2,119 | 1,525 | 1,431 | 1,677 | 1,281 | 1,666 | 1,743 | 1.626 |
| Lay, 1985 . | 1,661 | 1,802 | 1,589 | 1,439 | 1,965 | 1,335 | 1,561 | 1,728 | 1,592 |

## § 2. Retail Prices and House Rents.

1. Introduction.-(i) General. In Labour Report No. 1, issued in December, 1912, the results of certain investigations into the subjects of Prices, Price-Indexes and Cost of Living in past years were published, and some account was given of the methods employed for the collection of the data and of the technique adopted in the computation of the results. A detailed examination of the theory upon which the calculation of the index. numbers is based was given, but being necessarily too technical for the ordinary reader, was relegated to Appendixes. In Labour Reports Nos. 2, and 5 to 15 , results of further investigations were included, and in Labour Bulletins-Nos. 1 to 18, and in Quarterly summaries of Statistics, Nos. 70 to 98 , information was incorporated regarding variations in retail and wholesale prices, house rent, and purchasing-power of money up to the end of 1924.
(ii) Computation of Index-Numbers. The method adopted for the computation of the index-numbers is what is termed the "aggregate expenditure" method. Thereunder the average price of each commodity included is ascertained, and numbers (called "massunits") representing the relative extent to which each commodity was on the average used or consumed are also computed. The price in any year of each commodity multiplied by its corresponding " mass-unit" represents, therefore, the relative total expenditure on that commodity in that year on the basis of the adopted regimen. It follows, therefore, that by taking for any year the sum of the price of each commodity multiplied by its corresponding " mass-unit," a figure is obtained which representa the relative aggregate or total expenditure of the community in that year on all the commodities, etc., included. By computing these aggregate expenditures for a series of years and taking the expenditure in any selected year as "base," that is, making the expenditure in that year equal to 1,000 units, the relative expenditure in any other year, or what may be termed the "index-numbers," are readily ascertained. Numerical examples of the technique and methods adopted for the computation of index-numbers were given in Report No. 2 (pp. 44 and 45), and in Report No. 9 Appendixes-I, to IV., pp. 174 to 229.
2. Scope of Investigation.-As noted in Report No. 1, distinction must be drawn between (a) Variations in the purchasiorg-power of money, and (b) Variations in the standard of living, and in Report No. 2 attention was directed to the factors which must be taken into consideration in dealing with these matters in order to arrive at a satisfactory aggregate expenditure. The various Reports deal with the list of commodities selected and the reasons for their adoption, while § 4 of this Chapter deals with the extension of the inquiry to cover all ordinary household expenditure.
3. Variations in Index-Numbers for Retail Prices and House Rents, Capital Cities, 1901 to 1924.-(i) General. In Labour Reports and Bulletins, and in recent issues of the Quarterly Summaries of Statistics, index-numbers were given for each of the four groups and for all groups combined for each capital city since 1901, the expenditure in 1911 being taken in each case as base ( $=1,000$ ). In this sub-section summarized results only
are given, firstly, for food and groceries; secondly, for house rent; and thirdly, for the groups combined-the weighted average expenditure for all capital cities in 1911 being taken in each case as base ( $=1,000$ ). The index-numbers in each table are fully comparable with one another since they show not only the variations from year to year in each capital, but also the relative cost as between the cities.
(ii) Food and Groceries. The index-numbers thus computed for the three groups comprising groceries and food are shown in the following table:-
RETAIL PRICE INDEX-NUMBERS, FOOD AND GROCERIES.-CAPITAL CITIES, 1901 TO 1924.

(a) For all capital cities.

The figures quoted are directly comparable in every respeet ; thas, the same quantity of food and groceries, which cost $£ 1,000$ in the capital cities considered as a whole in 1911, would have cost $£ 917$ in Sydney in 1901, $£ 1,346$ in Perth in 1911, or $£ 1,684$ in Melbnurne in 1924.

In 1924 decreases were experienced in all the capitals with the exception of Perth, which showed an increase of 3.4 per cent. from the previous year. Comparing the results for 1924 with those for 1911, the extent by which prices increased varied from 80.1 per cent. in Melbcurne to 40.5 per cent. in Perth. Prices, however, were abnormally bigh in Perth in 1911.
(iii) Housing. The following table gives index-numbers computed for the weighted average bouse rent in each of the capital cities from 1901 to 1924, taking the average rent for the six capitals in 1911 as the base $(=1,000)$. The average rent has been obtained for each city separately by multiplying the average predominant rent for each class of house (i.e., houses having less than 4 rooms, 4 rooms, 5 rooms, 6 rooms, 7 rooms, and over 7 rooms) by a number ("weight ") representing the relative number of houses of that class in the particular city. The sum of the products thus obtained divided by the sum of the weights, gives the weighted average for all houses. The number of houses in each class for each city was obtained from the results of the 1911 census, and the index-numbers are based on the weighted average rents for all houses, and do not refer to any particular class of house. The actual predominant rents for each class were given in appendixes to Labour Reports Nos. 1, 2, and 5 to 14, and an examination of these figures shows that for some classes of houses the increase has been greater, and in some less, than the general increase indicated in the following table.

INDEX-NUMBERS.-HOUSING, CAPITAL CITIES, 1901 T0 1924.

(a) For all capital cities.

NOTE. - The above îgures are uirectiy cumpaíàlo tin every reapect.

A striking feature in the rent index-numbers is the decline in the years 1915 to 1917, This fall was probably, in some measure, due to the circumstance that wives and other dependents of soldiers shared houses or apartments, thus reducing the demand for accommodation. Government regulations forbidding increase in rents of houses tenanted by soldiers' dependents also had a restraining influence on any tendency towards a rise. In 1918 rents were again at the 1914 level, but in the years 1920 to 1924 fairly substantial increases occurred.
(iv) Food, Groceries, and Housing combined. The weighted averages for all groups are of importance, as indicating the general results of this investigation so far as the purchasing-power of money is concerned. The following table shows the indexnumbers for groceries, food, and house rent for each capital city, the weighted average cost for the six capitals in 1911 being taken as base $(=1,000)$ :-

## RETAIL PRICE INDEX-NUMBERS( $a$ )-FOOD, GROCERIES, AND HOUSINO.CAPITAL CITIES, 1901 T0 1924.


(a) As the price index-number increases, the purchasing-power of money diminishes.
(b) For all capital cities.

Note.-The above figures are directly comparable in every respect.

The combination of housing with prices of food and groceries has had the effect of considerably modifying the index of prices, or, in other words, the purchasing-power of money, as compared with the similar index based on food and groceries only. In 1918, 1919, and 1920 there were increases in prices of food and groceries and housing, the combined results for 1920 being an increase of 18.2 per cent. over. 1919, 56.6 per cent. over 1914, and 78.5 per cent. over 1911. The increase in the index-number between 1920 and 1914 varied between the capital cities from 41 per cent. in Perth to 69 per cent. in Hobart, while between 1920 and 1911 it varied between 44 per cent. in Perth and 93 per cent. in Hobart. The decrease in cost in 1921 was very slight in Perth compared with the decrease in the remaining cities. In 1922 there was a further decline in the combined cost of food, groceries, and bousing in all the cities, the weighted average index-number being 1,600 as compared with 1,697 in 1921. The index-number for 1923 shows a rise of 6.3 per cent. on that for 1922, both food and groceries and housing contributing to the increase, while that for 1924 shows a decrease of 1.1 per cent. from 1923, food and groceries having decreased 4 per cent., while housing increased 3.7 per cent.
4. Retail Price Index-numbers in Terms of Currency. - The tables in sub-section 3 give the relative cost in the six capital cities of food, groceries, and housing from 1901 to 1924 in the form of index-numbers. The figures have been converted into a monetary basis in the next table, and show the sums which would have to be paid in each city and in each year in order to purchase such relative quantities (indicated by the mass-units) of the several commodities, and to pay such sums for housing as would in the aggregate cost $£ 1$, according to the weighted average prices and rents in the six capitals in 1911.

## RETAIL PRICES.-AMOUNTS NECESSARY ON THE AVERAGE IN EACH YEAR FROM 1901 TO 1925 (1st QUARTER) TO PURCHASE IN EACH CAPITAL CITY WHAT WOULD COST ON THE AVERAGE f 1 in 19 II IN THE AUSTRALIAN CAPITALS REGARDED AS A WHOLE.



Food and Groceries (46 Commodities).

| 1901 | . |  | $\begin{array}{cc}8 . & d . \\ 18 & 4\end{array}$ |  | 8. d. |  | s. $d$. |  | 8. $d$. |  | 8. $d$. |  | s. d. |  | $\begin{array}{cc}\text { 8. } & d . \\ 19 & \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 4 |  | 4 |  | 7 |  |  |  | 3 |  |  |
| 1907 |  |  | 18 | 9 |  | 6 |  | 11 |  | 0 |  |  |  | 2 | 19 | 1 |
| 1911 |  |  |  | 9 | 18 | 8 | 20 | 4 | 20 | 5 |  | 11 | 21 | 2 | 20 | 0 |
| 1919 |  |  | $35^{\circ}$ | 8 | 32 | 5 | 35 | 3 | 34 | 5 |  | 5 | 35 | 0 | 34 | 4 |
| 1920 |  |  | 43 | 0 |  | 1 | 41 | 1 | 42 | 8 | 41 | 0 | 43 | 3 | 42 | 0 |
| 1921 |  |  |  | 0 |  | 0 | 36 | 3 | 38 | 1 | 40 | 0 | 40 | 6 | 38 | 0 |
| 1922 |  |  |  | 1 | 32 | 11 | 32 | 2 | 34 | 6 | 35 | 6 | 35 | 11 | 33 | 8 |
| 1923 |  |  | 36 | 5 |  | 1 | 33 | 10 | 36 | 6 | 36 |  | 37 | 3 | 36 | 1 |
| 1924 |  |  | 34 | 8 |  | 8 | 33 | 10 |  | 10 |  |  |  | 0 | 34 | 8 |
|  | [1st Quarter |  |  | 8 |  |  | 35 | 2 |  |  |  | 6 |  |  | 35 | 7 |
|  | 2nd |  |  | 8 |  | 11 | 33 | 7 | 36 | 6 |  |  |  | 3 | 34 |  |
| 1924 | 3rd |  | 33 | 11 |  |  | 33 | 5 | 35 | 3 |  | 1 |  | 10 | 34 | 2 |
|  | 4th |  | 34 | 4 |  |  | 33 | 0 | 34 | 8 |  |  | 36 | 0 | 34 | 1 |
| 1925 | 1st , | . | 34 | 6 |  | 1.0 | 33 | 4 | 36 | S | 39 | 4 | 35 | 7 | 34 | 9 |

Housing Accommodation (Wrigrted Average-All Houses).


Food, Groceries, and Houslina Combined.

| 1901 |  | . | 1710 | 17 | 5 | 155 |  | 3 | 20 | 6 | 17 | 5 |  | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1907 |  |  | 186 | 17 | 6 | 1511 | 17 |  | 19 |  | 17 | 9 |  |  |
| 1911 |  |  | 207 | 19 | 0 | 184 | 21 | 2 | 22 | 6 | 19 | 1 | 20 | 0 |
| 1919 |  | . | 317 | 29 | 7 | 2810 | 29 | 4 | 28 | 5 | 29 | 11 | 30 | 2 |
| 1920 |  | .. | 3611 | 35 | 9 | 3211 | 35 | 1 | 32 | 4 | 36 | 9 | 35 | 8 |
| 1921 |  | $\ldots$ | 346 | 34 | 10 | $30 \quad 3$ | 33 | 1 | 32 | 2 | 35 | 8 | 33 | 11 |
| 1922 |  |  | 328 | 32 | 6 | 2810 | 31 | 6 | 29 | 11 | 33 | 0 | 32 | 0 |
| 1923 |  | . | 349 | 35 | 0 | 302 | 33 | 5 | 30 | 9 | 35 | 1 | 34 | 0 |
| 1924 |  | . | 343 | 34 |  | 301 | 33 | 10 | 31 | 7 | 35 | 6 | 33 | 8 |
|  | (1st Quarter | . | 347 | 34. | 4 | 3011 | 33 | 10 | 31 | 4 | 36 | 0 | 33 | 11 |
|  | 2nd ", |  | 344 |  | 2 | 300 | 34 | 0 | 21 | 7 | 35 | 7 | 33 | 9 |
| 1924 | 3rd ", | . | 3311 |  | 11 | 2911 | 33 | 9 | 31 | 8 | 35 | 4 | 33 |  |
|  | 4th :, | . . | 343 | 33 | 10 | 298 | 33 | 6 | 31 | 10 | 35 | 0 | 33 | 6 |
| 1925 | ist , | . | 346 | 34 | 4 | 2911 | 34 | 2 | 32 | 7 | 35 | 1 | 33 | 11 |

5. Variations in Index-numbers, Retail Prices and Housing, Thirty Australian Towns, 1924.-The index-numbers given in the preceding sub-sections show changes in the cost of food, groceries, and housing separately for each capital city during the years 1901 to 1924 . The figures given in the next table show the relative cost of food and groceries, and of housing in 1924 in the thirty towns for which particulars are now collected. The weighted aggregate expenditure for the six capitals for the year 1911 has been taken as base and made equal to 1,000 , hence the columns are comparable both horizontally and vertically. The index-numbers in the last column are the same as in previous tables where the period and town are comparable.

