

## CERTIFICATE

This publication is issued pursuant to the provisions of the sundry civil act ( 41 Stats. 1430) approved March 4, 1921.

## ADDITIONAL COPIES

of this publication may be procured from THE SUPERINTENDENT OF DOCUMENTS
U. S. GOVERNMENT PRINTING OFFICE

WASHINGTON, D.C.
AT
15 CENTS PER COPY
Subscription Price Per Year
United States, Canada, Mexico, $\$ 1.50$; Other Countries, $\$ 2.25$

## Contents

Special articles: Page
Trade-union provision for sick, aged, and disabled members and for dependents ..... 1-16
Workmen's compensation legislation of 1927 ..... 17-33
Public service retirement systems in Great Britain and France_ ..... 33-42
Labor turnover:
Labor turnover in American factories during 1926 and 1927 ..... 43
Industrial relations and labor conditions:
Recommendations of President regarding coal-mining situation. ..... 44
Annual report of the Secretary of Labor, 1926-27 ..... 44-47
Indexes of the economic progress of the United States, 1922 to 1927. ..... 48
Results of Canadian industrial disputes investigation act, 1907 to 1925 ..... 48-53
Suggestions from employees ..... 54-57
Suiting the speed of the machine to the worker ..... 57, 58
English miners' welfare fund, 1926 ..... 58-60
Women in industry:
Hours and earnings of women in New York laundries ..... 61, 62
Married women in industry in Binghamton, N. Y_ ..... 62, 63
Child labor:
Illinois-Accidents to employed minors ..... 64
Pennsylvania-Compensated accidents to working children ..... 64-66
Industrial accidents:
The newer industrial-accident prevention and workmen's compen- sation problem, by Ethelbert Stewart, United States Commissioner of Labor Statistics ..... 67-73
Accident rates, by type of injury, for various injuries, 1926 ..... 73-80
No-accident campaign among manufacturers of Erie, Pa ..... 81
New York-Industrial accidents in 1926-27 ..... 81-83
Industrial hygiene:
Study of hazards of spray coating84-89
Carbon-monoxide hazard in commercial garages and automobile repair shops ..... 89, 90
Peru-Hygienic conditions in mines ..... 99, 91
Workmen's compensation and social insurance:
Recent workmen's compensation reports-
Hawaii ..... 92
Nevada ..... 92, 93
Tennessee ..... 93, 94
Texas ..... 94
Vermont ..... 94, 95
Brazil-Pension fund for port workers ..... 95
Germany-Position of social insurance ..... 95-100
Queensland-Unemployment insurance ..... 100-102
Worker's education and training:
Progress in industrial education, 1924 to 1926 ..... 103, 104
Great Britain-Apprenticeship in the printing trades ..... 104-106
Labor organizations and congresses:
Chile-Decree relative to trade-unionism ..... 107
Chile-Trade-union congress ..... 107
France - National congress of General Confederation of Labor- ..... 107-109
Great Britain-Membership of trade-unions. ..... 109, 110
9879 ..... III
Industrial disputes: PageStrikes and lockouts in the United States in November, 1927......- 111-116
Conciliation work of the Department of Labor in November, 1927_ 116-119
Mexico-Establishment of Federal Conciliation and Arbitration Board_ ..... 120
Wages and hours of labor:
Reporting-time and minimum pay in building-trades agreements_ ..... 121-127
New York-Office workers' earnings ..... 128,129
Argentina-Hours of work in Buenos Aires ..... 129
Mexico-Eight-hour day for commercial workers ..... 129, 130
Spain-Eight-hour day in mines ..... 130
Trend of employment:
Employment in selected manufacturing industries, November, 1927_ 131-142
Employment and pay-roll totals on Class I railroads, October, 1926,and September and October, 1927142, 143
Massachusetts-Unemployment of organized building-trades work-ers143-145
State reports on employment-
California ..... 145,146
Illinois ..... 147, 148
Iowa ..... 149
Maryland ..... 150
Massachusetts ..... 151
New Jersey ..... 152, 153
New York ..... 153-155
Pennsylvania ..... 155, 156
Wisconsin ..... 157, 158
Chile-Unemployment ..... 158
Wholesale and retail prices:
Retail prices of food in the United States ..... 159-179
Retail prices of coal in the United States ..... 180-182
Index numbers of wholesale prices in November, 1927 ..... 183, 184
Sources and frequency of price quotations used in constructing revised index numbers of wholesale prices. ..... 185
Comparison of retail-price changes in the United States and in foreign countries ..... 186-188
Cost of living :
Netherlands-Study of family budgets in Amsterdam, 1923-24_... ..... 189-191
Labor awards and decisions:
Awards and decisions-
Ferryboatmen-California railway lines ..... 192, 193
Railroads-Decisions of Train Service Boards of Adjustment.. ..... 193-195
Railway clerks-Chicago \& North Western Railway Co_ ..... 195, 196
Railway clerks-Wabash Railway Co ..... 196
Signalmen-Louisville \& Nashville Railroad ..... 196-198
Immigration and emigration :
Statistics of immigration for October, 1927 ..... 199-202
Labor representatives' agreement on restriction of Mexican immi- gration ..... 202
Activities of State labor bureaus:
California, Hawaii, Illinois, Iowa, Maryland, Massachusetts, Nevada, New Jersey, New York, Pennsylvania, Tennessee, Texas, Vermont, and Wisconsin ..... 203
Publications relating to labor:
Official-United States ..... 204, 205
Official-Foreign countries ..... 205-207
Unofficial ..... 207-211

## This Issue in Brief

Labor organizations have greatly expanded their original field of activities, and not only provide various "benefits" for their members, but have also undertaken measures to improve their members' economic position, social or protective measures, etc. A survey by the Bureau of Labor Statistics of trade-union provision for sick, aged, and disabled members shows that 61 international unions paid benefits for death, or sickness, disability, old-age, etc., amounting to more than ten and one-half million dollars last year. Payments of insurance of various kinds amounted to more than twelve millions. Since these unions began paying benefits and insurance, more than $\$ 300,000,000$ has been disbursed (p. 1).

A liberal policy on the subject of workmen's compensation was followed during 1927 by the legislatures of 31 States, 2 Territories, and the Congress of the United States, the laws having been extended to cover more workmen, to increase benefits, or to make the laws more effective and just. The study on page 17 analyzes the changes made by the legislation of 1927.
President Coolidge, in his message to Congress, December 6, 1927, recommended that legislation be enacted authorizing Federal control of fuel distribution as well as a Federal board of mediation and conciliation in case of actual or threatened interruption to coal mining (p. 44).

The Canadian Industrial Disputes Investigation Act has been very successful in averting or settling controversies between employers and workers in cases where the machinery of the act has been invoked, according to a study recently published by the Russell Sage Foundation. An article on page 48 reviews the operation of the act, and also the attitude of labor and of employers toward it.

Provisions for minimum pay for any work done in a day, and pay for reporting when no work is furnished, appear in many trade-union agreements. The results of an examination of 544 building-trades union agreements in many of the principal industrial cities of the United States with respect to these provisions are shown on page 121.

Systematic plans for suggestions by employees to stimulate their interest in the industry are a feature of the industrial relations plans of many companies. A recent study of the plans of about 60 firms shows that the awards are relatively small, as about 90 per cent of all suggestions receive only the minimum award, or little more. The plans seem, however, to be regarded as worth the effort they entail, since in most cases where plans were found to have been discontinued it was due to causes having no relation to the plan (p. 54).

A study of the health hazards of spray coating, recently completed by a committee appointed by the National Safety Council, shows that there are three distinct hazards in this process according to the kind of paint employed. These are the dangers of lead poisoning, benzol poisoning, and silicosis, the latter disease occurring in the enameling of sanitary ware, castings, etc., in which the paint often contains a large amount of free silica. Prevention lies in the elimina-
tion so far as possible of these dangerous substances, or, when this is impossible, in adequate exhaust ventilation and general good housekeeping in the plant (p. 84).

Carbon monoxide is a hazard in any inclosed, ill-ventilated space into which the exhaust gases from internal-combustion engines are being discharged. Tests carried out by the New York Bureau of Industrial Hygiene in 71 commercial garages and repair shops showed a general lack of adequate ventilation and, as a result, a concentration of carbon monoxide in the air in a number of instances in excess of the amount which can ordinarily be tolerated when there is exposure to the gas during a whole working-day (p. 89).

The married woman must be accepted as a factor in industry to be reckoned with, according to the New York Bureau of Women in Industry. A study recently made in Binghamton, N. Y., showed that 48.5 per cent of the woman workers were married, against 45.2 per cent who were single and 6.3 per cent who were widowed, divorced, or separated. In individual industries the proportion of the married ran as high as 55,58 , and 62 per cent (p. 62).

Greater activity was shown in the study of industrial education problems in the United States from 1924 to 1926 than in any previous biennium. Courses were multiplied and enrollments expanded. Much attention was given to the means of making the manual arts a more important factor in public education (p. 103).

