CHAPTER VI.-RETAIL PRICE INDEX-NUMBERS, 150 TOWNS.

1. Introduction.-To supplement the information collected each month for the 30 towns specified in the preceding Section, a special investigation was initiated in November, 1913, as to retail price indexnumbers in 70 additional towns in Australia. This investigation was repeated in November, 1914, and again in November, 1915, when the number of additional towns was increased to 120 , and it is intended to carry it out in that month each year, thus making information available annually for 150 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, 1920 to 1922.-The results of the investigation made in November, 1922, are set out in the tables on pages 47 to 49. (See end of last column on page 47). The aggregate expenditure on food and groceries separately is shown in the form of index-numbers tor 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 1525 (see page 49) represents the weighted average expenditure in 150 towns on food, groceries, and rent of 5 -roomed houses; 1415 represents the average weighted expenditure on food, grocerios, and rent of 4-roomed houses on November 1922. Similarly, in column $A_{2}$, the index-number 998 represents the relative weighted average expenditure on food and groceries only for November 1922. The figures given in the table are comparable throughout. Thus, taking the average weighted expenditure for all 150 towns on food, groceries, and rent of 5 -roomed houses as equal to 1525 , the expenditure on the same items in Melbourne is 1570 , while if 4 roomed houses were substituted for 5 -. roomed the expenditure in Melbourne would be represented by 1431.

- 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 following 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 1000 .


## Irder-Numbers-Cost of Food, Groceries and Housing Accommodation in 150 Towns for November 1920, 1921 and 1922 compared with the Weighted Average Cost of Food, Groceries, and Rent for all hooses in the Sis Capital Oities in 1911 as base $(\mathbf{m 1 0 0 0})$.