## RELATIVE INDEX-NUMBERS.-FOOD, GROCERIES AND HOUSING, THIRTY TOWNS, 1924.

(Note.-Weighted Average Cost all Groups, Capital Cities, 1911, taken as base $=1,000$.)


* See remarks on page 43 of Labour Report, No. 13, with reference to house rents.


## § 3. Retail Price Index-Numbers, 200 Towns.

1. General.-To supplement the information collected each month for the 30 towns specified in the preceding paragraph, a special investigation was initiated in November, 1913, into retail price index-numbers in 70 additional towns. This investigation was repeated in November, 1914, and again in November, 1915, when the number of additional towns was increased to 120 . In November, 1923, the number of additional towns was further increased to 170 , and it is intended to institute inquiries in November in each year, thus making information available annually for 200 towns. The results
of the first investigation were published in Labour Bulletin No. 5 (Section IV., pages 26 to 33), where some description was given of the methods adopted in making the investigation and in computing the index-numbers. The results of the succeeding yearly investigations have appeared in the Labour Bulletins and Reports of this Bureau.
2. Detailed Results, 1922 to 1924.-The results of the investigation made in November, 1924, are set out in the following tables. The aggregate expenditure on food and groceries separately is shown in the form of index-numbers for each year in column A. In columns $B$ and $C$ the corresponding aggregate expenditure on food, groceries and rent of 4 rooms, and food, groceries, and rent of 5 rooms are shown for each year for each individual town. The index-number 1,597 represents the weighted average expenditure in 200 towns on food, groceries, and rent of 5 -roomed houses; 1,472 represents the average weighted expenditure on food, groceries, and rent of 4 -roomed houses in November, 1924. Similarly, in column A, the index-number 1,012 represents the relative weighted average expenditure on food and groceries only for November, 1924. The figures given in the table are comparable throughout: Thus, taking the average weighted expenditufe for all 200 towns on food, groceries, and rent of 5 -roomed houses as equal to 1,597 , the expenditure on the same items in Melbourne is 1,600 , while if 4 -roomed houses were substituted for 5 -roomed the expenditure in Melbourne would be represented by 1,455 .

A change has been made in the basis on which the index-numbers in this table are computed. Previously, the weighted average expenditure on food, groceries, and rent of 5 -roomed houses for the 150 towns in each year was taken as base. In the tables on the foilowing pages the same basis is taken as in the case of the tables referring to 30 towns and 6 capital cities given in the preceding section, i.e., the weighted average expenditure on food, groceries, and housing accommodation in the 6 capital cities in 1911 is made equal to 1,000 .
INDEX-NUMBERS.-COST OF FOOD, GROCERIES AND HOUSING IN 150 TOWNS
FOR NOVEMBER, 1922, AND 200 TOWNS IN 1923 AND 1924, COMPARED WITH
THE WEIGHTED AVERAGE COST OF FOOD, GROCERIES, AND RENT FOR
ALL HOUSES IN THE SIX CAPITAL CITIES IN 1911 AS BASE $(=1,000)$.


INDEX.NUMBERS.-COST OF FOOD, GROCERIES, AND HOUSING IN
150 TOWNS, ETO-continued.

| State and Town. |  |  | 1922. <br> Novern ber. |  |  | 1923. November. |  | $1924 .$ <br> November. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| New Sonth đinuèl- | Wales-con- |  | A | B | 0 | A | 13 | C | A | 13 | C |
| Gilgandra |  |  |  |  | 1,130 | 1,426 | 1,505 |  |  |  |
| Glen Innes |  | 957 | 1,266 | 1,400 | 1,015 | 1,426 | 1,505 | 1,016 $0 \geq 5$ | 4 | 1,321 |
| Grafton |  | 1,006 | 1,359 | 1,478 | 1,0149 | 1,526 | 1,423 1,643 | 1,035 | 1,954 | 1,401 1,430 |
| Grenfell |  | 977 | 1,444 | 1,569 | 1,179 | 1,544 | 1,671 | 1,035 | 1,324 1,498 | 1,430 1,630 |
| Grifflbs Gulgong |  |  |  |  | 1,214 | 1,872 | 2,004 | 1,006 | 1,796 | 1,86 |
| Gulgong |  | 990 |  |  | 1,092 | 1,388 | 1.451 | -995 | 1,291 | 1,354 |
| Hay . |  | 1,004 | 1,296 | 1,358 | 1,039 | 1,434 | 1,566 | -962 | 1,333 | 1,439 |
| Inverell |  | 1,001 | 1,363 | 1,400 |  |  |  | 1,085 | 1,392 | 1,531 |
| Junee |  | 1,991 | 1,418 | 1,407 | 1,102 | 1,452 | 1,521 1,676 | 1,011 | 1,373 | 1,451 |
| Katoomba |  | 1,060 | 1,584 | 1,371 | 1,205 | 1,561 | 1,676 1,859 | 1.972 | 1,564 | 1,696 |
| Kempsey | $\cdots \quad$. | 1,961 | 1,290 | 1,497 | 1,021 | 1,728 1.350 | 1,859 1,383 | 1,129 | 1,619 | 1,737 |
| Kurri Kurri | . |  | 1,20 | 1,427 | 1,181 | 1,450 | 1,383 | 4 | 1,398 | 1,484 |
| Leeton |  |  |  |  | 1,196 | 1,914 | 1,050 | 1,068 | 1,421 | 1,496 |
| Lismore |  | 1,047 | 1,402 | 1,563 | 1,162 | 1,517 | 1,978 | 1,097 | 1,867 1,404 | 1,836 |
| Lithgow |  | 1,018 | 1,355 | 1,472 | 1,166 | 1,547 | 1,655 | 1,023 | 1,422 | 1,562 |
| Maitland |  | 1,994 | 1,350 | 1,402 | 1,086 | 1,547 | 1,055 | 1,028 | 1,409 | 1,502 |
| Moree |  | $\begin{array}{r}1.079 \\ \hline 099\end{array}$ | 1,487 | 1,605 | 1,288 | 1,692 | 1,797 | 1,104 | 1,556 | 1,692 |
| Moss Vale |  | 999 | 1,394 | 1,559 | 1,112 | 1,622 | 1,704 | 1,034 | 1,516 | 1,670 |
| Mudgee |  | 995 990 | 1,414 | 1,504 | 1,115 | 1,515 | 1,611 | 938 | 1,398 | 1,485 |
| Narrabri |  | 992 | 1,292 | 1,395 | 1,109 | 1,427 | 1,563 | 960 | 1,309 | 1,436 |
| Narrandera |  | 1052 | 578 |  | 1,187 | 1,621 | 1,746 | 1,069 | 1,516 | 1,694 |
| Orange |  | 1.055 | 1,578 | 1,657 1,410 | 1,164 | 1,559 | 1,717 | 1,036 | 1,481 | 1,595 |
| Parkes |  | 1,000 | 1,434 | 1,410 | 1,032 | 1,432 | 1,535 | 1992 | 1,447 | 1,565 |
| Penrith |  | 1,000 | 1,434 | 1,059 | 1,083 | 1,604 | 1,696 | 1,020 | 1,480 | 1,595 |
| Port Kembla |  |  |  |  | 1,085 | 1,440 1,467 | 1,557 | 1,025 | 1,340 | 1,436 |
| Portland |  |  |  |  | 1,106 | 1,402 | 1,494 | 1,097 | 1,380 | 1,450 |
| Quean beyan |  | 1,014 | 1,3\%6 | 1,458 | 1,172 | 1,402 | 1,494 | 1,042 | 1,423 | 1,535 |
| Quirindi |  |  | 1,3\% | 1,458 | 1,128 | 1,437 | 1,562 | 1,054 | 1,551 | 1,704 1,507 |
| Richmond |  |  |  |  | 1,121 | 1,492 | 1,588 | 1,075 | 1,493 | 1,56 |
| Scone |  |  |  |  | 1,028 | 1,462 | 1,587 | 1,965 | 1,335 | 1,491 |
| Singleton |  |  |  |  | 1,117 | 1,479 | 1,548 | 988 | 1,353 | 1,442 |
| Tamwortl |  | 921 | 1,339 | 1,497 | 1,065 | 1,427 | 1,582 | 947 | 1,380 | 1,465 |
| Taree |  |  |  |  | 1,088 | 1,598 | 1,687 | 979 | 1,538 | 1,680 |
| 'Temora | .. . | 1,006 | 1,467 | 1,532 | 1,099 | 1,555 | 1,667 | 1,057 | 1,584 | 1,692 |
| Tenterfield |  |  |  |  | 1,137 | 1,499 | 1,565 | 1,010 | 1,383 | 1,430 |
| Tumut |  |  |  |  | 1,149 | 1,511 | 1,643 | 1,039 | 1,533 | 1,632 |
| Ulmarra |  |  |  |  | 1,163 | 1,571 | 1,623 | 1,075 | 1,470 | 1,602 |
| Wagga Wagga |  | 951 | 1,350 | 1,477 | 1,132 | 1,856 | 1,988 | 1,016 | 1,740 | 1,838 |
| Walcha |  |  |  |  | 1,009 | 1,305 | 1,436 | 1,994 | 1,257 | 1,405 |
| Wellington |  | 944 | 1,226 | 1,313 | 1,129 | 1,414 | 1,506 | 1,018 | 1,308 | 1,421 |
| Weston |  |  |  |  | 1,198 | 1,487 | 1,527 | 1,066 | 1,356 | 1,395 |
| Windsor |  |  |  |  | 1,108 | 1,483 | 1,634 | 1,052 | 1,488 | 1,562 |
| Wollongong | $\cdots$ | 1,018 | 1,399 | 1,465 | 1,137 | 1,560 | 1,652 | 1,045 | 1,508 | 1,595 |
| Wyalong Yass . |  | 1.083 1,069 | 1,329 | 1,445 | 1,148 | 1,595 | 1,681 | 1,099 | 1,494 | 1,626 |
| Yass : |  | 1,069 950 | 1,385 | 1,449 1,408 | 1,249 | 1,567 1,412 | 1,648 1,511 | 1,080 | 1,458 | 1,524 |
|  |  |  | 1,306 | 1,408 | 1,014 | 1,412 | 1,511 | 942 | 1,376 | 1,475 |
| Weighted A verage for State $\dagger$ 1,024 |  |  | 1,403 | 1,589 | 1,099 | 1,585 | 1,686 | 1,023 | 1,527 | 1,653 |
| Victoria - |  |  |  |  |  |  |  |  |  |  |
| Melbourne |  | 967 | 1,431 | 1,570 | 1,062 | 1,547 | 1,689 | 963 | 1,455 | 1,600 |
| Ballarat |  | 976 | 1,217 | 1,320 | 1,080 | 1,356 | 1,463 | 987 | 1,268 | 1,384 |
| Bendigo |  | 977 | 1,284 | 1,381 | 1,075 | 1,375 | 1,473 | 088 | 1,293 | 1,373 |
| Geelong |  | 959 | 1,322 | 1,439 | 1,054 | 1,427 | 1,550 | 945 | 1,318 | 1,443 |
| Warrnambon! |  | 932 | 1,273 | 1,431 | 1,067 | 1,448 | 1,578 | 957 | 1,370 | 1,497 |
| Ararat |  | 1,002 | 1,303 | 1,395 | 1,150 | 1,472 | 1,540 | 1,049 | 1,372 | 1,455 |
| Bacchus Marsl |  |  |  |  | 1,081 | 1,480 | 1,640 | , 961 | 1,389 | 1,520 |
| Bairnsuale |  | 1.009 | 1,371 | 1,494 | 1,166 | 1,528 | 1,692 | 1,052 | 1,414 | 1,538 |
| leechworth |  | 996 | 1,293 | 1,275 | 1,114 | 1,364 | 1,433 | 1,040 | 1,303 | 1,369 |
| Bernalla |  | 947 | 1,276 | 1,385 | 1,081 | 1,413 | 1,489 | ,093 | 1,325 | 1, 4,21 |
| Camperdown |  | 963 | 1,330 | 1,539 | 1,055 | 1,450 | 1,581 | 1,001 | 1,404 | 1,52 ${ }^{1}$ |
| Casterton |  |  |  |  | 1,073 | 1,345 | 1,446 | 1,013 | 1,300 | 1,495 |
| Castlemaine |  | 997 | 1,280 | 1,375 | 1,069 | 1,358 | 1,454 | 1,056 | 1,389 | 1,505 |
| Colac |  | 973 | 1,500 | 1,583 | 1,135 | 1,675 | 1,793 | 1,042 | 1,574 | 1,667 |
| Creswick |  | 921 | 1,053 | 1,092 | 1,035 | 1,154 | 1,206 | 962 | 1,107 | 1,126 |
| Daylesford |  | 995 | 1,247 | 1,329 | 1,080 | 1,370 | 1,458 | 986 | 1,216 | 1,282 |
| Dunolly |  | 934 | 1,092 | 1,131 | 1,067 | 1,212 | 1,238 | 996 | 1,147 | 1,180 |
| Echuca |  | 973 | 1,235 \| | 1,327 | 1,069 | 1,364 | 1,464 | 1,026 | 1,355 | 1,470 |

[^1]INDEX-NUMBERS.-COST OF FOOD, GROCERIES, AND HOUSING IN lō0 TOWNS, ETC.-continued.


