Manufacturing Industries, Number of Persons included in Wages-Inquiry, and Percentage on Average Number Employed during 1912.

| Class of Industey | Male Employees.* |  |  | Fealale Employees.* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In- <br> cluded isk <br> Investigation. | Average Number Employed. | Per Cent. | Inchuded In Investigation. | Average Number Eme. ployed. | Per Cent. |
|  |  |  |  |  |  |  |
| I.-Treating Raw Materials, ete. | 7,587 | 8.081 | 93.9 | 85 | 88 | 96.6 |
| II.-Oijs and Fat, etc. . | 1,698 | 1,541 | 110.2 | 251 | 236 | 100.4 |
| III.-Stone, Clay, Glass, etce. $\quad$. | 11,809 | 11,478 | 102.9 | 08 | 68 | 100.0 |
| IV.-Working in Wood . . . | 26,489 | 26,554 | 09.8 | 41. | 22 | 186.4 |
| Y,-Metal Works, Machinery, ets. | . 60,786 | 60,714 | 100.1 | 443 | 309 | 148.4 |
| VI.-Food and Drink, etc, | 31,504 | 32,716 | 96.3 | 7,367 | 7,940 | 02.8 |
| VEI.-Clothing and Textile Fabrics . | 17,427 | 18,387 | 94.8 | 56,762 | 60,391 | 04, 0 |
| VIII,-Books, Paper, Pinting, etcer, . | 13,760 | 15,479 | 88.9 | 5,352 | 5,068 | 04.4 |
| IX.-Musical Instruments, etc. ${ }^{\text {a }}$ : | - 514 | 521 | 98.7 | 40 400 | 4 | 97,6 |
| $X$ - Arms and Exploss ves ... $\quad$. | 478 | 364 | 131.3 | 490 | 472 | 103.8 |
| XI.-Velicles, Hamess, Saddlery, etc. | 11,238 | 11,018 | 102.0 | 187 | 178 | 108.1 |
| XIT,-Ship and Boat Buikding ${ }^{\prime}$ '. | 3,141 | 8,510 | 89.5 |  | 1 |  |
| XIIL-Furniture, Beddug, etc. | 8,222 | 8,473 | 97.0 | 667 | 742 | 89.9 |
| XLV,-Drugs and Chemicals | 2,298 | 2,706 | 83.1 | 1,084 | 1,016 | 100.4 |
| XV, Surgical and other Fustruments | 168 | 162 | 10018 | 10 | 23 | 82.6 |
| XVI,-Timepieces, Jewellery, etc. . | 1,703 | 1,820 | 93.6 | 14.7 | 150 | 02,4 |
| XVII.-Heat, Light and Power | 7,581 | 7,001 | 108,3 | 143 | 350 | 40.9 |
| XYIII.-Leatherware, ne.i. | 859 | 766 | 85,2 | 260 | 417 | 85.0 |
| SIX.-Minor Wares, ne.i. | 2,078 | 2,181 | 96,3 | 954 | 779 | 122.5 |
| Total | 209,128 | 213,532 | 07.9 | 74,369 | 78,707 | 94.4 |

* The inmber of emplosees are exelusive of managens, oversoers, actuantiants ankl eleaks.

It will be seen that in some cases the number included in the present inquiry is actually greater than the average number employed during the year. This apparent anomaly is, of course, due mainly to the fact that owing to seasonal or some special variations in the activity of industry the number employed in November in these industries was in excess of the average number employed during the whole year.

The three largest classes in' respect to the number of males employed are Class V. (Metal Works, Machinery, etc.), 60,714; Class VI. (Food, Drink and Tobacco), 32,716; and Class IV. (Working in Wood), 26,554 . These three classes together account for 119,984 , or 56 per cent. of the total number of male employees. The next in order of precedence are Classes VII. (Clothing and Textile Fabrics), 18,387; VIII. (Books, Paper, Printing, etc.), 15,479; III. (Stone, Clay, Glass, etc.), 11,478; and XI. (Vehicles, Harness.' Saddlery,' etc.), $11 ; 018$; making a total of 56,362 , or 26.4 - per cent. of the total number employed. The abieve seven classes therefore account for no less than 82.4 -per cent. of the total average number employed in the whole nineteen classes. Similarly, as regards female employees, taree: classes account for 94.4 per cent, of the total number; these three, classes are:-VII. (Clothing and Textile Fábrics), 60,391; VI. (Food, Drink and Tobacco), 7940 ; and VIII. (Books, Paper, Printing, etc.'); 5668, making a total of 73,999 .