| Stale and Tow | 1920. |  |  | 1021. |  |  | 1022 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Naw South Wales- | A | - 3 |  | A | ${ }^{\text {B }}$ | , | A | , |  |
| Sydrey | 1,291 | 1,772 | 1,853 | 1,015 | 1,506 | 1.589 | 1,034 | 1,563 | 1,041 |
| Neweas | 1,330 | 1,707 | 1,868 1,857 | 1,029 | 1,408 | 1,574 | 1,008 | 1,410 | 1,574 |
| Gonlburn | 1,347 | 1.690 | 1,793 | 1,001 | 1,373 | 1,490 | ,086 | 1,409 | 1,527 |
| Bathurst | 1,347 | 1,594 | 1,689 | 985 | 1,232 | 1,328 | 940 | 1,187 | 1,309 |
| Aldetons | 1,319 | 1,484 | 1,533 | 1,035 | 1,196 | 1,235 | 1,046 | 1,230 | 1,288 |
| Albury | 1,203 | 1,722 | 1,815 | 1,003 | 1,431 | 1.521 | 986 | 1,519 | 1,594 |
| Rega ${ }^{\text {Rourks }}$ | 1,375 | 1,533 | 1,585 | 1,000 | 1,211 | 1,2;7 | 1,055 | t,239 | 1,385 |
| Diowral | 1,332 | 1,684 | 1,766 | 1,060 | 1,401 | 1,524 | 1,001 | 1,495 | 1,694 |
| Casino | 1,264 | 1,540 | 1,059 | 1,080 | 1,431 | 1,516 | 1,011 | 1,373 | 1,439 |
| Cobar | 1,391 | 1,489 | 1,522 | 1,133 | 1,232 | 1,265 | 1,043 | 1,141 | 1,174 |
| Cooms | 1,427 | 1,707 | 1,773 | 1,101 | 1,393 | 1,509 | 1,006 | 1,202 | 1,390 |
| coonamb | 1,413 | 1,720 | 1,808 | 1,049 | 1,365 | 1,174 | 1,045 | 1,352 | 1,435 |
| cootamund | 1,41\% | 1,805 | 1,916 | 1,053 | 1,472 | 1,362 | 1.921 | 1,337 | 1,440 |
| Cortitr | 1,356 | 1,600 | 1,652 | 1,052 | 1,328 | 1,387 | 1,013 | 1,309 | 1,381 |
| Cowra . | 1,250 | 3,693 | 1,731 | 907 | 1,312 | 1,434 | 974 | 1,372 | 1,484 |
| Deniltifuin | 1,300 | 1,626 | 1,697 | 997 | 1,298 | 1,967 | 1,008 | 1,309 | 1,378 |
| Dabbo | 1,364 | 1,751 | 1,876 | ${ }_{1}^{1,045}$ | 1,426 | 1,557 | 1,018 | 1,445 | 1,542 |
| ${ }_{\text {Forbes }}^{\text {Gich Innow }}$ | 1,331 | 1,030 | 1,745 | 1,016 | 1,385 | 1,477 | 1,014 | ${ }_{1}^{1,398}$ | 1,509 |
| Gren Ina | ${ }_{1}^{1,341}$ | 1,649 | 1,1937 | , 958 1,070 | 1,285 | 1,384 | 1,9067 | 1,268 1,359 | 1,400 1,478 |
| Grentelt | 1,326 | 1,072 | 1,804 | 1,014 | 1,422 | 1,500 | 977 | 1,444 | 1,569 |
| Gunneetial | 1,335 | 1,65] | 1,723 | 1,024 | 1,320 | 1,432 | 990 | 1,296 | 1,358 |
| Hay | 1,381 | 1,631 | 1,748 | 1,060 | 1,342 | 1,476 | 3,004 | 1,280 | 1,405 |
| Inverel] | 1,805 | 1,704 | 1,708 | 1,044 | 1,395 | 1,463 | 1,001 | 1,363 | 1,407 |
| Junce | 1,303 | 1,059 | 1,744 | 1,042 | 1,453 | 1,555 | 991 | 1,418 | 1,517 |
| Katoomb | 1,349 | 1,777 | 1,895 | 1,110 | 1,631 | 1,752 | 1,060 | 1,584 | 1,371 |
| Kempses | 1,269 | 1,550 | 1,651 | 1,042 | 1,421 | 1,519 | 901 | 1,290 | 1,427 |
| isthere | 1,290 | 1,055 | 1,739 | 1,035 | 1,458 | 1,486 | 1,018 | 1,355 | 1,572 |