[^2]INDEX-NUMBERS.-COST OF FOOD, GROCERIES, AND HOUSING IN $150^{\circ}$ TOWNS, ETC.-continued.


By deducting the index-number in column $A$ from those in columns $B$ and $C$, the relative aggregate expenditure on housing accommodation can be ascertained. Thus, for November, 1924, the index-number for food and groceries in Melbourne (column A) is 963 . Subtracting this from 1,455 (column B) gives a difference of 492 , which is the relative cost of house rent for houses of 4 rooms, and from 1,600 (column C) gives a difference of 637, which is the relative cost of house rent for houses of 5 rooms.

Similarly the relative cost of housing accommodation can be ascertained for each of the towns included.

A table showing the retail price index-numbers (food and groceries) for each of the thirty towns for various months since July, 1914, appeared in previous issues, but considerations of space preclude its repetition in the present issue. This table is, however, given in Labour Report No. 14, issued by this Bureau.

## §4. Variations in the Cost of Food, Groceries, Rent, Clothing and Miscellaneous Expenditure.

1. General.-The index-numbers in $\S 3$ show the variations in the cost of fond, groceries, and house rent. The expenditure on these items covers approximately 60 per cent. of the total expenditure of the ordinary household. The balance is expended on clothing, boots, fuel, light, and such miscellaneous items as renewals of furniture, furnishings, drapery, crockery, ludge dues, trade union dues, recreation, newspapers, etc. The Royal Commission on the Basic Wage recommended in its Report that a method should be adopted of ascertaining from time to time the rise and fall in the purchasing-power of money in its relation to the total household expenditure. The Government adopted the recommendation, and the duty of carrying out the necessary investigations was entrusted to the Bureau of Census and Statistics, which adopted the methods hereunder described.
2. Methods Adopted.-The Commission was concerned principally with the ascertainment of variations in the cost of the regimen described in the Indicator Liste published in its Report. It is clear, however, that restriction of the investigations of the Bureau of Census and Statistics in the way suggested by the Commission, would have limited their usefulness. It was decided, therefore, to apply to the extended investigation the method of index-numbers already used in the investigations into variations in the cost of food, groceries, and rent. The index-numbers may be used to determine accurately from time to time the rise and fall in the purchasing-power of money in relation to the reasonable standard of comfort for the typical family as outlined by the Commission, as well as for the determination of variations in any standard fixed by previous investigators, or which may be fixed in the future.

After careful investigation it was decided to adopt for food, groceries, and house rent the commodities, method, and weighting used by this Bureau. The commodities and quantities adopted for food and groceries conform very closely to those given in the Indicator Lists of the Commission. With regard to rent, the Commission adopted a certain type of five-roomed house as its standard for determining the amount allowed for housing. The investigations made by this Bureau were not confined to any particular type, but to the predominant house rent, and can with safety be used to show variations in the rent being paid for the type of house described by the Commission.

The investigations of this Bureau advisedly had been confined to food, groceries, and house rent," and it was necessary, therefore, to make investigations into the cost of clotbing and miscellaneous expenditure. With regard to clothing, the Basic Wage Commission collected a large amount of information as to prices and life of articles, and this has been utilized in computing the index-numbers given in the following tables. Forms were sent out to retailers on which the prices of the articles at November, 1920, were given. These prices, so far as the capital cities are concerned (being in general the prices quoted by the firms to whom the forms were sent), are the predominant prices, i.e., the price of the grade of the articles which is most in demand. The retailers were asked to quote for November, 1921, and for May, 1922, the prices of the same articles. In order to ascertain the change in expenditure, the quantities and life as given in the Indicator Lists of the Basic Wage Commission were used for " weighting " purposes to arrive at a weekly expenditure for clothing. This weekly expenditure is then multiplied by weights in the same manner as is the weekly expenditure on rent, thus giving an aggregate expenditure comparable with the aggregate expenditure on food and groceries and on rent.

With regard to Miscellaneous Expenditure, which covers a very wide field, inquiries were made as to variations in cost of fuel and light, household utensils, drapery, crockery, etc., and also with regard to other items included in the Indicator Lists for Miscellaneous Expenditure, and the aggregate expenditure on these items has been computed in the same manner as that for clothing.

The item Groceries (not Food) has been omitted from Miscellaneous Expenditure, as the index-numbers of this Bureau cover the items allowed for, such as soap, starch, blue, etc.
3. Period Selected as Base.-For the new index-numbers November, 1914, was adopted as base owing to the difficulty of securing information with regard to prices of clothing and miscellaneous items for earlier years, but they may be accepted as typical of immediately pre-war conditions.
4. Variations in Cost in the Capital Cities. $\dagger$-The index-numbers in the following table show the variations not only in each city from period to period, but also as between the various cities at any given period. Thus, the increase in cost in the six capital cities from November, 1914, was greatest in November, 1920, when it amounted to 66.5 per cent. The increase in November, 1924, compared with November, 1914, was 41.7 per cent. Further, in November, 1924, the cost of the commodities and services included was greatest in Hobart ( 1,512 ) and least in Brisbane $(1,316)$.
INDEX-NUMBERS, TOTAL HOUSEHOLD EXPENDITURE, CAPITAL CITIES.1914 TO 1924.
(Note.-Weighted average cost in November, 1914, for all articles in capital cities taken as base $=1,000$ ).


## § 5. Control of Trade, Prices, and House Rents.

In previous issues of the Year Book information was given as to the legislative measures enacted by Federal and State Parliaments for the control of trade, prices, and house rents.

In Queensland the Profiteering Prevention Act 1920, and the Fair Rents Act 1920, and in New South Wales the Fair Rents Act 1915, amended in 1920, are still in force. Similar legislative measures enacted by the other States and by the Federal Parliament bave been repealed or allowed to expire by effluxion of time.

## B. WAGES.

## § 1. Operations under Wages Board and Industrial Arbitration Acts.

1. General.-Particulars of the operations of Wages Boards and Industrial and Arbitration Courts under the Commonwealth and State Acts for the regulation of wages, houre, and conditions of labour were first compiled to the 31st December, 1913, and reviews to the end of approximately quarterly periods appear in Labour Bulletins and Quarterly Summaries to the 31st December, 1924.

[^3]2. Awards, Determinations, Industrial Agreements.-The following table gives a summary for each quarter of the years 1923 and 1924 :AWARDS, DETERMINATIONS, AND INDUSTRIAL AGREEMENTS, 1923 AND 1924.

3. Boards Authorized, Awards, etc., in Force.-(i) Totals for Australia. The following table gives particulars at the dates specified for all States-excepting Western Australia, in which State there is no provision for Boards-of Boards authorized, etc., and, including operations under the Commonwealth and the Western Australian Arbitration Acts, of the number of awards, determinations, and industrial agreements in force :-
BOARDS AUTHORIZED, ETC., AWARDS, ETC.—AUSTRALIA, 1913, 1923, AND 1924.


[^4]Considerable expansion of the principle of the fixation of a legal minimum rate of wage and of working conditions took place during the eleven years ended 31st December, 1924. At the end of 1924, 536 additional awards or determinations were in force in Australia. The number of industrial agreements* made and in force under the various Acts increased during the eleven years under review by 148.
(ii) Summary for States. The following table gives particulars for each State and the Commonwealth of the number of Boards authorized, etc., for the years specified :BOARDS AUTHORIZED, AWARDS, ETC.-SUMMARY, 1913, 1923, AND 1924.

(a) The figures for New South Wales are exclusive of Demarcation Boards.
(b) Including boards which were subsequently dissolved, owing to alteration in the sectional arrangement of industries and callings.
(c) Omitting a number of awards which expired on the 31st December, 1913.

## § 2. Rates of Wage and Hours of Labour.

1. General.--The collection of information respecting the current rates of wage payable in different callings and in occupations in various industries was first undertaken by the Commonwealth Bureau of Census and Statistics in the early part of the year 1913. The particulars acquired were obtained primarily from a wards, determinations and agreements, under Commonwealth and State Acts, and therefore show the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which obviously

* The registration of industrial agreements is not provided for under the Victorian Act, but such agreements may be reglstered and fled under the provisions of the Commonwealth Conciliation and Arbitration Act.
are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres have been taken. In cases where no award, determination, or agreement is in force, particulars are given, where available, of the ruling union or predominant rate as furnished by employers or secretaries of trade unions. The total number of occupations for which particulars of wages are available back to 1901 is 652 . Since 1913, when the scope of the inquiry was extended to 930 specified industries and 4,256 adult occupations ( 3,948 male and 308 female), the number of occupations included in the comparative computations has been kept constant.

The index-numbers for male adult workers were computed with the weighted average wage in 1911 as base ( $=1,000$ ) in order that comparisons might more readily be made between these index-numbers and the retail prices index-numbers which are also computed to the year 1911 as base. In the case of females, however, it has not been possible to secure information for years prior to 1914, and the index-numbers are therefore computed with the weighted average rate of wage payable to adult female workers in Australia at 30th April, 1914, as base ( $=1,000$ ).

An extensive tabular presentation of the minimum rates of wage for adult male and female workers in the main occupations in the capital city of each State is given in the Appendix to Labour Report No. 15.
2. Weekly Rates of Wage, 1920 to 1924.-(i) General. The arithmetical average of the rates of wage given in the Appendix referred to furnishes the basis for the computation of relative weighted wages in the different States and industrial groups.
(ii) Adult Males-States. The following table gives the weighted average nominal weekly rates of wage payable to adult male workers at the 31st December in the years 1920 to 1924 for a full week's work in each State and Australia, together with index-numbers computed with the average for Australia for the year 1911 as base $(=1,000)$.

## WAGES.-ADULT MALES-WEIGHTED AVERAGE NOMINAL WEEKLY RATE PAYABLE FOR A FULL WEEK'S WORK, AND WAGE INDEX-NUMBERS, 3Ist DECEMBER, 1920 T0 1924.

Note.-Index-numbers based on the average wage for Australia in 1911 (51s. 3d.) as base $(=1,000)$. The index-numbers in this table are comparable throughout.


Index-numbers.

| 31st December, 1920 | 1,835 | 1,679 | 1,785 | 1,613 | 1,751 | 1,674 | 1,752 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31st December, 1921 | 1,869 | 1,826 | 1,886 | 1,745 | 1,853 | 1,788 | 1,844 |
| 31st December, 1922 | 1,785 | 1,783 | 1,830 | 1,708 | 1,829 | 1,726 | 1,785 |
| 31st December. 1923 | 1,844 | 1,865 | 1,837 | 1,770 | 1,838 | 1,802 | 1,840 |
| 3lst March, $1924 .$. | 1,835 | 1,878 | 1,841 | 1,765 | 1,828 | 1,806 | 1,840 |
| 30th June, 1924 | 1,835 | 1,870 | 1,847 | 1,778 | 1,829 | 1,807 | 1,840 |
| 30th September, 1924 | 1,832 | 1,863 | 1,868 | 1,783 | 1,831 | 1,803 | 1,840 |
| 3isi Deceuiber, 1024 | 1.824 | 1,862 | 1,868 | 1,791 | 1,847 | 1,805 | 1,839 |

(a) Weighted average.