## SECTION TI.-DISTRIBUTION OF WAGES.

1. General. - For the purpose of tabulating the number of persons employed at various rates of wages sixteen wagegroups have been adopted. The lowest group in order of amount of wages is for persons leceiving less than 10 s . per week; the next group includes persons receiving as much as 10 s .; but less than 15 s . per week; while the following thirteen groups proceed by gradations of 5 s . to the group in-
cluding persons whose wages are as much as 75 s ., but less than 80 s . per week. The last and highest group includes all persons receiving a weekly wage of 80 s. and over. Tabulations in these groups have been effected for each of the sub-classes of the nineteen main industrial groups, as well as for each of the main groups, and for each State and the whole Commonwealth. In the body of this report it has been found practicable to publish only summarised results. More detailed tables shewing the results for each State and for each of the main industrial groups have been relegated to appendices. In addition to tabulating the number of persons of each sex falling within each wage group, the weighted average wage of all such persons in each group has been computed.
2. Number of Employees and Wages in Industrial. Groups.-A detailed classification according to wage-groups for each industrial class and sub-class may be found in Appendix I., where particulars are given of the number of workers and the percentage in each wagegroup, together with the average wage in each case. In these detailed tables particulars for females are given only for the separate Classes VI. (Food, Drink, ettc.), VII. (Clothing, etc.), and VIII. (Printing, etc.), which together comprise 69,481 , or 93.9 per cent. of the total number of female workers. Other classes are grouped together. It will be seen that the particulars given in this Appendix relate to the whole Commonwealth; owing to limitations of space it has been found. impracticable to publish similar information for the individual States. The following summarised results will, however, serve too indicate broadly the differences which exist between the several .States:-

## Manufaeturing Industries, Number of Employees and Average Wage in each State, classified in Industríes, November, 1912.



The above results shew that the average nominal rate of wage in November, 1912, for employees in manufacturing industries in the Commonwealth was 49 s . 3d, per week for males, and 19 s . 8d. for females. As regards individual States the average wage for males was highest in Western Australia (57s. 9d.), followed in the order named by New South Wales (51s. 1d.), South Australia (48s. 9d.), Queensland (47s.), Victoria (46s. 9d.), and Tasmania (44s. 4d.) being lowest. For females the average wage was also highest in Western Australin (22s. 5d.), followed by New South Wales (20s. 6d.), and lowest in Tasinania (16s. 5d.), but the averages for South Australia (17s. 8d.), and Queensland (16s. 11d.) were both lower than that for Victoria (19s. 11d.). The order of the States in this respect was therefore the same for males and females, except that in Victoria the average wage for males was lower than in South Australia and Queensland, but for females was higher than in both these States. This displacement of Victoria is, no doubt, due mainly to the facts that in that State inclustries in which females are largely employed have been highly developed and organised, and that a greater number of these industries have, come under wages boards than in the other States. The only classes in which the average wage for males exceeds $£ 3$ per week are XII. and XVII. (in Western Australia), and XV. (in South Australia), but as the total number of male employees comprised in these groups and States amounts to only 366, these instances may be regarded as relatively unimportant. Among the three principal classes in which females are employed, an average wage of 20s. per week for females is exceeded in four instances only, viz., in Class VI. in New South Wales and Victoria, and in Class VII. in New South Wales and Western Australia.