| Mailiank | 1,314 | 1,624 | 1,663 | 1,001 | 1,349 | 1,415 | ${ }^{1} 994$ | 1,350 | 1,402 |
| Moree | 1,429 | 1,785 | 1,890 | 1,073 | 1,395 | 1,481 | 1,079 | 1,487 | 1,605 |
| Moas Vn | 1,360 | 1,778 | 1,887 | 1,026 | 1,470 | 1,509 | 909 | 1,394 | 1,559 |
| Mudgee | 1,311 | 1,651 | 1,719 | 1,031 | 1,411 | 1,483 | 995 | 1,414 | 1,504 |
| Narrabri | 1,324 | 1,670 | 1,758 | 1,036 | 1,370 | 1,442 | 092 | 1,292 | 1,895 |
| Nowra | 1,369 | 1,698 | 1,764 | 1,073 | 1,402 | 1,468 | 1,052 | 1,678 | 1,657 |
| Orange | 1,258 | 1,542 | 1,691 | 1091 | 1,918 | ],411 | 955 | 1,307 | 1,410 |
| Prarkes | 1,318 | 1,670 | 1,778 | 1,019 | 1,420 | 1,503 | 1,000 | 1,434 | 1,559 |
| Queanbeyan | 1,382 | 1,052 | 1,709 | 1,044 | 1,343 | 1,395 | 1,014 | 1,376 | 1,458 |
| Tamworth | 1,277 | 1,003 | 1,700 | 95 | 1,383 | 1,498 | 921 | 1,339 | 1,497 |
| Wamora Waga' | 1,369 | 1,731 | 1,797 | 1,062 | 1,424 | 1,523 | 1,006 | 1,467 | 1,582 |
| Wagga Wagga | 1,242 | 1,594 | 1,079 1,661 | 1988 1,032 | 1,385 | 1,447 1,412 | 954 | 1,326 | 1,477 1,313 |
| Wotlongorg | 1,339 | 1,678 | 1,734 | 1,051 | 1,387 | 1,449 | 1,018 | 1,399 | 1,465 |
| Wyatong | 1,364 | 1,625 | 1,725 | 1,110 | 1,389 | 1,472 | 983 | 1,329 | 1,446 |
| Ynas | 1,470 | 1,797 | t, 867 | 1,093 | 1,411 | 1,483 | 1,009 | 1,385 | 1,449 |
| Young A varage | 1,295 | 1,618 | 1,703 | 1,014 | 1,310 | 1,387 | 950 | 1,300 | 1,408 |
|  | 1,308 | 1,740 | 1,828 | 1,020 | 1,469 | 1,553 | 1,024 | 1,493 | 1,589 |
| Vietoris- |  |  |  |  |  |  |  |  |  |
| Melbourne | 1,285 | 1,707 | 1,837 | 972 | 1,418 | 1,543 | 967 | 1,431 | 1,570 |
| Ballarat | 1,305 | 1,608 | 1,596 | 977 | 1,178 | 1,284 | 976 | 1,217 | 1,320 |
| Bendigo | 1,245 | 1,487 | 1,576 | 968 | 1,710 | 1,315 | 977 | 1,284 | 1,381 |
| Geclong ${ }^{\text {a }}$ | 1,238 | 1,552 | 1,052 |  |  |  | 959 | 1,322 | 1,439 |
| Warmainlool | 1,322 | 1,654 | 1,765 | 1099 | 1,335 | 1,484 | $\stackrel{932}{102}$ | 1,273 | 1,431 |
| Ararat ${ }_{\text {a }}$ | 1,355 | 1,640 | 1,761 |  | 1,327 | 1,426 |  | 1,303 | 1,398 |
| Bairnsdale | 1,329 | 1,607 | 1,728 1,589 | 1,048 | 1,377 | 1,504 | 1,009 | 1,371 | 1,494 1,276 |
| licnalla | 1,283 | 1,666 | 1,629 | 1,004 | 1,304 | 1,406 | 947 | 1,276 | 1,385 |
| Bright | 1,326 | 1,497 | 1,568 | 1,077 | 1,258 | 1,307 | 1,052 | 1,230 | 1,305 |
| Camperdown | 1,258 | 1,557 | 1,646 | . 982 | 1,324 | 3,426 | 963 | 1,399 | 1,539 |
| Costjemaine | 1,383 | 1,547 | 1,658 | 1.001 | 1,241 | 1,360 | 997 | 1,280 | 1,375 |
| $\xrightarrow{\text { Colac }}$ Oreswer | 1,332 |  | 1,743 | 1,028 | 1,489 | 1,604 | 973 | 1,500 |  |
| OTeswick | 1,310 | 1,406 | 1,445 | 970 | 1,075 | 1,121 | 921 | 1,053 | 1,092 |