The results show that at the 31st December, 1924, the weighted average nominal weekly rate of wage was highest in Queensland, followed in the order named by Victoria, Western Australia, New South Wales, Tasmania, and South Australia. In all States wages increased rapidly from December, 1919, to the end of 1921. During 1922, however, the a verage declined on account of adjustments made in accordance with the decrease in the cost of living. In 1923 the average wage increased in each Statc. During 1924 wages decreased in New South Wales and Tictoria, but there was sufficient movement in the opposite direction in the remaining States to allow the weighted average for Australia as a whole to remain practically stationary. The largest percentage increase during the period under review was in South Australia, with 11.0 per cent., followed by Victoria, 10.9 per cent., Tasmania 7.8 per cent., Western Australia 5.5 per cent., and Queensland 4.6 per cent. A decrease of 0.6 per cent. occurred in New South Wales. The increase in the weighted average for Australia was 5.0 per cent.
(iii) Adat Males-Industrial Groups. The following table shows (a) the average weekly rate of wage in each of the fourteen industrial groups, (b) the weighted average wage for all groups combined, and (c) index-numbers based on the average wage for all groups in 1911 ( 51 s .3 d .), as base ( $=1,000$ ) :-

## wages.-Addlt males-Weighted average nominal weekly rate FOR A FULL WEEK'S WORK, AND WAGE INDEX-NUMBERS IN EACH INDUSTRIAL GROUP, 31st DECEMBER, 1920 T0 1924.

Note.-Index-numbers for each industrial group and all industrial groups, based on the average wage for all groups in 1911 (518. 3d.), as base $(=1,000)$. The index-numbers in this table are comparable throughout.

Weighted Average Nominal Weekly Rate of Wage, and Index-Number at-

| Industrial Group. | 31st Slst <br> Dec., Dec., <br> 1920. 1921. |  | 31st Dec., 1922. | 31st Dec., 1923. | 31 st March, 1924 | $\begin{aligned} & 30 \mathrm{th} \\ & \text { Jume, } \\ & 1924 . \end{aligned}$ | 30 th <br> Sept., 1924. | 81st Dec., 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | s. d. | s. ${ }^{\text {d }}$ | s. ${ }^{\text {d }}$ | s. d. | s. d. | s. ${ }^{\text {d }}$. | s. $d$. | $\varepsilon . d$. |
| I. Wood, Furniture, , Wage ... | 95.1 | 98.2 | 95.4 | 99.2 | 99.9 | 99.9 | 99.9 | 99.7 |
| 1. Wood, Furniture, etc. Index-No. | 1,855 | 1,916 | 1,860 | 1,935 | 1,946 | 1,946 | 1,947 | 1,943 |
| IT. Engineering, etc. $\left\{\begin{array}{l}\text { Wage } \\ \text { Index-No. }\end{array}\right.$ | 192.5 1,803 | 193.2 | 93.10 1,832 | 1,900 | 97.9 1,907 | -97.9 | 197.2 1,896 | 97.5 1,901 |
| III Food, Drink, etc. $\{$ Wage $\ldots$ | 89.3 | 93.10 | 91.10 | 94.2 | 93.10 | $9 \pm .0$ | 93.11 | 94.0 |
| III. Food, Drink, etc. Index-No. | 1,742 | 1,832 | 1,792 | 1,837 | 1,831 | 1,833 | 1,832 | 1,835 |
| I V. Clothing, Boots, Wage ${ }^{\text {W }}$ | 86.5 | 93.3 | 91.1 | 93.11 | 94.0 | 94.5 | 93.0 | 93.0 |
| TV. Clothing, Boots, etc. Index-No. | 1,687 | 1,819 | 1,777 | 1,833 1045 | 1,835 | 1,837 107 | 1,815 | 1,815 |
| v. Books, Printing, flage | 99.6 | 104.7 9040 | 102.9 | 104.5 2037 | 106.6 | 107.4 | 108.0 | 108.3 |
| . Books, Printing ${ }^{\text {etc. }}$ Index-No. | 1,941 | 2,040 | 2,004 | 2,037 | -,078 | 2,094 | 2,107 | 2,113 |
| VI. Other Manu- f Wage . | 88.11 | 95.0 | 91.11 | 96.2 | 95.3 | 95.3 | 95.6 | 95.6 |
| facturing Index-No. | 1,736 | 1,854 | 1,793 | 1,876 | 1,859 | 1.859 | 1,863 | 1,863 |
| tilding ..f Wage | 95.7 | 102.5 | 100.5 | 103.8 | 104.5 | 104.3 | 105.1 | 105.0 |
| Index-No. | 1,865 | 1,999 | 1,980 | 2,023 | 2,037 | 2,035 | 2,050 | 2,058 |
| vIII Mining etc. . . Wage . . | 103.10 | 105.4 | 103.8 | 104.5 | 104.1 | 103.11 | 103.11 | 104.2 |
| VIII. Mining, etc. $\cdot$, Index-No. | 2,026 | 2,056 | 2,022 | 2,037 | 2,032 | 2,028 | 2,028 | 2,033 |
| IX. Railways, etc. . . Wage | 93.1 | 07.5 | 93.4 | 97.8 । | 96.0 | 96.5 | 97.3 | 96.11 |
| IX. Rallways, etc. - ${ }^{\text {a }}$ Index-No. | 1,816 | 1,901 | 1,821 | 1,906 | 1,888 | 1,881 | 1,898 | 1,892 |
| X. Other Land f Wage $\ldots$ | 37.3 | 90.2 | 88.5 | 92.6 | 90.6 | 90.0 | \$9.9 | 89.4 |
| X. Other Iand Iransport Index-No. | 1,702 | 1,760 | 1,725 | 1,806 | 1,766 | 1,756 | 1,751 | 1,744 |
| XI. Shipping, f Wage .. | 88.0 | 101.8 | 99.9 | 102.4 | 99.9 | 98.11 | 98.6 | 97.10 |
| XI. Shipping, $\quad$ Etc. (a) Index-No. | 1,716 | 1,984 | 1,947 | 1,997 | 1,946 | 1,031 | 1,923 | 1,008 |
| XII. Agricultural, f Wage ${ }^{\text {Index }}$ No | 16 | 89 | 83.11 1.637 | 85.8 1.671 | 85.11 | 85.11 | 86.0 | 85.10 |
| etc. ( $b$ ) ${ }^{\text {dindex-No }}$ | 1,699 | 1,73 | 1,637 | 1,671 | 1,676 | 1,677 | 1,679 | 1,675 |
| XIII. Domestic, f Wage | 80.6 | 81 | 82 | 84.6 | 85 | 85.9 | 85.10 | 86.0 |
| XIF. ${ }^{\text {etc. }(b)}$ Index-No. | 1,571 | 1,642 | 1,606 | 1,648 | 1,663 | 1,674 | 1,675 | 1,678 |
| XIV. Miscellaneous ... Wage | 84.11 | 91.1 | 88.8 | 92.3 | 92.5 | 92.6 | 92.4 | 92.2 |
| XiV. Miscellaneous ${ }^{\text {a }}$ ( Index-No. | 1,656 | 1,778 | 1,730 | 1,800 | 1,804 | 1,804 | 1,802 | 1,708 |
| All Industrial f Wage | $89 \cdot 10$ | $94 \cdot 6$ | 91.6 | 94.4 | 9.4.4 | 44.3 | 94.4 | 04.3 |
| Groups (c) llndex-No. | 1,75 | 1,544 | 1,785 | 1,840 | 1,840 | 1,840 | 1,840 | 1,890 |

(a) Including the value of victualling and accommodation where supplied. (b) Inciuding the value of board and lodging where supplied.
(c) Weighted average.

The foregoing table shows that the rate of increase in the weighted average weekly wage in occupations and callings classified in the fourteen industrial groups during the period 31st December, 1920 to 1924, was greatest in Group XI. (Shipping), 11.2 per cent., followed in the order named by Groups VII. (Building), 10.3 per cent., V. (Books, Printing, etc.), 8.9 per cent., and XIV. (Miscellaneous), 8.6 per cent. The smallest increase occurred in Group VIII. (Mining), 0.3 per cent., while one group (Agricultural, etc.), shows a
decrease of 1.4 per cent. In nine of the groups the increase was more, and in five groups less than the increase in the weighted average for all groups. • During 1924 there was a decline in the averages for eight groups, with increases in the remainder. The largest decreases occurred in Group XI. (Shipping), etc., 4.5 per cent., followed by Group X. (Other Land Transport), 3.4 per cent. The greatest increases occurred in Groups V. (Books, Printing, etc.), and XIII. (Domestic, etc.), with 3.7 and 1.8 per cent. respectively. The weighted average wage for all groups combined shows no appreciable movement during the twelve months.
(iv) Adull Females-States. The following table shows the weighted average weekly rate of wage payable to adult female workers for a full week's work in each State and Australia at the dates specified. Index-numbers are given also for each State based on the average weekly wage at the end of each of the periods indicated, computed with the weighted average wage for all States at the 30 th April, 1914, as base $(=1,000)$.

## WAGES.-ADULT FGMALES-WEIGHTED AVERAGE NOMINAL WEEKLY RATE PAYABLE FOR A FULL WEEK'S WORK, AND WAGE INDEX-NUMBERS, 3Ist DECEMBER, 1920 TO 1924.

Note.-Index-numbers based on the average wage for Australia at the 30th April, 1914 (278. 2d.) as base ( $=1,000$ ). The index-numbers in this table are comparable throughout.


As in the case of male occupations, female wages increased rapidly up to December, 1921, but in 1922 reductions were recorded. The decrease over the whole of Australia was relatively much less than in the case of males. There was an increase in each State during 1923, with the exception of Western Australia, where the wage remained stationary. The figures for 31st December, 1924, indicate a very slight increase so far as Australia is concerned, and in respect of individual States increases in all excepting New South Wales, the greatest increase being ls. 9d. in Tasmania. The advance in the Australian average during the period was 11.5 per cent.
( v ) Adult Females-Industrial Groups. The following table gives particulars of the weighted average weekly rate of wage payable to adult female workers in the industria! groups in which they are mainly employed, and in all groups combined. Taking the average wage for all groups at the 30th April, 1914, as base ( $=1,000$ ), index-numbers are given computed on the average rate of wage ruling at the end of cach period indicaied.

## wages.-AdULT FEMALES-WEIGHTED AVERAGE NOMINAL WEEKLY RATE PAYABLE FOR A FULL WEEK'S WORK, AND WAGE INDEX-NUMBERS IN EACH INDUSTRIAL GROUP, 3Ist DECEMBER, 1920, T0 1924.

Note.-Index-numbers for each Industrial Group and all Industrial Groups, based on the average wage for all groups at 30th April, 1914 (27s. 2d.), as base ( $=1,000$ ). The index-numbers in this table are comparable throughout.

(a) Including the value of board and lodging, where supplied. (b) Weighted Average.

The greatest increase in the weekly rate of wage occurred in Group IV. (Clothing, Boots, etc.), 14.3 per cent., followed in the order named by Groups I., II., V., and VI. (All Other Manufacturing), 12.5 per cent., XIV. (Miscellaneous), 9.5 per cent., III. (Food, Drink, etc.), 8.0 per cent., and XIII. (Domestic, Hotels, etc.), 7.2 per cent. The weighted average weekly rate for all groups was 11.5 per cent. higher at the end of 1924 than at the 31st December, 1920.

The average wage for females in each industrial group, excepting IV. (Clothing, Boots, etc.), increased during the year 1924, the largest increase being 2.4 per cent. in Group III., followed in the order named by Groups XIV., 2.3 per cent., I., II., V., and VI., 1.2 per cent., and XIII., 0.3 per cent. Group IV. decreased 0.9 per cent. The weighted average for all groups increased by 0.3 per cent.
3. Relative Hours of Labour and Hourly Rates of Wage, 1920 to 1924.-(i) General. The rates of wage referred to in preceding paragraphs relate to the minimum payable for a full week's work. The number of hours constituting a full week's work differs, however, in many instances between various trades and occupations in each State, and between the same trades and occupations in the several States. In order to secure what may be for some purposes a more adequate standard of comparison, it is desirable to reduce the comparison to a common basis, viz., the rate of wage per hour. Particulars are given in the following table classified according to States, for male and female occupations separately, at the end of the years 1920 to 1924. These particulars relate to (a) the weighted average nominal weekly wage, (b) the weighted average number of working hours constituting a full week's work, and (c) the weighted average hourly wage. The weighted average weekly wage relates to all industrial groups combined, and includes the value of board and lodging where supplied in land occupations, and the value of victualling in
marine occupations, whereas the number of working hours and the hourly wage relate to all industrial groups other than Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Many of the occupations included in these two groups are of a casual or seasonal nature, and the hours of labour are not generally regulated either by awards or determinations of industrial tribunals or otherwise, hence the necessary data for the computation of the arerage number of working hours are not available.