The fact that the average rate of wage paid in any one State is ${ }_{n}$. higher than that in any other State does not, of course, necessarily indicate that there is any difference as between those two States in the rate: : paid to journeymen or adult workers, or indeed, to any particular ". class or grade of employees, since the relative distribution of the em-in ployees in the respective wage-groups influences the amount of the wt average wage computed for all groups. This is evident when it is con-". sidered that, although the rates of wages in any industry for each; particular grade or class of worker may be identical, the fact that in the: one State a larger proportion of the lower paid grades is employed than* in another State, would result in a smaller average wage in the former, State than in the latter. Thus the figures in the preceding table shew that the average wage for males was higher in South Australia (48s. 9d.) than in Victoria (46s. 9d.). An analysis of the distribution into wage groups and of the average wage in each group shews, however, that this : difference is due not so much to the relatively bigher wages paid to.".' the several grades of workers in South Australia, as to the prepon-'د derating influence of the different distribution in the several groups.... This question of distribution in wages groups is, however, more fullydealt with in a later part of this report.

As regards the various industrial groups, the average rate of wagen ${ }^{\prime \prime}$ : of male employees was highest in Group XII., Shipbuilding (55s. 5d.), $\because$ followed by XVII., Heat, Light and Power (53s. 10d.), IX:, Musicall:; Instruments ( 52 s .5 d. ), and X. Arms and Explosives (52s. 2d.). Groupsin III., IV., and V.. are practically equal, then follows Groups XVI. and. .. XIV., and so on, until we reach Groups XIX., Minor Wares (42s.

3d.), and II., Oils and Fats (42s. 2d.), and finally, Gıoup XVIII., Leatherware, n.e.i., with an average wage of 39 s . ld. In the threo industrial groups specified separately for females the average wage was highest in Group VI., Food and Drink (20s. 7d.). Analogous remarks to those given above in regard to comparisons between the average rates of wages in different States apply equally to any comparisons that can be drawn between the average rates in industrial groups, that is to say, regard must be paid not only to the rates paid to particular grades or class of workers, but also to the relative distribution of low and high paid workers in the several industries.

## 3. Number of Employees in each State classified according to

 Wage Groups.-In Appendix II. particulars are given for each of the nineteen main industrial groups of the number of employees in each State, and the average wage classified in wagegroups by gradations of 5 s . from under 10 s , to 80 s . and over. The final results for all nineteen groups taken together are shewn in the following table:-Manufacturing Industries, Rates of Wages, Classification of Employees in WageGroups, November, 1912.


[^0]The significance of these results may be better appreciated by reference to the graph below, shewing the number of persons.em ployed in each wage-group in relation to the average wage in each group. The figures are shewn for the whole Commonwealth only (last two columns of preceding table), separate graphs being given for males and females.

As regards the grapb for male employees the most noticeable features are the aggregations of 'workers in the 45 s . to 55 s . groups, followed by a heavy fall in the 55 s . to 60 s . group, and a rapid increase in the 60s. to 65s. group. In addition there are two further divisions which are fairly well defined, by the decline in the 25 s . to 30 s. and the $35 s$. to 4 Cs . groups, respectively. These wages groups probably
Manufacturing Industries, Graph, shewing. Number of Male and Female Employees: in Wage-Groups, November, 1912.

correspond fairly closely with the division of workers into (a) boys and junior apprentices, (b) senior apprentices and improvers, (c) unskilled workers and those occupations requiring a moderate degree of skill, and (d) highly skilled artisans. It will be seen later that the first division (up to 30 s .) includes 16.4 per cent. of the total number of male employees, the second division ( 30 s . and under 45 s .) 12.8 per. cent., the third ( 45 s . and under 60s.) 38.1 per cent., and the fourth ( 60 s . and over) 32.7 per cent. The apparent increase shewn by the broken line is due to the aggregation in one group of all males whose wages were 80 s . and over.

As regards females, the graph shews the large aggregation of numbers in the groups from 15 s , to 25 s . The groups under 15 s . include 30.1 per cent. of the total number of famale employeas; 40.7 per cent. are included in the 15 s . to under 25 s . groups, the remaining 29.2 per cent. receiving 25 s. or over.
4. Percentage of Employees in each State in Wage-Groups.-The relative distribution of employes in the respective States and wagegroups may be more clearly seen by shewing the absolute numbers given in the table on page 7 in the form of percentages. These are given separately for males and females in the following tables:-

> Manufacturing Industries, Rate3 of Wages, Percentage of Employeas in States, and Wage-Groups, November, 1912.