Index-Numbers-Cost of Food, Groceries, and Housing Accommodation in' 150 Towns, etc.-continued.


## Index-Numbers-Cost of Food, Groceries, and Housing Accommodation in 150 Towns, etc.-continued.

| ate and Towt. | 1020. |  |  | 1921. |  |  | 1922. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Wegtern Australia- <br> Perth <br> Fremantie Kalgoorlic $\&$ Boulder Mudiand Junction \& gublord |  | ${ }^{1}$ | c | A |  |  | A | ${ }^{3}$ |  |
|  | 1,371 | 1,594 | ${ }_{1}^{1,772}$ | 1,059 | 1,440 | 1,580 |  | 1,1493 | 1,557 |
|  |  |  |  |  |  |  |  |  |  |
| Bunbury | 1,220 | 1,509 | 1,556 | 1,105 | 1.422 | 1, 185 | 1,046 | 1,397 | 1,497 |
| (emmaton | 1,222 | 1,604 | ${ }_{1}^{1,678}$ | 1,1,863 | 1,488 | ${ }_{1}^{1,576}$ | ${ }_{1}^{1,005}$ | 1.4382 | 1,548 |
| ${ }_{\text {Broomo }}$ | 1,488 |  |  | 1,402 |  |  | 1,308 | 1,966 | 2,098 |
| ${ }_{\text {Carnarvon }}$ | 1,387 | ${ }_{1}^{1,821}$ | 1,784 | l 1,241 | 1,659 | 1,745 | ${ }_{1}^{1,237}$ | 1, 1,530 | 1,779 |
| Katamining | 1,104 | 1,549 | 1,595 | 1,019 | ${ }^{1} 1,397$ | 1,476 | 1,009 | 1,388 | 1,549 |
|  | 1,469 | 1,7821 | ${ }^{1,7807}$ | ${ }_{1}^{1,343}$ | 1,474 | 1,488 | ${ }_{1}^{1,269}$ | ${ }_{1}^{1,442}$ | ${ }_{1}^{1,467}$ |
| Northam | 1,205 | 1,537 | 1,659 | 1,104 | 1,420 | 1,558 | 1,081 | 1,432 | 1,542 |
| Ravensthorpe | 1,359 | 1,457 | 1,523 | 1,268 | 1,387 | 1,432 | 1,158 | 1,267 | 1,3 |
| Weighted Avora | 1,220 | 1,565 | 1,654 | 1,09 | 1,458 | 1,540 | 1,04 | 1,41 | 1,50 |
| ${ }_{\text {Tasmanaa- }}^{\text {Hobart }}$ | 1,381 |  |  |  |  |  |  |  |  |
| Launceston | 1,339 | 1,658 | 1,793 | 1,009 | 1,331 | ${ }^{1,475}$ | 1,007 | 1,374 | 1,636 |
| Rechan | -1,419 | 1,603 | ${ }_{1}^{1,66}$ | 1,1070 | 1,325 | ${ }_{\text {1, }}^{1,388}$ | 1,116 | 1,281 | 1,091 |
|  | 1,238 | ${ }^{1,537}$ | 1, 1,16 | ${ }^{1,134}$ | ${ }_{1}^{1,397}$ | 1,476 | 1,092 | ${ }_{1}^{1,069}$ | 1,435 |
|  | ${ }^{1}, 2,290$ |  | 1,738 | 1,017 | 1,206 | 1,484 | ${ }^{1,028}$ | 1,454 | ${ }_{1}^{1,1886}$ |
| Devanport | 1,291 | 1,650 | 1,715 | 1,074 | 1,434 | 1,518 | 1,010 | 1,422 | 1,490 |
| ${ }^{\text {Franking }}$ | ${ }^{1,328}$ | 1, | ${ }^{1}$ | 1,073 | 1,223 | ${ }_{1}^{1,268}$ | 990 |  | ${ }_{1}^{1,178}$ |
| Soottrsala | 1,255 | 1,483 | 1,540 | 998 | . 1,201 | 1,327 | 1,051 | 1,315 | 1,380 |
| State A .. | 1,338 | 1,704 | 1,802 | 1,063 | 1,416 | 1,525 | 1,020 | 1,375 | 1,519 |
| Weighted Average for Australic | 1,282 | 1,862 | 1,763 | 1,011 | 1,405 | 1,507 | 988 | 1,415 | 1,525 |

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 1922 the index-number for food and groceries in Melbourne (column A) is 967 . Subtracting this from 1431 (column B) gives a difference of 464, which is the relative cost of house rent for houses of 4 rooms, and from 1570 (column C) gives a difference of 603 , 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.
3. Comparisons with Quarterly Results.--In order to ascertain the degree of accuracy with which the investigations as to variations in the purchasing-power of money made prior to 1912 for the capital cities only, and those made since the beginning of 1912 for the thirty towns, reflect the conditions obtaining throughout the States and Australia, comparisons between the three sets of results have been made annually. those for 1922 being given in the following table.