The general effect of reducing the rates of wage to a common basis (i.e., per hour) is to eliminate on comparison any apparent difference between the several States which may be due to unequal working time.
(ii) Adult Males and Females. Particulars for the last five years for adult males and females are given in the table hereunder : -
WEEKLY AND HOURLY WAGES AND hOURS OF LABOUR.-ADULT WORKERS, 1920 T0 1924.


Female Workers.

(a) Weighted average weekly rate in all industrial groups combined. (b) Weighted average working hours per week, and computed hourly rates of wage for all industrial groups excepting Grouns XI. (Shipping, etc), and XIT. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in industrial groups XI. and XII.
(iii) Index-numbers. There has been a diminution in each of the States during the years 1920 and 1921 in the number of working hours constituting a full week's work for male and female occupations, but during 1922 and 1923 certain increases in hours were recorded, principally in New South Wales. Each State, excepting New South Wales, shows a decrease for 1924. The effect of these changes on the hourly rate of wage as compared with the general increase in the weekly wage is readily seen from the comparative index-numbers given in the following table. In each instance (male and female occupations separately) the basis taken is the weighted average for Australia at the 30th April, $1914(=1,000)$.

WEEKIY AND HOURLY WAGE INDEX-NUMBERS.-ADULT WORKERS, 1920 T0 1924.
Note.-Weighted average for Australia at 30th April, 1914, as base ( $=1,000$ ).

4. Weighted Average Nominal Weekiy Hours of Labour, Aduit Males.-The following table shows the weighted average nominal hours of labour (exclusive of overtime) in a full working week for male workers in each State and Australia at the 31st December, 1920 to 1924. Index-numbers are given also for each State based on the weekly average hours at the end of each of the periods specified, computed with the weighted average hours of labour for Australia at the 30th April, 1914, as base $(=1,000)$.

HOURS OF LABOUR.-WEEKLY INDEX-NUMBERS, ADULT MALES, 1920 T0 1924.
Note.-Index-numbers based on the Average Hours of Labour for Australia at the 30th April, $1914(48.93)$ as base $(=1,000)$. The index-numbers in this table are comparable throughout. Overtime is excluded.

| Date. | ]articulars. | N.S.w. | Vic. | Q'land. | S.A. | W.A. | Tas. | Austraila. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31st Dec., 1920 | $\left\{\begin{array}{cc}\text { Weighted average weekly } \\ \text { hours of labour (a) } & \ldots \\ \text { Index-numbers } & \cdots\end{array}\right.$ | 47.51 971 | 47.19 964 | 45.63 $\mathbf{3 3 3}$ | 47.29 966 | 46.53 951 | 47.33 967 | 47.07 962 |
| 31st Dec., 1921 | $\left\{\begin{array}{l}\text { Weighted a verage weekly } \\ \text { hours of labour (a) }\end{array}\right.$ | 45.66 936 | 46.95 960 | 45.59 930 | 47.07 962 | 46.94 945 | 46.84 <br> 957 | 46.22 945 |
| 31st Dec., 1922 | $\left\{\begin{array}{c}\text { Weighted average weekly } \\ \text { lours of labour (a) }\end{array}\right.$ | ${ }^{46.05}$ | 46.99 060 | 45.51 980 | 47.00 961 | 40.41 948 | 46.93 $\mathbf{9 5 9}$ | 46.38 948 |
| 31st Dec., 1923 | $\left\{\begin{array}{cc}\text { Weighted a verage weekly } \\ \text { hours of labour (a) } & \cdots \\ \text { Index-numbers } & \ldots\end{array}\right.$ | 46.73 955 | 47.06 962 | 45.51 930 | 47.00 961 | 46.66 954 | 47.27 966 | 46.70 954 |
| 31st. Dec., 1924 | $\left\{\begin{array}{cc}\text { Weighted a verage weekly } \\ \text { hours of labour (a) } & \cdots \\ \text { Index-numbers } & \cdots\end{array}\right.$ | 46.75 955 | 46.99 960 | 45.40 $\mathbf{9 2 8}$ | $\begin{array}{r} 46.98 \\ 960 \end{array}$ | 46.52 951 | 47.26 966 | $\begin{array}{r} 46.66 \\ 954 \end{array}$ |

[^5] regulated by indnetrial tribunals.

There was a diminution in each State during the years 1920 and 1921 in the number of working hours constituting a full week's work for male occupations, but during 1922 and 1923, in certain States, especially in New South Wales, hours of labour were increased. Each State, excepting New South Wales, shows a decrease for 1924. The weighted average weekly hours index-number for Australia at the 31st December, 1924, was 954, as compared with 1,000 at 30th April, 1914, a reduction of 4.6 per cent. The lowest weighted average nominal weekly hours indexnumber at the 31st December, 1924, was that for Queensland (928), followed in the order named by Western Australia (951), New South Wales (955), South Australia and Victoria (960), and Tasmania (966).
5. Nominal and Effective Wages, 1901 to 1924.-(i) Nominal Weekly Wage Index-numbers-Each State. The following table shows the progress in nominal weekly rates of wage for all industries in each State, the weighted average wage for Australia in 1911 being taken as the base $(=1,000)$. These results are based generally upon rates of wage prevailing in the capital city of each State, but in certain industries, such as mining, rates are necessarily taken for places other than the capital cities.

## NOMINAL WAGE INDEX-NUMBERS, ADULT MALES, 1901 T0 1924.

(Weighted Average Wage for Adstralia in 1911=1,000.)

(a) Weighted average.

Notr.-The figures in the above table are comparable both horizontally and vertically.

During the period 1911 to the end of the year 1924 the average weekly rate of wage in New South Wales increased 82 per cent., in Victoria 89 per cent., in Queensland 88 per cent., in South Australia 77 per cent., in Western Australia 61 per cent., and in Tasmania 126 per cent., while the weighted average weekly rate for Australia increased 84 per cent.
(ii) Effective Weekly Wage Index-numbers-States. In comparing wages, two elements are of obvious importance, viz., (i) hours worked per day or week, and (ii) the cost of commodities and housing. Thus 60s. per week of 60 hours represents the same hourly rate as 48 s . per week for 48 hours. Similarly, if the cost of commodities and housing increases 25 per cent., e.g., if the prices index-number rises from 1,000 to 1,250 , then 60 s . per week (the index-number being 1,250 ), is effectively equal only to 48 s . (when the indexnumber was 1,000 ). Or, again, if the prices index-number falls from 1,000 to 750 , then 60s. per week, when the index-number is 750 , would have the same purchasing power as 80 s . when the index-number was 1,000 . Ignoring for the present the number of hours worked, and assuming that the real value of the average wages is to be measured by their purchasing power, the actual average wages paid may be reduced to their effective value by applying the prices index-numbers to the nominal wages index-numbers. The following table shows the effective wage index-numbers so ascertained in each State for each of the years indicated from 1901 to 1924.

In computing these effective wage index-numbers for years prior to 1914 , the nominal wage index-numbers given in the preceding table have been divided by the price index-numbers in Section A §2. The resulting index-numbers show for each State and for Australia for the years specified the variations in effective wages. The nominal wage index-numbers for these earlier years are based on rates of wage current at the end of December, the only data available. For the years 1914 onward, however, the nominal wage-index numbers used are based on the average wage for the four quarters in each year, and in this respect differ from those in the preceding sub-sections. However, so far as the years 1901 and 1911 are concerned, as the movement in wages during any one year prior to 1914 was very slight, it is possible that if the wage data were available in quarters, the index-numbers used would approximate very closely to those based on averages for the year.

EFFECTIVE WEEKLY WAGE INDEX NUMBERS.-ADULT MALES, 1901 T0 1924.(a)

(a) As to the effect in abnormal periods, see Labour Report No. 6, pp. 20-2, Section IV., par. 3.
(b) Weighted average.

In the table above the effective wage index-numbers are computed to the one base, that of Australia for 1911. Subject to the qualification already referred to, which, as has been pointed out, does not materially affect the figures, the index-numbers are comparable in all respects, and comparisons may be made as to the increase or decrease in the effective wage index-number for any State over a period of years. Thus, comparing 1924 with 1901, and also with 1911, there has been an increase in the effective wage in all States.
(iii) Effective Wages and Standard of Comfort. In the preceding table particulars are given as to variations in effective wages in each State, due allowance having been made for variations in retail prices of commodities, though not for unemployment.

For years prior to 1913 the data available as to unemployment are so meagre that comparative results allowing for variations both in prices of commodities and in unemployment cannot be accurately computed for the several States. In the next table for these earlier years the percentage of unemployment for Australia and the nominal wage index-numbers relate to the end of the year. For 1914 and subsequent years the wages index-numbers, percentages of unemployment, and retail prices index-numbers are the average for the year. Column I. shows the nominal wage index-numbers, and Column II. the relative percentages unemployed. Applying these percentages to the numbers shown in Column I., and deducting the results from each corresponding index-number to allow for relative loss of time, the figures in Column III. are obtained. These figures are then re-computed with the year 1911 as base, and are shown in Column IV. In Column V. the retail prices indexnumbers are shown, and in Columns VI. and VII. the effective wage index-numbers are given, firstly, for full work, and secondly, allowing for lost time. These are obtained by dividing the figures in Columns I. and IV. respectively by the corresponding figure in Column V. The resulting index-numbers show for Australia for the years specified the variations in effective wages. or in what may be called the " standard of comfort."*

[^6]A comparison between the figures in Columns I. and VI. gives the relation between the nominal rates of wage and the purchasing efficiency of these rates. The Ggures in Column VII. show variations in effective wages after allowing not only for variations in purchasing power of money, but for the relative extent of unemployment also.

WAGE INDEX-NUMBERS, NOMINAL AND EFFECTIVE, 1901 TO 1924.(a)

(a) As to the effect in abnormal periods, see Section IV., par. 3, of Labour Report No. 6.

Note.-For years prior to 1914, the nominal wage index-numbers and the percentage unemployed relate to the end of the year only, but from 1914 onward these figures, in addition to those for retail prices, are averages ior the whole year.

Compared with 1911 the effective wage in 1901 was 3.6 per cent. less for full work, and 5.5 per cent. less after allowance for unemployment. In connexion with the index. numbers in Column VII., unemployment was less in 1911-the base year, than in any other year. During the period 1912 to 1920, while wages increased steadily, prices increased at a greater rate, with the result that the purchasing power of wages was less in each of these years than in 1911, the lowest point reached being in 1915 when the full time index number was 14.6 per cent. less, or, allowing for unemployment, 18.7 per cent. less than for the base year. The first occasion on which the effective wage was higher than in 1911 was in 1921, when wages increased considerably while prices declined, the increase in effective wages being 7.6 per cent., but only 0.2 per cent. allowing for unemployment. Unemployment reached its "peak" during 1921. Both wages and prices fell in 1922, but the former less than the latter, resulting in a further increase in the effective wage. As wages remained practically stationary while prices rose, the effective wage for 1923 showed a decline.

In 1924 a rise in wages coincided with a fall in prices, and the effective wage increased. The average unemployment being greater than in the preceding year the increase in the effective wage was greater for full work than allowing for unemployment. In 1924 the effective wage was 9.5 per cent. (full time) and 4.6 per cent. (allowing for unemployment) higher than in 1911.

## § 3. Changes in Rates of Wage.

1. Geueral.-A change in rate of wage is defined as a change in the weekly rates of remuneration of a certain class of employees, apart from any change in the nature of the work performed and apart from any revision of rates due to increased length of service or experience. It is obvious that under this definition certain classes of changes are excluded, such, for example, as (a) changes in rates of pay due to promotion, progressive increments, or, on the other hand, to reduction in pay or grade to inefficient workers, and (b) changes in average earnings in an occupation due to a change in the proportions which more highly-paid classes of workers bear to those paid at lower rates. Bonuses to employees have not been taken into account in the tabulations. Each single change recorded relates to a change in the rates of wage effected in a specific industry or calling, and includes any and all changes to workers in that industry, irrespective of the different number of separate occupations or trades affected. Moreover, in some instances a change may relate to the employees of a single employer or to those of a number of employers, according to the instrument or method operating to bring about the change.