# MONTHLY LABOR REVIEW OF U. S. BUREAU OF LABOR STATISTICS 

VOL. 26, NO. 1
WASHINGTON
JANUARY, 1928

## Trade-Union Provision for Sick, Aged, and Disabled Members, and for Dependents

THE Bureau of Labor Statistics has recently begun a study of the various fields of activity which have been entered by the trade-unions of the country. As is generally known, labor organizations have gradually extended their scope, in many cases far beyond the original rather restricted field of concern for wages, hours, and working conditions. Since the fields so entered are so many and various, it was decided to cover one at a time, beginning with the provision made for the sick, aged, or disabled members and for the dependents. This seemed the logical place to begin, since after collective bargaining is gained by the organization the provision of "benefits" is usually the next step. Then may be undertaken measures intended to improve the workers' economic position, such as the establishment of labor banks, credit unions from which members may obtain loans, building and loan associations, legal aid departments; construction of homes; supply of services or goods by such means as mail-order buying, cooperative stores, etc. Or, unions may include social or protective measures, such as the establishment of various kinds of insurance, of definite health services, etc., or educational or recreational activities. Finally, as conditions in the industry become more or less stabilized, and the union ceases to have to fight for its very existence, union leaders have greater leisure to consider broader problems, those of the industry and even of society in general. At the unemployment conference sponsored by organized labor, which was held in the spring of 1927, one labor representative expressed himself to the effect that "The time has passed when trade-unions could confine their efforts to strictly organizational matters, and every union should now have its affairs so arranged that its officers will have time to devote to the big economic and industrial issues, such as unemployment."

## General Trade-union Benefits

M ${ }^{\text {OST unions pay some kind of trade-union "benefits." The first }}$ benefit usually provided is the strike and lockout benefit; then generally are undertaken the "welfare" benefits-payment of varying amounts in case of the death of a member, in case he becomes disabled for work from injury or illness, or is temporarily debarred from working at his trade because of sickness. The death benefit
is the welfare benefit most generally found; sickness and disability benefits are paid in about equal numbers of cases, and finally, among the welfare benefits, are found a few unions which pay for tuberculosis or for special disablements common to the trade, as for instance, loss of sight, by the granite cutters. Assistance to members in time of unemployment is another function often undertaken by labor organizations.

The present study has been confined to the national and international unions. Many local unions also pay benefits of various kinds, but to attempt to collect data concerning all these would be a prohibitive task. Inquiries were sent to each of the national and international unions known to be making some provision for sick, aged, or disabled members, personal visits also being made to a number of organizations whose activities covered a large range.

Of the 96 unions of nation-wide scope which were known to have or to have had some form of welfare benefit, data were secured from 75 . Of these, 61 pay benefits for death, 13 for disability, 13 for sickness, 13 make some provision for aged members, and 19 have some form of insurance. Eight unions pay tuberculosis benefits or provide for treatment of the tubercular. Seven organizations maintain homes for the aged and disabled, and two of these also maintain a tuberculosis sanatorium in connection with the home. The increasing popularity of group insurance is indicated by the fact that two unions have substituted such insurance for the death benefit formerly paid, the Pattern Makers' League now has the adoption of such insurance under consideration, and the International Photo-Engravers' Union of North America, at its 1927 convention, unanimously decided to substitute for its present $\$ 200$ death benefit, group insurance of $\$ 1,000$; and this action was ratified by a referendum vote of the general membership. The members of the Brotherhood of Railway Carmen have recently been circularized to obtain their views upon a suggested plan of group insurance. The ladies' auxiliary of the Order of Railroad Telegraphers at the 1927 meeting also adopted a group insurance plan.

The pharmacists discontinued their death benefits December 1, 1927, while those of the National Window Glass Cutters were abolished by action of their convention held in May, 1927. The benefits of the Amalgamated Association of Iron, Steel, and Tin Workers, and of the Brotherhood of Maintenance of Way Employees were discontinued in 1926. In other unions, however, the establishment of new benefits or an increase in the amount of the old benefits is being adrocated.
In the majority of cases all members in good standing are entitled to benefits by virtue of their membership in the organization, the cost being covered by the general trade-union dues. In some cases, as for instance where insurance is provided by the union, the member may be required to take this protection, paying an additional amount to cover the cost. ${ }^{1}$ In certain other cases, participation in a specified benefit is optional.
Table 1 shows for each trade-union from which data were secured the kind of benefits paid, the year when each kind of benefit was

[^0]established, the amount of the benefit, and in the case of weekly benefits the number of weeks for which payable.

This table covers benefits paid for death, disability, sickness, tuberculosis, old age, etc., and any special provision made for dependents of deceased members. Because of the scope of the subject, the measures taken by certain unions to provide homes for their aged or disabled members or treatment in a union or private sanatorium for those afflicted with tuberculosis will be discussed in a later article. Such cases have been indicated in the table by a star.

Table 1.-YEAR of establishment and amount of each kind
[Items marked * will be

| Union | Death benefit |  | Disability benefit |  | Sick benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | When established | Amount of benefit | When established | Amount of benefit | When established | Rate of payment |
| Bakery and confectionery workers | 1909 | $\left\{\begin{array}{r}1850-\$ 350 \\ 287-\quad 75\end{array}\right.$ |  |  | 1895 | \$10 per week. |
| Barbers | ${ }^{(3)}$ | $100-500$ |  |  | $\left.{ }^{3}\right)$ | do |
| Blacksmiths and drop forgers Boot and shoe workers | 1919 1900 | $\begin{array}{rr}50- & 300 \\ 100-200\end{array}$ | 1906 | \$100 to \$200 | 1900 | \$5 - |
| Bookbinders.-.-.- | \% 1920 | 100 75 | 190 | \$100 to \$200 | 190 | p |
| Brick and clay workers | 61915 | 7200 |  |  |  |  |
| Bricklayers, masons, and plasterers | ${ }^{(3)}$ |  |  |  |  |  |
| Bridge and structural-iron workers | 1903 | $100-400$ | 1920 | $\$ 25 \text { per }$ |  |  |
| Broom and whisk makers | 1893 | 75-200 |  |  |  |  |
| Butcher workmen. | ${ }^{(3)}$ | 300 |  |  |  |  |
| Carpenters and joiners | $\left.{ }^{3}\right)$ | $\left\{\begin{array}{rrr}1 & 50- & 300 \\ 2 & 25- & 75\end{array}\right.$ | 1882 | \$50 to \$400. |  |  |
| Cigar makers | 1881 | -100- 500 | 1881 | \$100 to | 1881 | \$7 per week |
| Commercial telegraphers | 1922 | 75-125 |  |  |  |  |
| Conductors, railway |  |  |  |  |  |  |
| Diamond workers | 1906 | 400-750 |  |  |  |  |
| Electrical workers | 1922 | 300-1, 000 | ------ |  |  |  |
| Foundry employees | (3) | ${ }^{10} 200$ |  |  |  |  |
| Fur workers | ${ }^{(3)}$ | 100 |  |  |  |  |
| Garment workers (United) | 1922 | 50- $\quad 100$ |  |  |  |  |
| Glass-bottle blowers.- | - 1891 | 500 |  |  |  |  |
| Granite cutters. |  |  | 111909 | \$750 flat |  |  |
| Hatters | 1907 | $\left\{\begin{array}{lll}12 & 100- & 300 \\ 13 & 100 & 150\end{array}\right.$ |  |  |  |  |
| Headgear worke |  |  |  |  | 1912 | \{\$7 per week ${ }^{13}$ |
| Hod carriers.... | 1903 | $50-100$ |  |  |  |  |
| Hosiery workers.................. | 1922 | 1,000 |  |  |  |  |
| Hotel and restaurant employees | 1902 | 1,75 |  |  |  |  |
| Iron, steel, and tin workers. | $\left\{\begin{array}{rl} 1 & 1903 \\ { }^{2} & 1909 \end{array}\right.$ | \} $100-500$ | ${ }^{15} 1916$ | (3) | ${ }^{15} 1908$ | \$5 per week |
| Lace operatives | 1892 | $\left\{\begin{array}{l}1200-1,000 \\ 225-50\end{array}\right.$ |  |  |  |  |
| Lathers... | 1902 | $\left\{\begin{array}{rr}50- & 50 \\ 50- & 400\end{array}\right.$ |  |  |  |  |
| Leather worker | $(3)$ 1883 | 16 $75-200$ $100-1,000$ |  |  | (3) | \$7 per week ${ }^{16}$ |
| Locomotive engineers <br> Locomotive firemen and enginemen |  |  |  |  |  |  |
|  | 1914 | 225 | 1926 | $\left\{\begin{array}{l} \$ 50 \text { per } \\ \text { month } \\ \text { during } \\ \text { disabil- } \\ \text { ity. } \end{array}\right.$ |  |  |
| Machinists_-.-.-.-.-.-......... | $\left.{ }^{3}\right)$ | $50-300$ |  |  |  |  |
| Maintenance-of-way employees | 1920 | $50-300$ | ${ }^{15} 1920$ | \$50 to \$300 |  |  |
| Metal polishers..-.-- | 1910 | $50-200$ |  |  |  |  |
| Molders | 1880 | 600-700 | 1880 | $\left\{\begin{array}{l}\$ 600 \\ \$ 700 .\end{array}\right.$ | 1896 | $\left\{\begin{array}{l} \$ 5.20 \text { per } \\ \text { week. } \\ \$ 7.60 \\ \text { week }{ }^{18} \end{array}\right. \text { per }$ |

${ }^{1}$ Members.
${ }^{2}$ Wives.
${ }^{3}$ Not reported.
4 After first week.
${ }^{5}$ Present rate.
${ }_{7}^{6}$ Discontinued for group insurance.
${ }^{7} \$ 400$ in Chicago district.
8 Any member of 20 years' standing disabled "from general causes" receives $\$ 350$.
${ }^{0}$ Subject to an all-time maximum of $\$ 350$.
${ }^{10}$ Raised to $\$ 300$ in 1927.