REMALES.

| Under 103. | $\vdots$ | +* | 90 | 12.7 | 22.7 | 21.8 | 14.2 | 26.1 | 13.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10s. and ilinder 158. | $\ldots$ | . | 18 ; | 15,3' | 10.4 | 16.6 | 15 Q | , 18.9 | 16.8 |
| 158. and minler 208. |  | . | 19.4 | 152 | 20.4 | 17.5 | 16.2 | 37.0 | 17.3 |
| 20s. athil inder 20゙s. |  |  | 46.7 | 26.8 | 191 | 23.4 | 15.2 | $\cdot 224$ | 234 |
| 258 and minder $30 \%$. | + | . | 154 | 18.6 | 0.7 | 11.2 | -11.7 | 6.0 | 155 |
|  |  |  | 100 | 7.7 | 45 | 5.8 | - 86 | 3.5 | 8.0 |
| 3ns, ankl under tus. | + | , * | 34 | 28 | 2 l | 26 | 6.3 | 8.3 | 2.8 |
| 40s. ant uniter 40̂s. | $\ldots$ | $\cdots$ | 1.8 | 0.8 | 11 | , 1.0 | 5.9 | 1.5 | 1.3 |
| 45s, allil mbiter foly. |  | . | 08 | 0.3 | 19.4 | 0.3 | 2.4 | 0.2 | 05 |
| 509. and madet fos. |  | . | 0.5 | 0.6 | 0.3 | 0.1 | 1.6 | 0.9 | 0.6 |
| 55s. and Mriter 60\%y |  | + | 0.1 | $\dagger$ | - 01 | $\dagger$ | 0.5 | $\pm$ | 0.1 |
| 60 s . And tuder 65s, | $\therefore$ | + | $4{ }^{1}$ | 0.2 | 0.2 | - $\dagger$ | 06 | 0.2 | 0.2 |
| 65. a at uriter 709. | . | . | 1 | ${ }^{+}{ }^{-1}$ | $\dagger$ | - t | 0.1 |  | , |
| 70 as and under 758 | . |  | ${ }_{0} 1$ | $\dagger$ | $\dagger$ | 61 | 0.8 | + | 0.1 |
| 75s. and under 80. 80 s. and over | $\cdots$ | $\cdots$ | ${ }_{0}^{\dagger}$ | 0.1 | 8.1 | 1) 1 | 0.2 | -4 | ${ }_{0}^{\dagger}$ |
| 'TOTAL |  |  | 1000 | 1060 | 1000 | 100.0 | 100.0 | 1000 | ¢ 100.0 |

$\dagger$ leass than 0.1 per cent.

The number of persons and the average wage in eaci of the above groups are ghewn in the table on page ! Of "the male wageearners in all industries 34,245 , or 16.4 per cent., earned less than 30 s . per week; 26,688 , or 12.8 per cent., were paid rates ranging from 30 s. to under 45 s . ; 79,785 , or 38.1 per cent., received from 45 s . to under 60 s ., and the remainder 68,410 , or 32.7 per cent., 60 s . per week and upwards. On applying these divisions of the several Sates the follow. ing results are obtained:-

Manufacturing Industries.-Rates of Wages, Number and Percentage of Male Employees in Wage Divisions, November, 1912.