The first line in each section shows the index-numbers derived from the special inquiry covering 150 towns; the second line gives the results obtained from the returns received for the month of November. 1922, for the five towns in each State from which regular monthly returns are received; and the last line gives the results obtained from the

November returns for the capital cities only. The capital cities are, of course, included in each of the other two investigations, and the five towns in each State are included in the investigation for " all towns" :-

Retail Price Index-Numbers, 1922. Comparisons in States.

| Particulars. | N.S.W. | Vic. | Q'land. | S.A. | W.A. | Tas. | W'gh't Aver. age. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Food and Grootries. |  |  |  |  |  |  |  |
| All Towns* | 1,027 | 074 | 966 | 989 | 1,018 | 1,023 | 1,000 |
| Five Towns in each State | 1,035 | 971 | 948 | 990 | 1,039 | 1,024 | 1,000 |
| Capital Citios only .- | 1,039 | 972 | 947 | 992 | 1,003 | 1,018 | 1,000 |

Rent, 5-Roomed Hodses.

| All 'Townd* | 1,071 | 1,035 | 767 | 1,004 | 874 | 945 | 1,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Five Towns in eachs State | 1.081 | 1,035 | 737 | 976 | 855 | 938 | 1,000 |
| Capital Cities only | 1,049 | 1,041 | 764 | 970 | 844 | 1,001 | 1,000 |

Food and Groceries and Rent.

| All Towns* |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| FiveTownsia each State | 1,042 | 995 | 897 | 994 | 988 | 996 | 1,000 |  |
| Capital Cities only | $\ldots$ | 1,043 | 994 | 874 | 985 | 974 | 904 | 1,000 |

- For llst of towns included, soe Table on pages 47 to 40 .

The index-numbers for November, 1916 to 1922, computed from the three sets of data mentioned above with 1913 as basis ( $=1000$ ), are shown in the following table :-

Variations in Retail Price Index-Numbers, 1816 to 1822.


[^0]The index-numbers in the first line of each section of the above table refer to 100 towns for November, 1913, and to 150 towns for November, 1916 to 1922 . The general closeness of the results shown in these two tables is remarkable, and indicates that the index-numbers published for the capital cities only for the years prior to 1912, and for the thirty towns for 1912 and subsequent years, reflect with a substantial degree of accuracy the variations in the retail price index-numbers. During the period November 1913, to November 1922, the average cost of food and groceries throughout Australia increased 55.8 per cent.; house rents increased 34.7 per cent.; the aggregate result showing an increase of approximately 47.8 per cent.

## CHAPTER VII.-INCLUSION OF CLOTHING AND MISCEL. LANEOUS REQUIREMENTS.

1. Introduction,-The Royal Commission on the Basic Wage was appointed to inquire into and report upon the following matters:-
(1) The actual cost of living at the present time, according to reasonable standards of comfort, including all matters comprised in the ordinary expenditure of a household, for a man with a wife and three children under fourteen years of age, and the several items and amounts which make up that cost.
(2) The actual corresponding cost of living during each of the last five years.
(3) How the basic wage may be automatically adjusted to the rise and fall from time to time of the purchasing-power of money.

Reference was made to the findings of the Commission in Report No. 11, pp. 28 and 29 In answer to the third clause of the enquiry, the Commission recommended that " a Bureau of Labour should be organized from existing members of the Public Sarvice, which should ascertain 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 (i.e., such a family as is deseribed in Clause 1)." This suggestion was adopted by the Government, and the Commonwealth Statistician was consulted as to the methods to be followed in this connexion. The duty of carrying out the recommendation was entrusted to this Bureau. As the result of investigations and inquiry as to methods adopted in other countries, the methods hereafter described have been adopted for the purpose of measuring variations in the cost of the commodities and services which comprise the total expenditure on living.
2. Methods Adopted.-The Commission was concerned principally with ascertaining variations in the cost of the regimen which its members adopted, and which is described in the Indicator Lists published


[^0]:    NOTE. The fioures in the vertical columns do not, of course, show relative purchating-powtr-of-money index-nmbers. They show meroly the increase or decrease in oost in Nowember of each yenr comparvd with November, 1919, for "All Touns," "Pive Townt in each Slato" and" "Capilat Citiof only" respectively.

    * See tootnote to preceding table.