OF WELFARE BENEFIT PAID BY SPECIFIED TRADE-UNIONS
discussed in detail in a later article]

${ }^{11}$ Pay only for disability caused by loss of sight.
${ }^{12}$ Men.
${ }^{13}$ Women.
${ }^{14}$ "Once in a lifetime."
${ }^{15}$ Discontinued, 1926.
${ }^{16}$ Benefit discontinued; only older members now receive it.
${ }^{17}$ Per month if not in sanitorium; if in sanitorium not to exceed $\$ 100$ per month plus $\$ 10$ for personal expenses.
is "Honorary" members; i. e., in good standing but not working at the trade.
${ }^{19}$ Regular members.

## MONTHLY LABOR REVIEW

Table 1.-YEAR OF ESTABLISHMENT AND AMOUNT OF EACH KIND

| Union | Death benefit |  | Disability benefit |  | Sick benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | When established | A mount of benefit | When established | Amount of benefit | When established | Rate of payment |
| Paper makers. | 1911 | \$50- \$300 |  |  |  |  |
| Pattern makers | 1905 | 50- 400 | 1905 | \$50 to \$400 | 1905 | \$4 per week. |
|  | - 1900 | 20100 |  |  | a 1900 | \$7.50 per week_ |
|  | 1903 | $\left\{\begin{array}{l}21100 \\ 200\end{array}\right.$ |  |  |  |  |
| Plate printers and die stampers | 1924 1902 | (3) $150-500$ |  |  |  |  |
| Pocket-book makers |  | 150- 500 |  |  | 1902 | \$5 per week.-- |
| Post-office clerks (National Federation. |  |  |  |  | 1913 | \$10 per week ${ }^{4}$ - |
| Potters. | 1911 | $50-300$ |  |  |  |  |
| Printers | 1892 | 75- 500 |  |  |  |  |
| Printing pressmen. | 1906 | 100-700 |  |  |  |  |
| Quarry workers... Railroad signalme | $\left.{ }^{3}\right)$ | $50-125$ |  |  |  |  |
| Railroad trainmen | 1912 | ${ }^{26} 300$ |  |  |  |  |
| Railway and steamship clerks | 1922 | 100-1, 500 |  |  |  |  |
| Railway workers (American Federation). | 1905 | -100 |  |  |  |  |
| Retail clerks...............- | 281905 | ${ }^{28} 25-200$ |  |  |  |  |
| Roofers and waterproof work | (3) | 200 |  |  |  |  |
| Sheet-metal workers. Shoe workers | $\begin{gathered} (8) \\ 1901 \end{gathered}$ | 100- $\begin{array}{r}500 \\ 100\end{array}$ |  |  |  |  |
| Stereotypers and electrotypers. | 1904 | 200-300 |  |  |  |  |
| Stove mounters | ${ }^{(3)}$ | 29150 |  |  |  |  |
| Street and electric railway employees. Switchmen | 1892 | $50-800$ | 1892 | 50 to 800 |  |  |
| Tailors. | 1889 | 20- 100 | ${ }^{(3)}$ | $\left\{\begin{array}{c}\$ 2.50 \text { to } \\ \$ 4.00 \text { per }\end{array}\right.$ | 1907 | \$5 per week ${ }^{32}$ |
| Textile workers | 1907 | $25-25$ |  |  |  |  |
| Train dispatchers | 1925 | ${ }^{33} 300-1,000$ |  |  |  |  |
| W all-paper crafts. | 1923 | $50-300$ |  |  |  |  |
| Window-glass cutters. | 1919 | 100 |  |  |  |  |

${ }^{3}$ Not reported.
${ }^{4}$ After first week.
${ }^{20}$ Apprentices.
${ }^{21}$ Journeymen.
${ }^{22}$ And $\$ 20$ for medical examination.
${ }^{23}$ Treatment in sanatorium at cost not to exceed $\$ 18$ per week.
${ }^{24}$ Treatment in union's sanatorium.
${ }_{25}^{26}$ Varies according to membership; 10 cents for every participating member.
${ }^{26}$ Maximum
${ }_{28}^{27}$ All expenses of treatment in sanatorium.
${ }^{28}$ Prior to 1905 paid a flat sum of $\$ 100$ after 1 year's membership.

OF WELFARE BENEFIT PAID BY SPECIFIED TRADE-UNIONS-Continued


[^1]${ }^{20}$ In present form.
${ }^{21}$ Payable for 10 weeks each year for 3 years, after having received 2 years' sick benefits; disability benefits amount to $\$ 4$ per week for first year, $\$ 3.50$ per week for second year, and $\$ 2.50$ per week for third year. ${ }^{32}$ Subject to an all-time limit of $\$ 200$.
${ }^{33}$ Varies according to membership of benefit association; death benefit, $\$ 1$ for each member at time of death.
a Discontinued, December, 1927.
b Not yet in operation.

- Left to discretion of board.

Death benefits.-As is seen, the benefits vary considerably as between unions. Thus, death benefits ${ }^{2}$ payable upon the demise of members vary from $\$ 20$ to $\$ 1,500$, with $\$ 50$ the most common minimum and $\$ 200$ and $\$ 300$ the most common maximums. Benefits payable upon the death of a member's wife are much lower. Where a range of benefits is shown, the amount payable is predicated upon length of membership in the union. Thus, for example, the International Brotherhood of Blacksmiths, Drop Forgers, and Helpers pays $\$ 50$ upon the death of a member who has belonged to the union one year, gradually increasing the amount as the years of membership increase, up to 10 years' membership when the maximum amount, $\$ 300$, is payable. The unions for which the bureau has data usually require one year's membership before the member becomes eligible for death benefits; others, like the Boot and Shoe Workers' Union, the Cigar Makers' International Union, and Retail Clerks' International Protective Association pay such benefits after three months' affiliation, while the United Hatters has a nonbeneficiary period of two years. The photo-engravers stand alone in permitting apprentices to receive the death benefit. Anywhere from 2 to 30 years' membership is necessary to secure the maximum benefit of the various organizations. In the case of the International Hod Carriers, Building and Common Laborers' Union the maximum benefit is attained after two years' membership, but only if the deceased had not passed his fiftieth birthday at the time of his initiation into the union.

In the case of the death of a member who can not pass the medical examination entitling to insurance, the Brotherhood of Railroad Trainmen pays the expenses of the last illness and of the funeral, the total so expended being limited to $\$ 300$.
Disability benefits.-In most cases where disability benefits are maintained, a flat sum is paid to the incapacitated members, the amount quite generally varying, like that of the death benefit, with the length of time the beneficiary has been a member of the union. Fifty dollars is the minimum paid and $\$ 800$ the maximum. Only three organizations make weekly or monthly payments for disability.
The International Association of Bridge, Structural and Ornamental Iron Workers pays disability benefit in cases of disablement by injury due to the occupation, provided the man has been a member of the union for 15 years; while loss of sight is the only disability for which payment is made by the Granite Cutters' International Association.

A member of the United Brotherhood of Carpenters and Joiners of America who has belonged to the union for one year and. who becomes permanently disabled by reason of an accidental injury, and is thereafter prevented "from ever again following the trade for a livelihood," becomes eligible to receive a "disability donation" varying, according to his length of membership, from $\$ 50$ to $\$ 400$. Permanent disability is defined as total blindness, the loss of an arm and/or leg, loss of use of a limb, loss of four fingers of one hand, "or being afflicted with any physical disability resulting from accidental injuries."

[^2]The boot and shoe workers provide that these benefits shall be paid only after the member, by reason of sickness or disability, has been incapacitated from work for two years and has drawn his sick benefit of $\$ 5$ per week for 13 weeks in each of these two years. In case of continued disability after exhausting the sick benefit, the union pays him the sum of $\$ 100$ as a disability benefit, and this relieves the union from any further claims of sick or death benefits. The tailors also provide that disability benefits do not become payable until after receiving two years' sick benefits. This union, however, continues the payment of benefit-calling it a "disability benefit"for 10 weeks in each of the succeeding three years, gradually reducing the amount per week from $\$ 4$ to $\$ 2.50$. At the end of the third year of disability payments cease.

Any locomotive fireman or engineman in good standing in the brotherhood who becomes totally incapacitated from performing any manual labor is entitled to receive during such disability the sum of $\$ 50$ per month. Disability is here defined as Bright's disease, uncompensated valvular disease of the heart, progressive pernicious anemia, permanent paralysis of either extremity, locomotor ataxia, total deafness in both ears, arthritis deformans, diabetes, cancer, or loss of a hand, foot, or both eyes.

Sick benefits.-Sick benefits vary from $\$ 4$ to $\$ 10$ per week, $\$ 5$ being the most common amount. The benefit period ranges from 7 to 16 weeks, 13 weeks being the most general. The boot and shoe workers and the National Federation of Post Office Clerks provide for a waiting period of one week before sick benefits become payable; in the latter organization membership in the sick benefit fund is optional and at present covers only about 10 per cent of the members.