| STate. | UNDER 30S. |  |  | H0s. AND UNDEAK 45s |  |  | 43s. AND GNIPER 60s |  |  | 608 | AND UFESt, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | $\begin{aligned} & \text { A ver- } \\ & \text { fage } \\ & \text { wite } \end{aligned}$ | 1'er cent of a! Males. | No. | Average Wage. | Per cest. <br> of all <br> Males. | No. | $\begin{gathered} \text { A vet- } \\ \text { ige } \\ \text { Wige. } \end{gathered}$ | Per cent of all Males. | No. | Aver: age. Wage | Per a ent. of all Males. |
|  |  | ${ }_{17}^{8 .}$ |  |  |  | 11.2 |  | 5i. ${ }_{\text {s. }}$ d. | 39.2 | 28.012 |  | 354 |
| N.s.W. . | 11,210 12.967 | $\begin{array}{ll}17 & 2 \\ 16 & 7\end{array}$ | 14.2 20.1 | 8,830 8,259 | $\begin{array}{rrr}36 & 6 \\ 36 & 11\end{array}$ | 11.2 | 24,240 | 515 | 37.6 | 19,4567 |  | 29.5 |
| Q'mat | 4224 | 108 | 16.3 | 5,658 | 37 3 | 21.8 | 9,460 | $3{ }^{3} 8$ | \$5,0 | 6.072 | 6811 | ${ }^{2} 69$ |
| \$, A. | 3.375 | 16 | 17.1 | 1,987 | \$36 4 | 10.0 | 8.027 | 51 | 46 | 0,300 | 007 | 32.3 |
| W, A | 1.189 | 17 \% | 8.5 | 687 | 361 | 5.1 | 4,870 | al 10 | 36.6 | 6.616 | $31 \quad 3$ | 40.8 |
| Tas. | 1,334 | 151 | 204 | 1,261 | 385 | 198 | 2,578 | \%) 8 | 305 | 1,364 | 166 | 21.8 |
| C'witu | 34,243 | 168 | 16.4 | 26,688 | ${ }^{37} \quad 6$ | 128 | 79.785 | 5010 | 38.1 | 08.410 | 188 | 32.7 |

. Of the female wage-earners in all industries 22,415 , or 30.1 per cent., earned less than 15 s. per weok, the average wage being $9 \mathrm{~s} .5 \mathrm{~d} . ; 30,218$, or 40.7 per cent., were paid rates ranging from 15 s . to under 25 s ., the average being 19 s . 5 d .; 17,423 , or 23.5 per cent., rereived from 25 s . but less than 35 s ., with an average of 27 s .7 d. , the remainder being paid at a rate of 35 s , and upwards, the average being 42s. 11d. On applying these divisions to the several States, the following results are obtained:-

## Manufacturing Industries, Rates of Wages, Number and Percentage of Female Employees in Wage Divisions, November, 1912.

| Statis. | Under lis. |  |  | $\begin{aligned} & 15 \mathrm{~s} . \mathrm{Nu} \\ & \text { UNDER } 25 \mathrm{~s} . \end{aligned}$ |  |  | 25s. ATV <br> UnDEIt stis |  |  | 35S. AND OVPR. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N゙0. | $\begin{gathered} \text { A ver- } \\ \text { Age } \\ \text { W'ige } \end{gathered}$ | Per cent. of tull Fe. males. | No. | Average Wage | Per cent of all Fe. mules | No. | Ater age Wage | Fer cent. of all Femates. | No. | $\begin{gathered} \text { Aver- } \\ \text { itge } \\ \text { Wrage. } \end{gathered}$ | Jrer cent. of 11 H'emales. |
| N.S.W. | 6.882 | $\begin{array}{cc}s . & d \\ 10 & 1\end{array}$ | 27.3 | 9,755 |  | 40.1 | 6,171 |  | 2.54 | 1.751 | 8. ${ }_{4}^{1}$ | 7.2 |
| Vic, | 0,548 | 9 | 28.0 | 14,331 | 20 \% | 42.0 | 8,775 | 27 | 25.7 | 1,524 | 43 3 | 43 |
| Q'land | 2,901 | 811 | 42.1 | 2,729 | 1812 | 39.5 | ,082 | 97 | 142 | +287 | 429 | 42 |
| S.A. | 1,944 | 830 | 37.9 | 2,101 | 10 ¢ | 40.9 | 874 | 27 | 17.0 | 218 | 403 | 4.2 |
| W, A, | 726 | 811 | 298 | ${ }^{7} 784$ | 180 | 31.4 | 491 | 27 11 | 21.3 | 448 | 44 | 18.5 |
| 'Tas. | 614 |  | 45.0 | 538 | 190 | 89.4 | 130 | 276 | 0.5 | 85 | 414 | 6.1 |
| Gwly | 22,415 | 95 | 30.1 | 30,218 | $10 \quad 5$ | 40.7 | 17.423 | 27 | 23.5 | 4,313 | 4211 | 5.7 |

-5. Percentage of Employees in Industrial Classes and WageGroups. In the preceding paragraphs the distribution of wage-earners has been dealt with firstly, accortling to industrial classes and States (paragraph 2), and secondly, according to wagegroups and States (paragraphs 3 and 4). It now remains to shew the percentage distribution in industrial classes according to vage-groups. The absolute figures, from which these percentages are computed, have been referred to in paragraph 2, and detailed results for each industrial class and sub-class are given in Appendix I. The following table shews accordingly the percentage of wage-arners in each wagegroup, classified according to industrial class:-

Manufacturing Industries, Rates of Wages, $\mathbf{P}$ ercentage of Employess in t. Industrial Classes and Wage-Groups, November, 1912.