There is a certain amount of overstatement as regards " persons affected," since in the quarterly adjustments of wages the same persons figure on four occasions. The difficulty of eliminating this factor has, however, been found too great to justify the labour involved. A further complication also arises from the overlapping of Commonwealth and State awards.
2. Methods by which Changes were Effected, and Results.-(i) Summary, Australia, 1924. The following table gives for Australia the number of changes in rates of wage, the number of workpeople affected, and the total net amount of increase in the weekly wage distribution brought about either without, or after, stoppage of work during the year 1924, as a result of the application of one or other of the methods set out in the tables :-
CHANGES IN RATES OF WAGE.-METHODS AND RESULTS, AUSTRALIA, 1924.(a)

(a) In this section of the table an Award or Agreement under the Commonwalth Conciliation and Arbitration Act and the Arbitration (Public Service) Act is counted as one change only, although such Award, Agreement, or Order may be operative in more than one State.
(b) Decrease.

The total number of changes recorded during the year 1924 was 718 , of which 264 or 36.7 per cent. of the total number were brought about by award or determination under State Industrial Acts and 211 by awards of the Commonwealth Court of Conciliation and Arbitration.
(ii) Summary, Australia, 1920 to 1924. So far as possible, the effect of awards or agreements is recorded in the figures for the year in which such awards or agreements are made and filed. In certain cases, however, the awards or agreements are made
retrospective as to the date on which the altered rate of wage has to be paid, and in others the particulars as to the number of workpeople affected and the effect of the change are difficult to ascertain.

(a) See footnote to preceding table. (b) Decrease.

The greatest number of changes was effected through the instrumentalities of the State Acts, and these comprised 64.6 per cent. of all changes in 1920 , but only 46.7 per cent. in 1924, while the changes made under the Commonwealth Acts increased from 13.2 per cent. to 40.5 per cent. "Direct negotiations" between parties shows a marked decline in the later years. In 1920, 333 changes, or 19.3 per cent., of the total affecting 17 per cent. of all persons concerned in the changes of that year, were so brought about, whereas in 1924 , only 23 changes ( 3.2 per cent.), affecting 1,939 persons, or 0.2 per cent. of the whole, resulted from this agency.
3. Number and Effect of Changes.-(i) General. The following tables give particulars of changes which occurred in each State during the years specified. As regards the number of persons affected, the figures refer to the total number of persons ordinarily engaged in the various industries, and the results as to the amount of increase in wages are computed for a full week's work for all persons ordinarily engaged in the several industries and occupations affected. In cases of changes in existing minimum rates under awards or determinations of industrial tribunals it has been assumed (in the absence of any definite information to the contrary) that the whole of the employees in each occupation received the minimum rates of wage before and after the change.

The figures given in regard to the amount of increase per week do not relate to the increase each week, but only to the increase in a single week on the assumption that the full number of persons ordinarily engaged in the particular trade or occupation affected by the change were employed during that week. It is obvious, therefore, that the aggregate effect per annum cannot be obtained without making due allowance for unemployment and for occupations in which employment is seasonal or intermittent. It is also clear that since unemployment and activity in all branches of industry may vary from year to year, and in many branches from season to season also, no accurate estimate of the actual effect of the changes in the total amount of wages received or paid per annum can be made until the determining factors have been investigated. These factors are (a) the amount of unemployment, and (b) the period of employment in seasonal industries.

Changes brought about by awards and agreements under the Commonwealth Conciliation and Arbitration Act, the Arbitration (Public Service) Act, and the Industrial

Peace Act 1920 are necessarily included hereunder as changes in each State to which such awards and agreements apply. The average increase per head per week is computed to the nearest penny.
(ii) Summary-States, 1924. During the year 1924 the number of increases in rates of wage recorded was in excess of the decreases.

CHANGES IN RATES OF WAGE.-NUMBER AND EFFECT, 1924.


The preceding figures for changes in wages include all those which have occurred either through the operations of wage tribunals or as the result of direct negotiations between employers and employees. Many workers in all States come under the juris. diction of awards made by the Federal Arbitration Court. The principle of quarterly adjustments adopted by that Court led to variations in all States during the year.

(a) Changes recorded in this column are common to all States, as the particulars relating to the number of workpeople affected and the net amount of increase per week in each State were not ascertainable. (b) Decrease.

The relative positions of the States in regard to the number of changes effected, and also in regard to the number of workers affected in each year naturally depend largely on the magnitude of the different industries and callings in which changes took place.
(iii) Industrial Groups--Australia. Workpeople affected by Changes. In the following table particulars are given of the number of changes, the number of persons (males and females) affected, and the total amount of increase per week, classified according to Industrial Groups throughout Australia during the years 1920 to 1924 :-

## CHANGES IN RATES OF WAGE.-INDUSTRIAL GROUPS, AUSTRALIA, 1920 TO 1924.(a)



[^7](iv) Male and Female Occupations. Included in the changes in rates of wage recorded in the table on page 581 are those which in the whole or part thereof affected female occupations. Particulars in respect of these ohanges in so far as they relate to the numbers of male and female workers affected, etc., are set out hereunder :-

## Changes in rates of wage.-effect in male and female OCCUPATIONS, 1920 TO 1924.



Number of Male Employees Affected.

| 1020 | 385,118 | 202,972 | 126,306 | 66,824 | 48,088 | 24,213 | 703 |  | 7,812 | 862,036 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 219,813 | 185,895 | 90,918 | 37,062 | 19,988 | 13,484 |  |  | 21,710 | 588,870 |
| 1922 | 322,813 | 85,005 | 64,473 | 34,085 | 18,248 | 14,473 |  | 387 | 24,600 | 564,034 |
| 1923 | 465,446 | 256,666 | 27,421 | 60,967 | 31,507 | 24,931 | 71 | 1,002 | 42,830 | 910,841 |
| 1924 | 181,779 | 295,591 | 38,271 | 95,743 | 37,185 | 24,100 | 35 | 30 | 76,994 | 749,728 |

Net Amount of Increase per Week to Male Employees.


Average Increase per Head per Week to Male Employees.


Number of Female Employees Affected.

| 1920 | 69,492 | 55,239 | 19,158 | 9,781 | 7,401 | 4,104 |  |  | 75 | 165,250 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 52,969 | 59,189 | 24,804 | 7,634 | 2,707 | 1,299 |  |  | 1,793 | 143,395 |
| 1922 | 41,096 | 5,167 | 14.318 | 1,637 | 299 | 1,565 |  |  |  | 64,082 |
| 1923 | 53,994 | 19,428 | 2,630 | 2,242 | 550 | 987 |  |  | 180 | 80,011 |
| 1924 | 14,287 | 43,170 | 14,704 | 15,518 | 3,413 | 2,044 |  |  | 4,791 | 97,027 |

Net Amodnt of Inorease per Week to Female Employees.

| 1920 | $\underset{20,783}{ }$ | $\stackrel{¢}{20,828}$ | $\underset{6,316}{ }$ | 2,818 | $\underset{3,038}{\text { ¢ }}$ | $\underset{1,488}{ }$ | $£$ | £ | ${ }^{\text {¢ }} 88$ | ${ }_{55,459}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 11,636 | 9,328 | 4,141 | 1,330 | 658 | 251 | $\cdots$ | $\cdots$ | 1,007 | 28,361 |
| 1922 | (b) 2,685 | 318 | (b) 871 | (b) 61 | 51 | 117 | $\ldots$ |  |  | (b) 3,131 |
| 1923 | 2,914 | 3,032 | 113 | 514 | 54 | (b) 138 | . |  | (b) 9 | 6,480 |
| 1924 | 91:3 | 4,712 | 2,12 ${ }^{\text {d }}$ | 825 | 42: | 249 | $\cdots$ | . . | 780 | 10,025 |

Aferage Increase per Head per Week to Female Employers.

(a) Changes recorded in this column are common to all States, as the particulars relating to the number of workpeople affected and the net amount of increase per week in each State were wot aecertainalule. (b) Decrease.

## C. EMPLOYMENT.

## § 1. Industrial Disputes.

1. General.-Information with regard to the collection of particulars and methods of tabulation of industrial disputes involving stoppage of work has appeared in previous issues of the Year Book, and is also given in the Annual Reports of the Iabour and Industrial Branch of this Bureau.

In annual* tabulations, particulars are included of all disputes which either commenced or were current during the year under review. As regards " number of disputes," and " number of establishments involved," therefore, duplication will take place in respect of those disputes which started in and were uncompleted at the end of a preceding year; the number involved widl, however, be indicated in a footnote, to permit of due allowance being made therefor in any calculations made from the tables.
2. Industrial Disputes Involving Stoppage of Work, Classified in Industrial Groups, 1924.-The following tables give particulars of industrial disputes which either commenced or were current during the year 1924, classified according to industrial groups. Similar information for the years 1913 to 1923 was published in Labour Reports Nos. 5 to 14.

(a) Six disputes in New South Wales (in volving 6 establishments and 633 workers) one dispute in Victoria ( 1 establishment and 27 workers), one dispute in Queensland ( 1 establishment and 125 workers), one dispute in Tasmauia ( 1 establishment and 88 workers), commenced in 1923.

[^8]INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO INDUSTRIAL GROUPS, 1924-continued.

(a) See footnote (a), page 584.
3. Industrial Disputes; Australia, 1920 to 1924.-The following table gives particulars of the number of industrial disputes, the number of workpeople involved, and the losses in working days and wages caused by disputes which either commenced or wera current during each calendar year 1920 to 1924 , classified according to industrial groups :-

INDUSTRIAL DISPUTES-AUSTRALIA, 1920 TO 1924.(a)


| Number of Workpeople Involved. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1920.. | 21,092 | 6,527 | 81,043 | 15,043 | 31,861 | 155,566 |
| 1921.. | 3,161 | 1,421 | 133,547 | 22,694 | 4,278 | 185,101 |
| 1922. | 15,215 | 287 | 96,151 | 2,882 | 1,797 | 116,332 |
| 1923. | 9,884 | 577 | 58,043 | 2,257 | 5,560 | 76,321 |
| 1924.. | 6,899 | 2,753 | 133,876 | 5,631 | 3,287 | 152,446 |
| 1920 to 192.4 | 56,251 | 11,565 | 502,660 | 48,507 | 46,783 | 665,766 |



Estimated Loss in Wages.

|  | $£$ |  | £ | E | £ | £ | £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1920.. | 215,057 |  | 70,006 | 1,418,193 | 357,786 | 309,345 | 2,370,387 |
| 1921.. | 39,416 | $i$ | 24,719 | 459,450 | 397,169 | 49,721 | 970,475 |
| 1922. | 242,159 |  | 3,280 | 427,363 | 64,597 | 14,108 | 751,507 |
| 1923. | 120,127 | 1 | 6,284 | 1,086,90! | 29,580 | 32,611 | 1,275,906 |
| 1024.. | 80,746 |  | 21,359 | 735,572 | 61,823 | 18,109 | 917,690 |
| 1920 to 1924 | 697,505 |  | 125,648 | 4,127,432 | 910,955 | 423,084 | 6,285,574 |

(a) See footnote (a), page 5st.
4. Summary of Disputes (involving Stoppage of Work), 1920 to 1924 (a). -The following table gives particulars of the number of industrial disputes in each State in various years from 1920 to 1924 , together with the number of workpeople involved, the number of working days lost, and the total estimated loss in wages.
(*) This table shows the full effect of all disputes which either occurred or were current during each calendar year, and the footnote * on page 584 does not, therefore, apply.

## INDUSTRIAL DISPUTES-SUMMARY, 1920 TO 1924.(a)


(a) See footnote *, page $\overline{8} 4$.
(b) See footnote (a), page 584.

Detailed information in regard to the disputes during these and previous years is given in the Labour Reports issued by this Bureau.

The number of disputes in 1924 was almost double that in 1923, the stoppages in the coal-mining industry chiefly accounting for the increase. The principal dispute in 1924 was that in which the coke workers in New South Wales were concerned, the trouble being due to a demand by the employees for a reduction of the working week by five hours. The dispute lasted 97 days and involved the workers in a loss of 126,100 working days and $\mathbf{x} 96,750$ in wages. Of the disputes in the coal-mining industry in New South Wales,
the more important were those which occurred at the Wallsend Colliery (yardage rates) ; Stockton Borehole, Boolaroo (increase in wages) ; Bellbird Colliery, Cessnock (hours) : Mount Kembla Colliery (working conditions) ; Wallarah Colliery, Catherine Hill Bay (dismissal) ; and Richmond Main (seniority). The only other disputes of note were those in connexion with the bakers, Sydney, over the question of day-baking; the seamen on the Katoomba, Karoola, and Komura, Sydney, the object of which was to enforce payment of compensation for an injury to a fireman ; the employees of the electric tramways, Melbourne, over the dismissal of an employee; and the construction workers, Ingham railway, Qucensland, for the reinstatement of seven men and the removal of an engineer.