Other benefits.-The "other benefits" listed in the table include tuberculosis benefit, homes for the"aged, old-age pensions, and "benerolent" allowances. As the treatment provided by trade-unions for tubercular and superannuated members will be discussed in a later issue of the Labor Review, no discussion of particular measures will be given here. These benefits were included in Tables 1 and 3 merely to give as complete a picture as possible of the union "welfare" activities.
"Benevolent" allowances are those made in cases of claims for benefits which have been disapproved because they were not payable under the laws of the organization but which seem to be "worthy of charitable consideration." In such cases the board of directors of the relief department of the Brotherhood of Locomotive Firemen and Enginemen may at its discretion grant an allowance of not more than $\$ 50$ per month, to continue as long as the board determines. Such cases are, in the Brotherhood of Railroad Trainmen, left to the discretion of the board as to both amount and period.
The "relief" granted by the Order of Railway Conductors is extended where needed to "aged and disabled members and to the wife or minor dependents of any member adjudged insane while said member remains under such disability."

## Trade-Union Insurance for Members

Many labor organizations, instead of or in addition to the regular union benefits, have an insurance plan by which members may take out insurance in case of death, accident, or sickness, or all of these. In the majority of unions from which data were secured the insurance is written by a special insurance department of the union; in some cases, especially where group insurance is carried, this is secured from one of the two general union insurance companies-the Union Cooperative Life Insurance Co. of the electrical workers or the Union Labor Life Insurance Co. Others obtain the protection from some old-line insurance company.

In all cases the insurance is limited to members of the union who are in good standing.

Table 2 below shows the kind of insurance offered to members of specified unions, when the plan was established, the range of benefits provided, and the premium cost:

TABLE 2.-KINDS OF INSURANCE PROVIDED BY TRADE-UNIONS AND AMOUNT AND COST OF POLICY

${ }_{2}^{1}$ Through an old-line company.
${ }^{2}$ With double indemnity in case of accidental death.
${ }^{3}$ No data.
${ }^{4}$ Without medical examination.
${ }^{5}$ With medical examination.
${ }^{6}$ And weekly indemnity of $\$ 15$ for not to exceed 52 weeks.
${ }_{8}^{7}$ And weekly indemnity of $\$ 25$ for not to exceed 52 weeks.
${ }^{8}$ Payable at rate of $\$ 10$ per week.
${ }_{10}^{9}$ And weekly indemnity of $\$ 5 ;$ after Oct. $1,1927, \$ 10$.
10 And weekly indemnity of $\$ 30$.
${ }^{11}$ Weekly indemnity.
${ }_{12}^{12}$ And weekly indemnity of $\$ 7$.
${ }_{14}^{13}$ And weekly indemnity of $\$ 30$.
${ }_{14}$ And also payment for certain disabilities and accidental death.

## Amounts Paid in Benefits and in Insurance

Table 3 shows the amounts paid to beneficiaries for each kind of benefit by specified labor organizations during the organization's last fiscal year and during the whole period since the benefit was adopted.

$$
78271^{\circ}-28-2
$$

[11]

TABLE 3.-AMOUNTS DISBURSED BY TRADE-UNIQNS FOR BENEFITS OF VARIOUS KINDS DURING UNION'S LATEST FISCAL YEAR AND SINCE BENEFIT WAS ESTABLISHED

Amounts paid out for each type of benefit in-

ized for FRA真hantnacists
s://fraser.stlouisfed.org
eral Reserve Bank of St. Louis


Table 4 shows the disbursements for insurance of the various kinds.
TABLE 4.-NUMBER OF INSURED PERSONS AND AMOUNT OF DISBURSEMENTS FOR EACH KIND OF INSURANCE, BY SPECIFIED TRADE-UNIONS

| Union and kind of insurance | Number insured | Amount paid in insurance |  |
| :---: | :---: | :---: | :---: |
|  |  | Latest fiscal year | Whole period of operation |
| Boilermakers (group life and disability) | 123,00015,0001800 |  | \$329, 800 |
| Brick and clay workers (group life) |  |  |  |
| Conductors, dining ear (group life) Conductors, railway: |  | \$2, 500 | 6,843 |
| Life and total disability | ${ }^{1} 59,000$ | $\begin{array}{r} 21,555,224 \\ 380,500 \\ \& 80,550 \end{array}$ | 37, 492, 404 |
| Accident | 9, 276 | $\begin{array}{r} 2 \\ 52,375 \\ 37,375 \\ 5112,466 \\ 2,500 \end{array}$ | 929, 770 |
| Conductors, sleeping car (life and disability) | 12,500240180 |  | ${ }_{\text {(6) }}{ }^{(6) 234,700}$ |
| Headgear workers (group life) |  |  |  |
| Letter carriers: | $\begin{array}{r} 5,503 \\ 19,482 \end{array}$ |  |  |
| Life-.... |  | $\begin{aligned} & 147,162 \\ & 116,464 \end{aligned}$ | $\begin{aligned} & 4,246,048 \\ & 1,550,991 \end{aligned}$ |
| Locomotive engineers: |  |  |  |
| Life-1...- | $\begin{aligned} & (a) \\ & 12,235 \\ & 3,802 \end{aligned}$ | $\begin{array}{r} 3,168,383 \\ 232,035 \\ 67,668 \end{array}$ | $\begin{array}{r} 63,605,423 \\ 3,708,633 \\ 350,932 \end{array}$ |
| Accident-1-....-. Sickness and medical care |  |  |  |
| Locomotive firemen and engineme |  |  |  |
|  | $\begin{array}{r} 100,574 \\ 3,126 \end{array}$ | 1, 321, 650 | $732,441,833$ 277,060 |
| Accident |  | 34,000 | 3 44, 121 |
| Machinists (life and disability) | $\begin{array}{r} 18,000 \\ 7,528 \\ 6,000 \\ 50,067 \\ 183,622 \\ 500 \\ 17,000 \end{array}$ | $\begin{array}{r} 1,200 \\ 51,500 \\ 28,000 \\ 82,000 \\ 236,760 \\ 4,336,482 \\ 4,000 \\ 130,000 \end{array}$ | $\begin{array}{r} 5295,443 \\ 374,500 \end{array}$ |
| Post office clerks (National Federation) (group life) -- |  |  | 76,000 |
| Post office clerks (United National Association) (group life)- |  |  | 82,000 |
| Railroad trainmen (life and disability) |  |  | $\begin{array}{r}3,636,693 \\ 74,686 \\ \hline\end{array}$ |
|  |  |  | $\begin{array}{r}74,686,741 \\ 7,000 \\ \hline\end{array}$ |
| Railway and steamship clerks (nonoccupational accident).Railway mail clerks: |  |  | 421,800 |
| Life | $\begin{aligned} & 12,964 \\ & 760 \\ & 19,206 \\ & 958 \end{aligned}$ | $\begin{array}{r} 4,900 \\ 127,738 \\ 4,426 \end{array}$ | $\begin{array}{r} 5,164,275 \\ 8,880 \end{array}$ |
| Accident |  |  |  |
| Immediate relief Switchmen (life and |  |  | 8,682 |
| Total | 551, 223 | 12, 009, 940 | 229, 780, 672 |

${ }^{1}$ Approximate.
${ }^{2}$ Death.
${ }^{3}$ Disability.
1 "Benevolence."
${ }^{5}$ Weekly indemnity.
${ }_{7}^{6}$ Never have had to pay a claim.
${ }^{7}$ Includes also payment for certain disabilities.
${ }^{8}$ Death; also have 3 total disability cases receiving $\$ 36$ per month for 5 years.

- No data.
${ }^{8}$ No payments as yet.


## Provision for Dependents of Deceased Members

Closely related to the death or funeral benefits is the question of provision of assistance to the widow and children. For the death benefit, whether provision is made for a cash benefit or for payment of the funeral expenses, is intended to be a measure of immediate assistance to the family. If this benefit is to be enlarged upon, the next step is logically a continuing provision for the dependents of the deceased.

Responsibility in this matter has been definitely assumed by the International Printing Pressmen and Assistants' Union. At the 1926 convention of the union, proposal was made that the union undertake the raising of a fund to provide for widows with dependent

> [14]
children who have no other means of support. The proposal, it is stated, was unanimously favored and some $\$ 50,000$ was subscribed to the fund in a few minutes. Further funds are being raised by subscription and members are being asked to contribute $\$ 100$ each year for three years. Cottages are to be built, each with its own little garden plot, at Pressmen's Home, and it is proposed not only to make the cottage rent free but also to provide free heat, light, water, milk, ice, and facilities for canning; free medical and hospital attention; and "educational facilities both elementary and for technical trade purposes." An endowment fund of $\$ 1,000,000$ is to be raised, from the interest on which an allowance is to be paid amounting to $\$ 1$ per day for the widow and 50 cents for each child. It is hoped that this can be accomplished within the next three years.

Widows of members of the Order of Railway Conductors and the United Brotherhood of Carpenters and Joiners are provided for in the homes for the superannuated members of these organizations. Other unions, such as those of the bricklayers, and the railroad trainmen, provide that upon the death of a retired member in receipt of the old-age pension paid by the union, payment may be extended to his widow. The locomotive engineers and firemen provide widows' pensions through a special pension department. These will be described in detail in a later article.

## Benefits of Local Unions

As already stated, no attempt was made to obtain data as to benefits paid by locals of the various unions. In some cases, however, the report of the international union contained data as to the locals also.

Nearly all of the locals of the National Marine Engineers' Beneficial Association pay death benefits, the amounts varying from $\$ 100$ to $\$ 500$; three locals, it is reported, are negotiating with union insurance companies for group life insurance for their members. About half of the locals pay sick benefits, averaging $\$ 6$ per week.