> * For classifuation of intugtries sec patge t. The total of the percentages gaven in each horizontal hme is, of course, equal to 1000 .

These figures shew that among the males the largest proportion of highly-paid workers (in receipt of cos. per week and upwards) are found in the following Classes in order of precedence:-IX. Musical Instruments, $54^{\circ} .29^{\circ}$ per cent. ; XII. Ship and Boat Building and XIII. Furniture, Bedding, etc., 47.83 per cent. each; XVI. Timepieces, Jewellery, etc., 45.70 per cent.; VIII. Books, Printing, etc., 44.86 per cent., and V. Metals, Machincry, etc., 40.97 per cent. This percentage of highly-paid workers ranges down to as low as 9.72 in Class I., Treating Raw Materials. On the other hand the Classes in which the largest percentage of low-paid male workers (in receipt of less than 30s. per week) are found are as follows:-XV. Surgical and other Scientific Instruments, 36.43 per cent.; XVIII. Leatherware, n.e.i., 34.14 per cent.; XI. Vehicles, Harness, etc., 30.36 per cent.; VIII. Books, Printing, etc., 29.27 per cent., and XVI. Timepieces, Jewellery. etc., 29.01 per cent, This proportion ranges down to 6.99 per cent. in Class I., Treating Raw Materials, so that that class has at the same time the lowest percentage of both highly-paid and lowpaid workers. On the other hand, in Classes VIII. and XVI. the percentage of both high and low-paid workers is peculiarly large, leaving only about 25 per cent. of the employees in these classes in the two middle divisions.
6. Effective Wages in various States. On page 7 hereinbefore particulars were given of the average rate of wage for male and female workers, respectively, in each State. These particulars refer, of course, to nominal rates in which no allowance is made for relative cost of living, unemployment, overtime, and short time, etc. In the following table particulars are given of effective wages, allowance having been made for the difference in cost of living as between the several States:-

Manufacturing Industries, Nominal and Effective Wages in each State, November, 1912.

| State. |  | Cost of Living Index, Nos. | Mades. |  | Females.' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Nominal Wage. | Effectivo Wage. | Nominal Wage. | Effoctive Wage. |
| New South Wales | $\cdots$ | 1,056 | $\begin{array}{ll}\text { s. } \\ 51 & \text { d. }\end{array}$ | $\begin{array}{cc}s . & d . \\ 48 & 4\end{array}$ | $\begin{array}{lr}s . & d . \\ 20 & 6\end{array}$ | s. $\quad$ d. |
| Vietoria |  | 960 | 469 | 48 8 | 1011 | 209 |
| Queensland . |  | 885 | 470 | 531 | 1611 | 191 |
| South Australia | . | 1,022 | 48 9 | 478 | 178 | $17 \quad 3$ |
| Western Australia | . | 1,061 | 57 9 | 545 | 225 | 212 |
| Tesmanis | . | 961 | 44 4 | 462 | 16 | 17 l |
| Commonwealth |  | 1,000 | 493 | 493 | 198 | $19^{-8}$ |

The above results shew that for males the rates of wages, both nominal and effective, are highest in Western Australia, and lowest in Tasmania. New South Wales, which comes second in respect to nominal wage, is exceeded in effective wage by both Queensland and Victoria, while the effective wage in South Australia is lower than in any other State except Tasmania. For female workers, both nominal and effective wages are again highest in Western Australia, and lowest in Tasmania. Victoria occupies second place in regard to effective wages, and is followed, in the order named, by New South Wales, Queensland, and South Australia.


[^0]:    *For constitution of Wage-groaps see pages 6 and 7