A dispute which threatened to reach very serious dimensions occurred on the waterfront in October, 1924, and was known as the "Overtime" Dispute. Owing to the difficulties of obtaining even an approximate estimate of losses involved, coupled with the fact that there was no actual stoppage, the dispute was not included in the foregoing tabulations.

The objective of the Waterside Workers was to secure the abolition of the Overseas Shipping Bureauin Sydney, which since its formation as the result of the 1917 ("Railway") dispute had employed and paid its labour on a basis not in consonance with the principles recognized by the Waterside Workers' Federation. The initial action taken by the Federation was to prohibit the working of "overtime" on all vessels after 5 p.m., but subsequently all vessels loaded through the Bureau were declared "black," and cargo operations thus rendered almost impossible.

The Commonwealth Court of Conciliation and Arbitration which intervened in the dispute declared its inability to abolish the Bureau, but as the result of a conference of the parties called by the Commonwealth Government, the owners finally decided to abolish the Burean as from the 28th February, 1925, and the dispute accordingly ended On the 1anth December, 1924. The losses incurred by the workers were mostly in "overtime" payments, but no satisfactory estimate of the total is obtainable.

It is, of course, obvious that the mere number of disputes cannot by itself be accepted as a proper basis of comparison, nor does the number of workpeople afford a satisfactory basis. A better idea as to the significance and effect of industrial disputes may be obtained from the number of working days lost and the estimated loss in wages.

The position which New South Wales occupies in comparison with the other States is almost entirely due to the prevalence of disputes in connexion with coal-mining, and attention has frequently been drawn to the preponderating influence exercised by these disputes on the total number of industrial disputes. In making any comparison as to the number of disputes in this industrial class in each State, it should be observed that the number of workers engaged in the mining industry is very much larger in New South Wales than in any of the other States.

Apart from these stoppages, the number of disputes in all other industries, whilst still in excess of that for each of the other States, does not compare unfavourably if the number of workpeople in each State is taken into consideration.

In regard to extensive dislocations of industry prior to the institution of systematic inquiries by this Bureau, efforts were made to obtain statistical data relating to the shearers' disputes in 1890, 1891, and 1894, and the maritime dispute in the early part of 1891 , but precise information was not obtainable.
5. Duration of Industrial Disputes, 1924.-The following table gives particulars respecting the number of disputes, workpeople directly and indirectly involved, working days lost, and estimated amount of luss in wages respectively, consequent on the cessations of work recorded for Australia during the year 1924, classified under the adopted limits of duration :-

# INDUSTRIAL DISPUTES-DURATION, AUSTRALIA, 1924.(a) 


(a) Sce footnote (a), page 584.

Similar figures for the years 1913 to 1923 will be found in previous issues of the Year Book and in the Labour Reports.
6. Causes of Industrial Disputes, 1914 to 1924 (a). -The following table shows the number of disputes, number of workpeople involved, and the total number of working days lost in disputes during the years 1914 and 1919 to 1924, classified according to principal cause :-

INDUSTRIAL DISPUTES.-CAUSES, AUSTRALIA, 1914 TO 1924.(b)

(a) See footnote *, page 584.
(b) See footnote (a), page 584.

INDUSTRIAL DISPUTES.-CAUSES, AUSTRALIA 1914 TO 1924-continued.


The main causes of industrial disputes are "Wage" questions, " Working Conditions," and "Employment of Particular Classes or Persons." In each of the ten years, 1914 to 1924, with the exception of 1922, the number of dislocations concerning wages exceeded those caused by any other question, and varied between a minimum proportion of 26 per cent. in 1922 and a maximum of 45 per cent. in 1916. The majority of the disputes classified under the heading, "Employment of Particular Classes or Persons," are stoppages of work for the purpose of protesting against the dismissal of certain employees, who, in the opinion of their fellow-workers, have been unfairly treated or victimized. This class of dispute occurs very frequently in the coal-mining industry. The number of disputes over "Trade Union" questions has represented a fairly uniform proportion of the total number of disputes during the years under review, while the figures under " Hours of Labour" show a steady decrease. "Sympathetic" disputes represent only a small proportion of the total disputes, varying over the years shown from one-quarter to three per cent.
7. Results of Industrial Disputes.-The following table shows the number of disputes, number of workpeople involved, and the number of working days lost in disputes throughout Australia during the five years 1920 to 1924 , classified according to results:-
INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO RESULTS.-AUSTRALIA, 1920 T0 1924.(a)
No. of Disputes.
Number of Workpeople Involved in Disputes.

Total Number of Working Days Lost
by Disputes.

(a) See footnote (a), page 584.
(b) The following particulars of disputes which were incomplete at the 31st December, 1924, should He added to the above figures to effect a balance with those published in the preceding table :-

8. Methods of Settiement.-The following tables show for Australia the number of disputes, number of workpeople involved, and number of working days lost in industrial disputes during the years 1914 and 1919 to 1924 , classified according to the adopted schedule of methods of settlement :-

INDUSTRIAL DISPUTES.-METHODS OF SETTLEMENT, AUSTRALIA, 1914 TO 1924.(a)
 (a) See footnote *, page 584 . (b) See footnote (a), page 584 . (c) See fontnote (b), page 587.

## INDUSTRIAL DISPUTES.-METHODS OF SETTLEMENT, AUSTRALIA. 1914 TO 1924 (a)-continued.



Estimated Loss in Wages.

((t) See footnote *, page $58 t$.
(b) See footnote (a), paqe 584.

The majority of the disputes were settled by direct negotiations between employers and employees, the proportion so settled ranging between 53 per cent. in 1917 and 76 per cent. in 1921 ; in 1924 the proportion was 57 per cent. The proportion of dislocations settled by compulsory conferences or the intervention and assistance of officials under State or Commonwealth Arbitration Acts has slightly decreased during the period under review. In connexion with the comparatively large number of disputes which are classified as having been settled "By other methods," many stoppages of work occur each year, principally at collieries, but the cause for such stoppages is not officially known to the employers or their representatives. Such stoppages usually last for one day, and work is resumed without negotiations for a settlement of the trouble.

## § 2. Fluctuations in Employment.

1. General.-The particulars given in the following tables are based upon information furnished by the secretaries of trade unions. The membership of the unions regularly reporting is approximately 400,000 . Unemployment returns are not collected from unions the members of which are in permanent employment, such as railway and tramway employees, and public servants, or from unions whose members are casually employed (wharf labourers, etc.). Very few of the unions pay unemployment benefit, but the majority of the larger organizations have permanent secretaries and organizers who are closely in touch with the members and with the state of trade within their particular industries. In many cases unemployment registers are kept, and provision is made in the rules for payment of reduced subscriptions by members out of work. In view of these facts, and of the large membership of the unions from which quarterly returns are received,

RETAIL AND WHOLESALE PRICES, NOMINAL AND EFFECTIVE WAGE INDEX-NUMBERS, AND PERCENTAGE OF UNEMPLOYED-AUSTRALIA, 1906 TO 1924.


Notr.-The figures on the left represent the scale for the percentage unemployed according to trade union returns. The figures on the right represent the scale for the several index-numbers, the year 1911 being taken in each case as base $(=1,000)$. Since the end of the vear 1911, the Retall Price Index-numbers (weighted average cost of food, groceries, and housing for the six capital cities), and the Wholesale Price Index-number (Mclbourne) are shown each quarter, while unemployment percentages are shown quarterly since the end of the year 1912 only. The otuer index-numbers since 1913 refer to the average for the whole year, but for purposes of convenience are plotted on the graph as at the end. not the middle, of the year. Retail Price and Wholesale Price Index-numbers show the average level during the whole of each quarter, and they also for convenience are plotted at the end, and not the middle, of each ituarter.

INDUSTRTAL DIS PUTES.-WORKING DAYS LOST LI INDUSTRLAL GROUPs, AUSTRALIA, 1913 TO 1924.


- Explanation.-The scale refers to working days lost in hundred thousands. Thus, 1aking the year 1917, and comparing the shaded and blank sections with the scale, it will be observed that about 870,000 working days were lost in Manufacturing and Building, over 1,300,000 in Mining, over 2,300,000 in Transport, and about 150,000 in other industries.
percentage unemployment results based on the information supplied may be taken to show the general trend of unemployment. Seasonal fluctuations in unemployment have been provided for by collecting returns quarterly since the 1 st Jonuary, 1913, the yearly figures quoted representing the average of the four quarters.

2. Unemployment.-(i) Staies. In addition to the qualifications referred to above, allowance must be made for the circumstance that the industries included in the returns from trade unions are not quite identical in the various States. The results may, however, be taken as representing fairly well labour conditions generally.

UNEMPLOYMENT.-STATES, 1924.

|  |  | Unions Reporting. |  | Unemployed. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number. | Members. | Number. | Percentage. |
| New South Wales | $\ldots$ | 112 | 164,273 | 20,749 | 12.6 |
| Victoria, |  | 89 | 130,052 | 9,197 | 7.1 |
| Queensland | . | 49 | 36,393 | 2,343 | 6.4 |
| South Australia | $\cdots$ | 60 | 34,740 | 1,612 | 4.6 |
| Western Australia | . | 65 | 23,443 | 1,278 | 5.5 |
| Tasmania | . | 38 | 8,712 | 328 | 3.8 |
| Australia | . | 413 | 397,613 | 35,507 | 8.9 |

(ii) Summary for Australia. The following table gives a summary for Australia for the last five years:-

UNEMPLOYMENT.-AUSTRALIA, 1920 TO 1924.


NOTE.-Similar flgures for each of the four quarters of the years since 1912 will be found in the Labour Reports. The quarterly figures show the number of persons who were out of work for three days or more during a speciffed week in each quarter, and the annual fgures the average of the four quarters; they do not include persons out of work through strikes or lock-outs.

The highest percentage of unemployed yet recorded (12.5) was reached in the second quarter of 1921.
(iii) Industrial Groups. The next table shows the percentages unemployed in industrial groups. Industries in which employment is either unusually stable or exceptionally casual, such as railways, shipping, agricultural, pastoral, etc., and domestic, hotels, etc., are insufficiently represented in the returns owing to the impossibility of securing the necessary information from the trade unions. Particulars are not,
therefore, shown separately for these groups, such returns as are available being included in the last group, "Other and Miscellaneuus."


## § 3. Apprenticeship.

In Year-Book No. 16, pp. 602-3, information was given with regard to legislation relating to the question of apprenticeship. Tables were included showing the periods of apprenticeship fixed in the awards of the various industrial tribunals of the States and Commonwealth, and also the proportion of apprentices to journeymen and journeywomen. This information has been omitted from the present issue, but further investigations are being made, and additional and more comprehensive information will be incorporated in a later issue.

## D. ASSOCIATIONS.

## § 1. Labour Organizations.

1. Registration. -(i) Under Trade Union Acts. The benefits obtained by registering trade unions under the Trade Union Acts in force in the various States are not considered of much value; consequently the statistics of registered trade unions of employees do not accurately represent the position of unionism. Further, the returns for past years are so defective as to be practically valueless, inasmuch as no reliable indication is afforded of the numerical and financial position of the unions. Some of the registered unions fail to supply returns; this non-supply may lead to cancellation of the registration. Others have obtained the cancellation of their certificates of registration, the apparent reason being that they proposed to register under the Commonwealth Conciliation and Arbitration Act or a State. Arbitration Act. In Queensland, some of the largest labour unions withdrew from registration during 1911, mainly on account of the necessity for closer restriction of their ohjects as set forth in their rules, consequent on legal decisions affecting trade unions. In Victoria and in South Australia very few of the existing unions are registered under the Trade Union Acts. It will be seen, therefore, that the available information under this heading is too meagre for statistical purposes.
(ii) Under Industrial Arbitration Acts.-Information with regard to registrations of trade unions under the various State Industrial Arbitration Acts will be found in previous issues of the Year Book. The latest information available as to registrations
is as follows:-New South Wales, 119 industrial unions of employers and 153 industrial unions of employees; Queensland, 76 industrial unions of employees with approsimately 92,444 members ; South Australia, 16 organizations of employees with 11,800 members ; Western Australia, 43 organizations of employers with 900 members, and 125 organizations of employees with 34,084 members. Registration under Commonwealth legislation began in 1906. In that and the four following years, there was but one union of employers; another was registered in 1911. The unions of employees registered were 20 in 1906, with 41,413 members. In August, 1023, there were on the register 10 organizatione of employers with 5,663 persens, firms or corporations affliated, and 147 organizations of employees with 578,095 members.
2. Particulars regarding Trade Unions.-(i) Types. The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organization, which, in its turn, may be merely a branch of a British or international union. Broadly speaking, there are four digtinet elasses of laboui organizations, viz. :-(i) the local independent, (ij) the State. (iii) the interstate, and (iv) the Australasian or International, but a number of varintions occui from each of these classes. The leading characteristics of each of these types were briefly outlined in Labour Report No. 2 (pp. 7 to 9 ) issued by this Bureau.
(ii) Number and Membership. As already stated, the figures for trade unions registered under the Acts do not represent the position of unionism in Australia. In 1912 the Labour and Industrial Branch of the Commonwealth Bureau of Census and Statistics was established, and with the cordial co-operation of the officials of the labour organizations, comprehensive figures relating to the development of organized labour are now available. The following table shows the position at the end of 1924:-

TRADE UNIONS, BRANCHES, AND MEMBERS, 1924.