The pattern makers' local unions pay sick benefits.
The Philadelphia branch of the American Federation of Full Fashioned Hosiery Workers, which has a local membership of some 5,000 workers, has a beneficial association through which sick benefits are paid. From dues, which are $\$ 1$ per month, benefits of $\$ 20$ a week for a period of 25 consecutive weeks are paid. Any surplus left in the treasury at the end of each year is divided equally among those who drew no benefit during the year. The cost per member of this benefit during the three years the plan has been in operation has averaged $\$ 7$ per year.

The San Antonio local of the street-railway employees' union pays sick and disability benefits, its fund being aided by a contribution of 35 cents per member per month from the employing company.

The amounts paid by the local unions of cigar makers, hotel and restaurant employees, and street-railway employees during their latest fiscal year and during the whole period that welfare benefits have been paid are shown in Table 5.

TABLE 5.-BENEFITS PAID BY LOCALS OF THREE INTERNATIONAL UNIONS

| Union and year | Amounts paid in each kind of benefit |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Death and disability | Sick | Donations ${ }^{1}$ | Total |
| Cigar makers: | $\$ 242,915$254,167 | $\begin{array}{r} \$ 174,817 \\ 169,261 \end{array}$ |  | $\begin{array}{r} \$ 417,732 \\ 423,428 \end{array}$ |
|  |  |  |  |  |
| Hotel and restaurant employees: | $\begin{array}{r} 16,992 \\ 504,089 \end{array}$ | $\begin{array}{r} 47,539 \\ 1,317,473 \end{array}$ | $\begin{array}{r} \$ 16,814 \\ 293,723 \end{array}$ | $\begin{array}{r} 81,345 \\ 2,215,285 \end{array}$ |
| 1900-1926.- |  |  |  |  |
| Street-railway employees: | $\begin{aligned} & \begin{array}{l} 3 \\ 3 \\ 3 \\ \hline \end{array} 187,491 \\ & \left.{ }^{(4)}\right) \end{aligned}$ | $\begin{aligned} & 174,028 \\ & \text { 157, } 400 \\ & \text { (4) } \end{aligned}$ |  | $\begin{array}{r} 361,519 \\ 345,306 \\ 4,026,278 \end{array}$ |
| 1925 |  |  |  |  |
| 1892-1926 |  |  |  |  |

1 Probably equivalent to "benevolent" or "relief" allowances.
${ }_{2}$ 1905-1926.
${ }_{3}$ Including payments for old age also.

- Not reported.

Local No. 2 of the National Federation of Federal Employees, after giving a good deal of consideration to the group insurance policies offered by various old-line insurance companies, decided to carry the insurance itself and has adopted an unusual plan. Under its plan the cost remains unchanged but the benefit varies according to the age of the member. Each member pays 50 cents per month, entitling him to benefits varying according to his age at the time of accepting insurance, as follows:

| Age | Benefit | Age | Benefit | Age | Benefit | Age | Benefit | Age | Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20. | \$370. 00 | 31. | \$280. 00 | 41 | \$200. 00 | 51 | -\$130. 00 | 61. | 80. 00 |
| 21 | -360. 00 |  | 270. 00 |  | 190. 00 |  | 130. 00 |  | 70.00 |
| 22 | 350. 00 | 33 | 260.00 | 43 | 190. 00 |  | 120. 00 | 63 | 70. 00 |
| 23 | 340. 00 | 34 | 250.00 | 44 | 180. 00 |  | 110. 00 | 64 | 70. 00 |
| 24 | 330. 00 | 35 | 250.00 |  | 170. 00 |  | 110. 00 | 65 | 60.00 |
| 25 | 330. 00 | 36 | 240.00 |  | 160. 00 | 56 | 100. 00 | 66 | 60. 00 |
|  | 320. 00 | 37. | 230. 00 | 47 | 160. 00 |  | 100. 00 | 67 | 50. 00 |
| 27. | 310. 00 | 38 | 220.00 | 48 | 150. 00 |  | 90. 00 | 68 | 50. 00 |
| 28 | 300. 00 |  | 220.00 |  | 140. 00 | 59 | -90.00 | 69 | 50. 00 |
| 29 | 290. 00 | 40 | 210.00 |  | 140. 00 | 60 | -80.00 |  | 50. 00 |
|  | 290. 00 |  |  |  |  |  |  |  |  |

The women's local union at the Federal Bureau of Engraving and Printing looks after its sick members through a hospital guild. The guild has an agreement with a local hospital by which the hospital agrees to furnish guild members a bed in a two-bed room, board, general nursing service, and ordinary medicines. In operative cases an extra charge of $\$ 50$ is made for each operation.

Each member pays into the guild dues of $\$ 5$ per year, which entitles her to hospital service for four weeks. ${ }^{3}$

[^3]
## Workmen's Compensation Legislation of 1927

IJ THE 43 States and 3 Territories having workmen's compensation laws, 2 legislatures did not meet ${ }^{1}$ in 1927, and 11 did not change the law. ${ }^{2}$ A liberal tendency was noticeable in the legislation of the 34 jurisdictions ${ }^{a}$ which did pass amendments or supplemental acts. At the beginning of the year 5 States did not have workmen's compensation laws ${ }^{5}$ and 4 great classes of workers subject to Federal jurisdiction had not been covered (employees in the District of Columbia, those engaged in interstate commerce, seamen, and longshoremen). The longshoremen's and harbor workers' compensation act * was the outstanding piece of legislation of the year and brought to a large number of persons the benefits of compensation law. Two jurisdictions reenacted their laws with many improvements. ${ }^{5}$

Liberalization of benefits received attention in 21 States. This was done by increasing all benefits or certain special classes, by raising the minimum or maximum weekly payments, by more liberal allowances in the case of medical assistance or burial, and by other less direct methods.

Increase in coverage comes next in importance. In California and in Nebraska action was taken to place more farmers under the act. Maryland, Illinois, Michigan, Oregon, and Wisconsin dealt with the subject of illegally employed minors. Several States extended the act to cover more public employees. Particular activity and continued hesitancy were noticeable in covering volunteer firemen, employed convicts, and National Guardsmen.

Interesting changes were made showing a tendency to cut down benefits payable to alien nonresident dependents, remarried widows, and children who marry or reach a certain age. Several important words and phrases have been redefined, particularly "hernia." Idaho created a second-injury indemnity fund. The waiting period was dealt with in Maine, Pennsylvania, and Texas. Connecticut and Massachusetts gave attention to the waiving of rights under the act. The Alaska lien section and the transfer of administration from the courts in Kansas should receive special notice.

The following analysis does not include legislation increasing salaries and gives less attention to procedure than to other changes.

## Alaska

THE entire workmen's compensation act of Alaska was reenacted, with several changes, by chapter 77. Compensation benefits were increased approximately 15 per cent over those provided in chapter 98 of the Laws of 1913. In death cases where the beneficiaries are not residents or citizens of the United States the 75 per cent allowed beneficiaries was reduced to 60 per cent as to a wife or minor children and 50 per cent as to all others. Section 3 of the act allows interest to run at 8 per cent during a period running from six months after the injury until claim is paid. Section 5 gives an employee or beneficiary a lien for compensation upon the employer's

[^4]property on which he was working when injured, and provides that such lien shall have priority over other liens except liens for wages and materials and as to such it shall be equal in rank. Section 9 defines the contractors excluded from the benefits of the act and allows certain workmen associated under a partnership agreement the benefits of the act.

The initiative in obtaining statements concerning who are beneficiaries is shifted from the employee to the employer by section 12 (a) of the new act. The old law provided that the employee shall furnish the statement whereas now the employer shall require the statement. This statement, formerly offered in evidence by the employer to establish the facts shown in it, now establishes "conclusively" the facts therein set forth and is prima facie evidence that there are no other beneficiaries (sec. $12(\mathrm{~g})$ ).

If an employer elects not to come under the act, section 33 requires him to post notice of this fact on the premises in addition to the old requirement of recording notice with the United States commissioner. An employee need not now record notice of his election not to be bound by the act but need only serve notice on his employer and obtain a receipt therefor.
The old provision that the costs "may" be assessed upon the party prosecuting or defending the suit without reasonable grounds is changed by section 44 and now the prevailing party "shall" be entitled to costs and a reasonable attorney's fee. Other changes are incidental to the above or less important.

## California

$\mathrm{S}^{\mathrm{E}}$EVERAL changes have been made in the California law. By chapter 834, employers and employees engaged in farm work are conclusively presumed to have accepted the act unless either of them rejects the act prior to an injury. Convicts working on the State roads are expressly excluded from the compensation act (ch. 653). The provision of the compensation act fixing the liability of principal employers and contracting employers (sec. 25) has been repealed (ch. 760 ).
California acted promptly in enacting provisions to cooperate in the administration of the Federal longshoremen's act by authorizing the State fund to insure employers under the act and allowing the industrial accident commission to accept Federal appointments as deputy commissioners (ch. 589).

The division of workmen's compensation insurance and safety of the department of industrial relations has been superseded by the division of industrial accidents and safety of the department of industrial relations (ch. 440). The industrial accident fund has been abolished and certain fees and payments paid into that fund shall now be paid into the general fund (ch. 761, 762). All parties to an action for third-party liability must have notice and an opportunity to be heard before a court consents to settlements (ch. 702).

## Colorado

THREE amending acts were passed. Coverage, which apparently formerly included all firemen, now includes only those regularly employed (ch. 197). The withdrawal of certain employers who had
elected to be bound by the act may now be made within less time than formerly (ch. 198). Provisions relating to the State fund were amended making the fund provide the salaries of its employees, enlarging the list of legal investments for the fund, and making changes in procedure (ch. 199).

## Connecticut

FOUR acts were passed on the subject of workmen's compensation. Injury is now defined and includes only accidental injuries which may be definitely located as to time when and place where the accident occurred, and occupational diseases. An occupational disease is defined as a disease peculiar to the occupation in which the employee was engaged and due to causes in excess of the ordinary hazards of employment as such. Arising "out of and in the course of" is defined. In case of an accidental injury if disability or death was due to acceleration or the aggravation of a venereal disease or to habitual use of alcohol or narcotic drugs, it shall not be a compensable injury. In case of aggravation of a preexisting disease, compensation shall be allowed only for such proportion as may be reasonably attributed to the injury upon which the claim is based. To be entitled to compensation for hernia the employee must now prove that it resulted from an accidental injury, that immediately following such accident the employee was unable to work, that there was not a preexisting hernia, and that within two weeks after the accident the employer was notified.
The maximum weekly payment in fatal cases has been increased from $\$ 18$ to $\$ 21$. The funeral allowance has been doubled to $\$ 200$. The periods for certain specific permanent partial disability cases have been extended. In second-injury cases compensation for the second injury shall be limited to the later injury considered by itself. Waiver of right to compensation by persons having physical defects is now allowed for any injury "attributable in a material degree" instead of injury "directly due" to such condition. If the waiver is signed by a minor the parent or guardian must now approve it. The rights and liabilities of the parties in cases of waiver are now the same as those where less than five employees are employed and the act has been rejected. The waiver is extended to include death (ch. 307).

A minimum attorney fee of $\$ 25$ is fixed in certain cases (ch. 304). Notice to the employer in cases of occupational disease is provided for (ch. 307). Compensation commissioners, after they cease to hold office, may do certain things with regard to causes theretofore tried before them as though they were still commissioners (ch. 138). The travel, clerical, and office expense allowance of commissioners has been made more liberal (ch. 185).

## Delaware

TwO amending acts were passed. One extended the coverage to include employees and certain officials of the State and New Castle County (ch. 193). The other provides that if any compensation has been paid under the total disability or partial disability provisions and the injury falls within the schedule of permanent partial disabilities the total amount paid shall not exceed the total
amount allowed under the permanent partial disability schedule. It is further provided that where certain compensation has been paid, no statute of limitation shall take effect until two years from the making of the last receipted payment (ch. 192).

## Hawaii

ANEW section was added to the Hawaiian law, providing that in cases of permanent partial disability of minors the compensation shall not in any event be less than $\$ 5$ a week. (Act No. 207.)

## Idaho

BY CHAPTER 106 many changes were made in the compensation law. An industrial special indemnity fund was created to provide for persons who receive a certain type of injury which, because of a previously incurred permanent partial disability, puts them in the class of permanent total disability cases, and to limit the liability of the employers liable for the second accident to the second permanent partial disability. Contributions to the fund are to be made by the employees benefited by and employers liable for certain payments for injuries of a permanent partial nature. The employer's payments to the employee in permanent partial disability cases are to be reduced one per cent, but the employer is to pay two per cent into the fund. The employee covered by the fund is to be allowed compensation by his employer for the permanent partial disability and thereafter out of the special fund he is to receive the remainder of the compensation that would be due him for permanent total disability.

The coverage was extended to include public officials as well as public employees, except judges of election, clerks of election, or jurors. The right of election to come under the act in certain employments not covered by the act, formerly in the employer and employee, now rests with the employer alone, and the provision for the termination of the agreement to come under the act has been omitted.

In the definition of "dependents," the widow, to come within the act, must be living with the deceased "at the time of the accident." It is now provided that compensation to or for a child shall cease when such child marries. The word "injury" in the act is further defined as not being synonymous with "accident" and it is provided that the only injury now compensable is one which is the result of an accident. Claim for compensation must now be made within a year after the "accident" instead of a year after the "injury." Hernia, to be compensable now, must have resulted from injury by "accident," and have been reported to the employer within 30 days of the accident. In total disability cases a divorced employee who contributes to the support of his minor child is to receive compensation the same as if he were a widower.

Additional compensation for married employees in cases of total disability to follow that for the first 400 weeks is allowed at the rate of $\$ 6$ per week. If the totally disabled person has certain dependents, he is allowed a minimum compensation of $\$ 8$ a week for a period not exceeding 400 weeks and thereafter at the rate of $\$ 6$ a week, but in no case shall compensation exceed the full amount of his average
weekly wages. The industrial accident board was probably given more discretion in the commutation of payments. In fixing rates of premiums the State insurance fund shall not consider any wage in excess of $\$ 2,400$ a year. Compensation appeals to the court are now given priority over civil cases.

With reference to security for the payment of compensation, the type and amount were made more definite, failure to post notices is penalized, and certain old enforcement provisions repealed; place of deposit and of filing of notice and method of cancellation of policy of insurance or security bond have been changed, and the enforcement of the article for securing the payment of compensation has been made more drastic by a penalty of $\$ 1$ per day for each employee while such failure to secure payment continues and after default for a period of 30 days the employer may be enjoined from doing business. Chapter 181 reduced the cost of carbon copies of the evidence taken at any hearing from 20 cents to 5 cents.

## Illinois

SEVERAL important changes have been made in the compensation law (p. 497). The compulsory coverage of the act is extended to include employees engaged in the carriage and distribution of commodities where the employer employs more than two (formerly three) employees; work in connection with certain real estate developments; and enterprises for the treatment of wood with preservatives (sec. 3). Members of underwriters' fire patrols are excepted from the general definition of employee given in the act. The definition of employee is further changed so that it now includes minors illegally employed (sec. 5) and when they are injured a penalty of 50 per cent will be allowed in addition to regular compensation (sec. 7-I, 8-K).

The compensation for injury resulting in death where employee left dependent children under 16 years of age was increased. Provision was also made for cutting down or stopping compensation payments in the event of a child reaching the age of 18 or the widow remarrying. If compensation due collateral heirs is less than $\$ 450$ the employer must pay the difference between amount payable and $\$ 450$ into the special fund for double injury permanent total disability cases. If the employee did not leave even dependent collateral heirs the compulsory contribution to the special fund is now limited to $\$ 300$ and must be paid within 60 days. If after payment into the special fund it develops that compensation is payable to a dependent under the act, provision is now made for refund from the fund. Anyone who has become liable for burial expenses may now institute proceedings to collect up to $\$ 150$. (Sec. 7.)

In cases of injury not resulting in death several changes were made in the law. Compensation schedule payments for permanent partial disabilities were increased with but few exceptions. The employer is now required to furnish artificial teeth to replace natural teeth lost through injury. In the event of loss by amputation of certain members, such loss is now deducted from certain awards for subsequent injuries. (Sec. 8.) The employer requesting medical examination must now pay in advance traveling and other expenses including wage loss. The employer's surgeon is no longer required to deliver
report of examination to the employee except at latter's request; if so requested, he must do so 5 days before case is set for hearing, and if he refuses or willfully fails to furnish a copy he shall not be permitted to testify at the hearing next following the examination. (Sec. 12.)

The employer is now required to report only injuries arising out of and in the course of employment, instead of those arising out of or in the course of employment as heretofore (sec. 30). In case of the claimant's mental incapacity, limitation of time does not begin to run until a conservator or guardian has been appointed (sec. 24).

The procedure was amended in several respects. Detailed provision is newly made for the enforcement of awards for payment into special fund in case of death without dependents (sec. 7-E) and for payments to employees out of the special fund (sec. 8-F). Detailed provision is also made for taking depositions of witnesses residing in a foreign country (sec. 16). The time of making written demand for argument has been changed (sec. 19-E). In awards affecting the special fund new procedure has been created (sec. 8-F).

Provisions relating to securing of insurance were amended, defining who were to make affidavits as to the financial liability of the employer, making the securing of the payment of compensation subject to the satisfaction of the industrial commission, providing for review by the courts of all orders made by the commission on this subject, and increasing penalties providing for the enforcement of these provisions (sec. 26). Changed or added phraseology in section 5-I, and section $19 \mathrm{E}, \mathrm{F}$, are of lesser importance.

## Indiana

THE maximum basic weekly wage to be considered in computing compensation was increased from $\$ 24$ to $\$ 30$ and the minimum from $\$ 10$ to $\$ 16$, but it is provided that in no case shall compensation exceed the average weekly wage of the employee at the time of the injury (ch. 34).

## Iowa

THE only change in the law of Iowa in 1927 was an amendment authorizing the industrial commissioner to make an order for an equitable apportionment of compensation payments where a deceased employee leaves a surviving spouse and child or children under 16 years of age, or over 16 if incapacitated (ch. 32).

## Kansas

THE workmen's compensation law was reenacted with several changes by chapter 232 . The most important change has been the transfer of the administration of the law from the courts of the State to the public service commission, one member of which is designated as commissioner of compensation and is in active charge of the administration of the act.