(a) Allowing for interstate duplication. (b) Number of distinct organizations and interstate groups of organizations in Australia-not the total number of organizations, which are practically independent and sclf-governing. (See helow.)

In the preceding table the number of separate unions in each State refers to the number of unions which are represented in each State, exclusive of branches therein, and each union is counted once only. Except in the last line, the number of branches indicates the number of branches of State head offices, which may, of course, themselves be branches of an interstate or larger organization. In taking the total number of separate unions in Australia (see last line but one), it is obvions that, in the case of interstate and similar unions, there will be duplication, since each such union is counted once in each State in which it has any branchee. In the figures given in the last line allowance has been made for this duplication. State branches of interstate or federated unions, as well as sub-branches within a State, are included under the heading "Branches" in the third column-last line. The scheme of organization of these interstate or federated unions varies greatly in character, and the number of separate Commonwealth unions does not, therefore, fairly represent the number of practically independent organizations in Anstralia. In some of these unions the State organizations are bound together under a system of unification and centralized control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposer. There are therefore 376 distinct organizations and interstate groups of organizations in Australia, having 2,091 State branches and sub-branches, and a total of $729,15 \overline{1}$ members.
(iii) Classification in Industrial Groups. The following table shows the number of unions and members thereof in Australia at the end of each of the last five years. The number of unions specified refers to the number of different unions represented in each State; and, while interstate or federated unions are counted once in each State in which they are represented, sub-branches within a State are not counted.

TRADE UNIONS.-INDUSTRIAL GROUPS, AUSTRALIA, 1920 TO 1924.

Industrial Groups. $1920 .|1921 . \quad 1922$.$| \begin{tabular}{ll|l|l}$ \& 1923. \& 1924. <br>
\hline
\end{tabular}



Nomber of Members.

| I. Wood, Furniture, etc. | $\cdots$ | 23,691 | 25,541 | 23,582 | 24,465 | 23,859 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1I. Engineering, Metal Works, etc. |  | 53.870 | 57,012 | 53,637 | 59.032 | 68,243 |
| III. Food, Drink, Tobacco, etc. . |  | 49,447 | 51,698 | 54,497 | 58.663 | 55,402 |
| IV. Clothing, Hats, Boots, etc. |  | 40,325 | 42,069 | 44,540 | 45.842 | 46,521 |
| V. Books, Printing, etc. |  | 15,136 | 15,059 | 15,341 | 16.249 | 15,856 |
| VI. Other Manufacturing |  | 39,710 | 38,873 | 37,942 | 38,554 | 40,376 |
| VII. Building |  | 40,348 | 42,244 | 42,177 | 46.231 | 51,819 |
| VIII. Mining, Quarrying, etc. | $\ldots$ | 41,777 | 39,967 | 38,082 | 37,063 | 40,996 |
| IX. Railway and Tramway Services | $\cdots$ | 89,069 | 88,731 | 92,152 | 89.405 | 90,365 |
| X. Other Land Transport |  | 17,862 | 16,944 | 20,376 | 16.385 | 17,785 |
| XI. Shipping, etc. | $\cdots$ | 41,668 | 40,840 | 41,510 | 38.008 | 37,823 |
| XII. Pastoral, Agricultural, etc. |  | 42,923 | 47,893 | 43,538 | 36.584 | 46,081 |
| XIII. Domestic, Hotels, etc. |  | 19,353 | 20,442 | 21,130 | 20,713 | 22,861 |
| XIY. Miscellaneous . | $\because$ | 169,271 | 175,696 | 174,434 | 172,550 | 171,168 |
| Total | .. | 684,450 | 703,009 | 702,938 | 699,743 | 729,155 |

Particulars are given in Labour Report No. 15 of the number of male and female members of unions and the percentage of such members on the total number of adult wage-carners. Other tables in the same Report show the classification of unions according to the number of members and the number of central labour organizations.
(iv) Interstate or Federated Unions. The following table gives particulars as to the number and membership of interstate or federated unions in 1924 :-

INTERSTATE OR FEDERATED UNIONS.-AUSTRALIA, 1924.

(a) Certain unions in this group have, in addition to branches In each of the six States, a branch in the Northern Territory.

It appears, therefore, that 105 out of the 376 separate associations and groups of associations in Australia are organized on an interstate basis. The membership of these 105 unions amounts to 578,048 , or 79.3 per cent. of the total membership ( 729,155 ) of all unions.
3. Central Labour Organizations.-In each of the capital cities, and in a number of industrial centres elsewhere, delegate organizations, consisting of representatives from a group of trade unions, have been established. Their revenue is raised by means of a per capita tax on the members of each affiliated union. In most of the towns where such central organizations exist, the majority of the local unions are affiliated with the central organization, which is usually known as the Labour or the Trades Hall Council, or the Labour Federation. In Western Australia a unified system of organization extends over the industrial centres throughout the State. In this State there is a provincial branch of the Australian Labour Party, having a central council and executive, and metropolitan and branch district councils, to which the local bodies are affiliated. The eentral council, on which all district councils are represented, meets periodically. In the other five States, however, the organization is not so close, and, while provision usually exists in the rules of the central council at the capital city of each State for the organization of district councils or for the representation on the central council of the local councils in the smaller industrial centres of the State, the councils in each State are, as a matter of fact, independent bodies.

The table below shows the number of metropolitan and district or local labour councils, together with the number of unions and branches of unions affiliated thereto, in each State at the end of the year 1924:-

CENTRAL LABOUR ORGANIZATIONS.-NUMBER, AND UNIONS AFFILIATED, 1924.

| Particulars. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | N. Ter. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Councils | 3 | 5 | 4 | 3 | 9 | 2 | 1 | 27 |
| Number of Unions and Branch Unions |  |  |  |  |  |  |  |  |
| affiliated | 93 | 185 | 81 | $76$ | $189$ | $41$ | 3 | 668 |

The figures given in the preceding table as to number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated to the local trades councils in the several towns in which they are represented.

Between the trade union and the central organization of unions may be classed certain State or district councils organized on trade lines, and composed of delegates from separate unions, the interests of the members of which are closely connected by reason of the occupations of their members. Delegate councils of bakers, bread carters, and mill employees, or of unions connected directly or indirectly with the iron, steel, or brass trades, or with the building trades may be so classed.
4. Laws relating to Conditions of Labour.-In Official Year Book No. 16, pp. 538 to 566, a conspectus was given of Labour Laws in force in Australia at the end of the year 1922, and of Acts and Regulations relating to Factories and Shops.

Information was contained in the same issue with regard to employment under Mining Acts, followed by a brief reference to Employers' Liability and Workmen's Compensation Acts and miscellaneous legislation relating to conditions of labour enacted by the States. A conspectus of the Tribunals for the Regulation of Wages and Conditions of Labour was also included. Owing to considerations of space these references have been omitted from the present issue.

## § 2. Employers' Associations.

1. General.-Recent investigations show that the spirit of association is no less manifest in the case of employers than in the case of workers. Associations for trade purposes merely are not included in the present chapter, which deals with those associations only whose members are united for their own protection, and for representation in cases before Arbitration Courts, Wages Boards and other wage-fixing tribunals. Associations of employers and employees are recognized under the Commonwealth Conciliation and Arbitration Act as well as under several State Acts, and organizations of these bodies may be registered.
2. Employers' Associations in each State.-The following table gives particulars of the number of employers' associations in each State at the end of the years 192.3 and 1924 :-

EMPLOYERS' ASSOCIATIONS-STATES, 1923 AND 1924.


The decrease in 1924 in the number of associations is partly explained by the exclusion of certain associations which have been found to be not strictly employers' associations, while in some cases associations have become either inactive or defunct. The year 1922 was the first for which information was collected, and particulars for that year will be found in Year Book No. 17.
3. Employers' Associations in Industrial Groups.-The figures in the table hereunder refer to Australia at the end of the years 1923 and 1924.


The female membership of these associations was 936 for 1923, and 3,119 for 1924 .

The organization of employers is relatively strongest in the pastoral and agricultural industries and in the manufacture and distribution of articles of food and drink. In the former case there has been considerable growth in organization among small farmers, and in the latter the number of small shops purveying foodstuffs of which the proprietors are members of grocers', butchers', and other similar associations accounts for the large membership.
4. Federations of Employers' Associations.-In addition to the associations in various industries, there are central associations in each State, to which many of these separate organizations are affiliated. Examples of this kind of association are provided in the Chamber of Manufactures, Chamber of Commerce, and Employers' Federation in each State. Further, these State associations are, in some cases, organized on a federal basis, e.g., there is an Associated Chamber of Manufactures, an Associated Chamber of Commerce, or a Central Employers' Association, to which State branches are affiliated.

The affiliation of these associations is, however, of a very loose nature when compared with that of the Federated Trade Unions. Whereas in the latter case the central toudy has complete control of its state branches, in the case of the Employers' Associations each state body enjoys complete independence, the central body acting in a more or less advisory capacity only.

The following table gives particulars, so far as can be ascertained, of inter-state or federated associations having branches in two or more States in 1923 and 1924 :-

INTERSTATE OR FEDERATED EMPLOYERS' ASSOCIATIONS, 1923 AND 1924.

|  | Particulars. |  |  | Associations Operating in-- |  |  |  |  | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2 States. | 3 States. | 4 States. | 5 States. | 6 States. |  |
| No. of Assoclations. |  |  |  |  |  |  |  |  |  |
| 1923 |  | . | . | 4 | 4 | 4 | 5 | 12 | 29 |
| 1924 | $\cdots$ | . | . | 2 | 6 | 6 | 11 | 9 | 34 |
| No. of Members. |  |  |  |  |  |  |  |  |  |
| 1923 |  | . | $\ldots$ | 679 | 2,028 | 465 | 16,521 | 26,832 | 46,525 |
| 1924 | . |  | . | 427 | 595 | 829 | 29,612 | 26,523 | 57,986 |


[^0]:    Note.-The figures given in this table are comparable in the vertical columns, but are not directly comparable horizontally. The index numbers are reversible.

    * In the computation of the index-numbers for years prior to 1911, the aggregate expenditure on 80 commodities in 1911 is taken as base $(=1,000)$, while for later years the aggregate expenditure on 92 commodities is taken.

[^1]:    * Figures not available for 1923

[^2]:    * Figures not available for 1923.

[^3]:    $\dagger$ In Labour Report No. 14, index-numbers are given showing the relative cost from November, 1921, to November, 1923, in 30 of the principal towns in Australia.

[^4]:    (a) Including awards made by Arbitration Courts and the Commonwealth Pullic Service Arbitrator. (b) Owing to the fact that a number of awards under the New South Wales Industrial Disputes Act (1908) were still in force, the boards constituted for such industries under the Industrial Arbitration Act (1912) had not made any awards. (c) Excluding awards or determinations which pxpired in New South wales (under the Act of 1908 ) on \$1st Decenher, 1912. (d) During 1924 the majnity of South Australian boards expired and all had not leen reconstitnted at the close of the year.

[^5]:    (a) Weighted average working hours per week for all industrial groups excepting Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.), in which working hours have not been generally

[^6]:    * This expression must not be confused with "standard of living." A change in the standard of living necessarily involves a change in regimen (see Labour Report No. i), that is, a change in the nature or in the relative quantity of commodities purchased, or both. A change in the "standard of comfort" merely implies a variation in effective wages, which variation may, or may not, result in, or be accompanied by, a change in the " standard of living."

[^7]:    (a) In this tabie an Industrial Award or Agreement under the Commonwealth Conciliation and Arbitration Act, the Arbitration (Public Service) Act, the Industrial Peace Act, or an Order of the War Precautions Coal Board is counted as one change only, although such Award, Agreement or Order may
    
    (b) Deazeno.

[^8]:    * In respect of years prior to 1922 , the figures include complete particulars of industrial disputes which commenced during any calendar year; and where any such dispute extended into a subsequent year, the relative figures were also incorporated in those for the year in which the dispute commenced.