The new act is much better than the old law in several respects. Insurance or proof of financial ability to secure compensation is now compulsory. Motor transportation has been made a hazardous employment and building work is added to the class subject to the act without regard to the number of men employed. The provision that the employments be conducted for the purpose of business,
trade, or gain has been dropped. Injuries sustained outside the State in certain cases are now covered. Actual notice of accident by employer now makes rendering notice by employee unnecessary. Maximum weekly payments have been increased to $\$ 18$ from $\$ 12$ in permanent partial disability cases and from $\$ 15$ in permanent total disability cases. In fatal cases the total maximum was increased from $\$ 200$ to $\$ 4,000$. Lump-sum payments are now commuted on a 95 per cent basis instead of 80 per cent. Employers must now report certain accidents within seven days after knowledge. Many other changes have been made, some merely changes in phraseology, while others were more important. Chapter 231 provides that every insurance policy under the act shall contain a provision that insolvency of insured shall not relieve the insurance carrier of liability.

## Maine

TWO acts were passed amending the law. The intention of the legislature in 1925 to increase the maximum payments allowed under the schedule for permanent partial disabilities from $\$ 16$ to $\$ 18$ per week was carried out by correcting an error in references to sections. In computing the seven-day waiting period the day of the accident is now counted. The employer, who was formerly liable for the reasonable expense of "last sickness and burial" in the case of death where there are no dependents, is not now liable for the expense of the "last sickness" (ch. 252). Compensation and medical and hospital bills allowed State employees are to be paid from the appropriation or fund of the department which employed the injured person instead of from the contingent fund of the State as heretofore (ch. 158).

## Maryland

THE compensation law of Maryland was amended in several respects. By chapter 83 , officers and enlisted men of the organized State militia are excluded from the act; and by chapter 395 officers of the Maryland police force and all guards of penal institutions are brought under the provisions of the act. Section 35 A was added (ch. 660) extending the act to cover certain State prisoners engaged in any extrahazardous employment and providing a special method of computing wages of prisoners.

Chapter 536 provides that all compensation and death benefits shall be doubled in the case of any minor employed illegally with the knowledge of the employer, and the burden of such additional compensation or death benefit shall be borne by the employer alone and no insurance policy shall protect him. By chapter 656 workmen under the minimum age prescribed by law and not engaged in extrahazardous employment are apparently classed with other minors under the election provisions of the law. The total amount to be assessed against insurance carriers for the maintenance of the State industrial accident commission is increased from $\$ 80,000$ to $\$ 100,000$ (ch. 552).

The law giving certain courts jurisdiction to review the decisions of the commission in certain cases was amended to allow transfer from such court to another where either of the parties suggest that they can not have a fair and impartial trial in that court (ch. 587).

The law was further amended by allowing 6 per cent interest to be paid on installments of compensation not paid as they matured or would have matured.

Section 58A was added by chapter 396, giving the superintendent of the State accident fund certain power to compromise any claim against any person who is alleged to be legally liable for any accident in which compensation is paid by the State accident fund.

## Massachusetts

CHAPTER 309 makes several changes in the compensation law. The coverage of public employees is probably further extended by defining "laborers, workmen, and mechanics" so as to include foremen, subforemen and inspectors. The act is extended to cover injuries arising out of an ordinary risk of the street received while actually engaged in the employer's business and with his authorization. The injuries now covered include those sustained outside the State as well as within the State.

The amounts of payments have been changed in several instances. In death cases where the dependents are a widow and more than two children, the compensation is increased $\$ 2$ per week for each such additional child, limited only by a total amount of $\$ 6,400$; and if the widow dies the amounts payable had she lived shall continue. In total disability cases the maximum weekly payment is increased from $\$ 16$ to $\$ 18$ and the minimum from $\$ 7$ to $\$ 9$ but equal to the average weekly wage if such is less than $\$ 9$, and the total is raised from $\$ 4,000$ to $\$ 4,500$. In partial disability cases the maximum is increased from $\$ 16$ to $\$ 18$ and the total from $\$ 4,000$ to $\$ 4,500$. Liability for medical expenses beyond two weeks is extended to cases requiring specialized or surgical treatment. It is newly provided that no compensation shall be paid except for partial disability for any period for which wages were earned.

An exception is made to the denial of the right of an employee to waive his rights to compensation. In cases where employees are peculiarly susceptible to injury or peculiarly likely to become permanently or totally incapacitated by an injury the department of industrial accidents may now allow the employee to waive his rights. Commutations may now be allowed whenever the department of industrial accidents deems it best and the parties agree, as the conditions that the case be an unusual one and that payments have been made for six months have been dropped.

It is newly provided that all medical records and reports of hospitals, clinics, and physicians shall be open to the inspection of the department of industrial accidents so far as they are relevant to any matter before it. Certain opinions of the commissioner of insurance are now subject to review by the supreme court.

A tendency toward applying the compensation law to policemen, firemen, and members of the National Guard was evident in two acts, chapters 157 and 291

## Michigan

SEVERAL changes were made in the Michigan law. Employers engaged in interstate or foreign commerce may now elect to become subject to or withdraw from the provisions of the law as to
any distinct department of its intrastate business and not to be subject thereto as to any other distinct department (Act 289.). Any minor between 16 and 18 years of age who was illegally employed when injured shall receive double compensation (Act 162), but if such minor is engaged in an occupation approved by the department of labor and industry he shall be considered to be legally employed (Act 19) and subject to the act if the employer has filed the required permit and certificate.

In total disability and fatal cases the compensation has been increased from 60 to $662 / 3$ per cent of average weekly wages and in partial disability cases from 60 to $662 / 3$ per cent of wage loss; in all three cases the maximum weekly payment has been increased from $\$ 14$ to $\$ 18$. In total disability cases the total maximum has been increased from $\$ 7,000$ to $\$ 9,000$ (Act 63.) Alien dependents residing outside of the United States and Canada shall be entitled to only $662 / 3$ per cent of compensation in fatal cases. Presumption of dependency no longer extends to a husband. Compensation to a widow upon her remarriage reverts to other dependents. Compensation to children ceases at the age of 21 . (Act 376.)

## Minnesota

THREE changes are made in the compensation law. Where services for a municipal corporation are performed gratis or without fixed compensation, the daily wage, for the purpose of computing compensation, shall be taken to be the current wage paid for similar services in municipalities where such services are performed by paid employees (ch. 216). Chapter 417 provides a procedure for nonresidents and foreign corporations who can not be served with notices, and chapter 436 provides for the reporting of accidents of employees of the State and the payment of awards to them.

## Nebraska

TWO amendatory acts were passed. Chapter 39 repeals certain special acts for the relief of volunteer firemen and broadens the coverage of the workmen's compensation act to include them under certain conditions. For the purposes of the act the fireman's wages shall be taken to be those received by him from his regular employer, and if not regularly employed it shall be assumed that he receives $\$ 35$ per week. Chapter 134 allows employers of farm laborers and household domestic servants to elect to come under the act by insuring his employees, and the existence of such a policy in effect at the time of an accident shall be conclusive proof of such election unless the employee prior to the accident properly elects not to be bound.

## Nevada

M ALE persons drafted to fight fires shall for the purpose of obtaining the benefits of the workmen's compensation act be considered employees of the county demanding their services (ch. 45).

## New Jersey

THE coverage of the act was extended to include active volunteer firemen (ch. 127). The provision authorizing an official conducting a hearing to allow costs was amended by placing a limit
on the attorney fees allowed of 20 per cent of the judgment or award, but if compensation was offered or paid prior to hearing 20 per cent of the judgment or award in excess of such amount offered or paid, and limiting witness fees to $\$ 50$ for any one witness and $\$ 150$ for medical witnesses (ch. 324).

## New Mexico

THEonly legislation was a provision authorizing the State highway commission to take out compensation insurance covering its employees engaged in extrahazardous occupations (ch. 100).

## New York

SEVERAL laws were passed by the New York Legislature changing the compensation act in many respects. The maximum weekly compensation for permanent or temporary total disability was increased from $\$ 20$ to $\$ 25$ (ch. 558) and the maximum amount payable for temporary total disability was increased from $\$ 3,500$ to $\$ 5,000$ (ch. 555). The maximum amount payable for temporary partial disability was increased from $\$ 3,500$ to $\$ 4,000$ (ch. 555 ). Compensation for the complete loss of hearing of one ear, not specifically heretofore provided for, is now allowed to the extent of 60 weeks (ch. 554). In the case of an award for permanent partial disability followed by death of claimant from causes other than the injury, where there is no surviving spouse or child, payments shall be made to certain dependents as directed by the board (ch. 556).

The commissioner of taxation and finance replaces the State treasurer as custodian of the special fund for certain second-injury permanent total disability cases, and the uninsured employer was also made liable for the payments to the fund heretofore limited to insurance carriers (ch. 493). Where a city or village, participating in a special mutual-insurance plan, is situated in two counties, instead of apportioning the liability between the counties, the city or village may now elect with which county it will carry all its insurance (ch. 494). It is made a misdemeanor for certain medical examiners employed by the department of labor to accept or participate in any fee from compensation-insurance companies or any self-insurers, whether or not the fee relates to a compensation claim (ch. 496). Penalizing for the failure to notify the commissioner of cessation of payments of compensation is now in the discretion of the commissioner, and the maximum possible penalty of $\$ 100$ is reduced to $\$ 25$ (ch. 497). The power to regulate medical fees was transferred from the commissioner to the industrial accident board and was extended to fees "whether furnished by the employer or otherwise." Upon unanimous vote of the board a physician's failure to furnish a report within 20 days may now be excused and an award for medical treatment allowed. It is newly provided that an employer's liability for medical treatment shall not be affected where the injury was caused by a third party, but the employer shall have a cause of action against such third party to recover the amount paid by him for medical treatment (ch. 553 ).

The industrial accident board is now authorized within one year of the date of accident, upon its own motion or that of a party in interest, to reclassify a disabilty upon proof of change in condition
or previous error (ch. 557). Mutual casualty-insurance corporations organized under the insurance laws of the State apparently can not cover employer's liability or workmen's compensation risks, according to chapter 471. The labor law of the State was amended by chapter 166 changing the term of office of the industrial commissioner from four years to the end of the appointing governor's term and until his successor has qualified. Chapter 578 provided that persons entitled to a pension or death benefit under the public employees' retirement system are not entitled to benefits under the workmen's compensation act.

## Norťh Dakota

THREE amendments were passed. In cases of permanent total disability the maximum amount payable is now fixed at $\$ 15,000$. In fatal cases also the maximum has been fixed at $\$ 15,000$ but this amount is in addition to amounts paid and medical expenses. This last limitation does not apply where, in addition to a widow, widower, or child, there are certain other dependents. The law now has a schedule for specific permanent partial disability cases, allowing compensation from a minimum of $\$ 27$ to a maximum of $\$ 4,680$, and periods of compensation for other permanent partial disability cases have been reduced two-tenths of a week for each 1 per cent of disability (ch. 286). The investment of funds is provided for (ch. 284) and provision made to enforce safety regulations (ch. 285).

## Oregon

THE act now apparently covers minors illegally employed. Salaried firemen and public employees engaged in the operation of bridges now come within the list of hazardous occupations (ch. 326). Employers and employees about to engage in hazardous occupations must now elect not to come under the act prior to engaging therein instead of within three days as heretofore (ch. 312). The act is made compulsory as to the State and certain of its political subdivision as applied to any hazardous occupations (ch. 326). The widow and children of a common-law marriage are given the benefits of the act (ch. 414).

The right of the employer to deduct a portion of the employee's Wages for medical expenses is further restricted, and in the event of the employer's insolvency such amounts withheld shall have preference as claims (ch. 208). The governor is now required to make an audit of the funds of the industrial accident commission and report results to the legislature(ch. 413). The appropriation of one-half the administrative expenses of the industrial accident commission has been discontinued by chapter 188. Insurance provisions as to rating, distribution of surplus, and the catastrophe fund have been changed by chapter 312. The temporary increase of 30 per cent in compensation by the Laws of 1920 , chapter 5 , has been repealed (ch. 227). Chapter 216 provides that every insurance policy under the act shall contain a provision that insolvency of the insured shall not relieve the insurance carrier of liability.

## Pennsylvania

ACT No. 156 made several important changes in the act. The waiting period was reduced from 10 to 7 days. In cases of total and partial disability and in permanent injury cases, where the person formerly was allowed 60 per cent he is now allowed 65 per cent, with the maximum increased from $\$ 12$ to $\$ 15$ and the minimum (except in partial disability cases where there is none) increased from $\$ 6$ to $\$ 7$ per week. In total disability cases the total maximum was increased from $\$ 5,000$ to $\$ 6,500$. The period allowed for the loss of the first phalange of the thumb or any finger shall be one-half the period allowed for the loss of a thumb or finger. In fatal cases there has been a general increase in rates allowed dependents, but maximum weekly payments have been created. The basis for the computation of death compensation has been increased, the maximum from $\$ 20$ to $\$ 24$, the minimum from $\$ 10$ to $\$ 12$ a week. Maximum burial expenses are increased from $\$ 100$ to $\$ 150$. New provisions allow interest at 6 per cent to run in certain cases and provide for payments to be made to dependents or to the estate when a claimant dies before the final adjudication of his claim. Compensation for hernia was made more difficult to obtain by requiring conclusive proof of strain, immediate descent of the hernia, pain, and notification of employer within 48 hours.

Unless knowledge be obtained or notice given to the employer within 90 days after the occurrence of the injury no compensation shall now be allowed. Provisions relating to procedure were made more definite, the period within which an agreement or award could be reinstated or reviewed in certain cases and within which a rehearing could be granted was limited.

Act No. 271 amended the provisions relating to the State fund by directing the State treasurer to make payments from the State fund upon requisition of the secretary of labor and industry, instead of upon vouchers of the board as heretofore, and the State treasurer is relieved of the responsibility of auditing the accounts he is called upon to pay. Probably the burden on the fund is increased by the new provision as to payments of salaries and fees out of the fund. Act No. 164 adds minor duties to those of the department of labor and industry and also authorizes it to divide the State into administrative districts

## Rhode Island

BY CHAPTER 1058 the schedule of permanent partial injuries has been further subdivided, probably resulting in an increase in compensation in most cases. In fatal cases if dependents are two or more orphans the maximum compensation allowed has been increased. By an amendment to the rehabilitation laws, chapter 1039 newly provides for the maintenance of certain injured employees eligible for rehabilitation and instruction in addition to compensation to which the employee is entitled under the workmen's compensation act.

## South Dakota

TWOamendments were made to the compensation law of South Dakota in 1927. The first act (ch. 222) broke up the maximum amount of $\$ 150$ allowed for medical attention into separate items,
one a maximum of $\$ 100$ for hospital services "or other suitable or proper care," and one an amount not to exceed $\$ 100$ for medical and surgical services. The second act (ch. 223) provides for the payment of claims of injured employees of the State out of funds of the industrial commissioner appropriated for that purpose, but certain boards may either pay claims out of funds available for maintenance or procure workmen's compensation insurance.

## Tennessee

MAXIMUM weekly compensation payments, formerly ranging from $\$ 12$ to $\$ 15$ according to the number of dependents, has been raised to a maximum of $\$ 16$ without regard to the number of dependents in permanent total disability and fatal cases. The maximum has also been raised to $\$ 16$ in temporary total disability cases. It is newly provided that upon remarriage of the widow, compensation payable to her shall be vested in the children, if any, under 18 years of age (ch. 40). The division of workmen's compensation is substituted for the bureau of workshop and factory inspection in receiving reports of accidents (ch. 24), notice of willingness to pay compensation settlements and releases, and trustee's receipts for lump-sum payments (ch. 40). Employees of the department of highways and public works were almost brought under the act by chapter 62 .

## Texas

SEVERAL changes were made in the compensation law of Texas. Chapter 60 newly provides that if incapacity continues for four weeks or longer compensation shall be computed from the inception date of such incapacity. Chapter 223 dropped the requirement of notice to adverse party when that party was not willing to abide by the final ruling and decision of the industrial accident board. The State Insurance Commission is abolished by chapter 224 and a board of insurance commissioners is created, made up of three commissioners of life, fire, and casualty insurance. The latter shall have general supervision of matters relating to casualty, workmen's compensation, fidelity, guaranty, and miscellaneous insurance. Nothing in the chapter is to affect the dutiesnow imposed by law on the industrial accident board, however. Chapter 241 extends the act relative to the liability of the Employers' Insurance Association by including "judgments of a court of admiralty and maritime jurisdiction."

The compensation act covers employees hired in Texas and injured outside the State, but because of doubt about the power of parties to go into courts when dissatisfied with the decision of the industrial accident board, chapter 259 gave such employees the same rights and remedies as if injured in the State, effective as of March 28, 1917, the effective date of the act of 1917. The chapter added that the injury must occur within one year from the date of leaving the State and further that no recovery will be allowed if the employee recovered in the State where the injury occurred. The law regulating motor bus transportation (ch. 270) makes the taking out of a workmen's compensation insurance policy a condition precedent to operation. Installments paid under the workmen's compensation act apparently fall within the exemption of periodic benefits from legal
garnishment and execution as provided by a general act, chapter 234. The provision creating a conclusive presumption of total and permanent disability in certain cases inadvertently omitted in the 1925 Revised Civil Statutes of Texas was added by chapter 28.

## Vermont

THE Legislature of Vermont passed three amendatory acts. Act No. 98 extends the coverage of the act to include employees in the State department of highways other than office employees. The State and municipalities may insure with an authorized insurance carrier. Act No. 99 changes the liability of employers for surgical, medical, and hospital services and supplies from an amount not exceeding $\$ 100$ during the first 14 days to a liability not exceeding $\$ 50$ for medical services and supplies over a 14-day period and a liability not exceeding $\$ 150$ over a 30 -day period for hospital services. Act No. 100 changes the place at which hearings shall be held from the town to the county seat, gives the commissioner greater powers in fixing the place at other than the county seat, allows the parties to agree on a place, and provides for accommodations at such place.

## Virginia

AREORGANIZATION of the administration of the State government (ch. 33) the industrial commission was placed within the department of workmen's compensation. Several other changes of an administrative nature were also made.

## Washington

NUMEROUS changes were made in the law by chapter 310. Certain employments apparently formerly within the definition of extrahazardous, as computing machine operators, are now specifically excluded. Injuries formerly compensable if occurring on the premises must now also be sustained if in the course of employment. The injuries covered are sharply cut down by the change of definition of "injury" from some "fortuitous event" to " a sudden and tangible happening, of a traumatic nature, producing an immediate or prompt result, and occurring from without." Hernia now means "a real traumatic hernia resulting from the application of force which either punctures or tears the abdominal wall." Injury while engaged in commission of crime is specifically excluded from injuries covered. Dependents must now be "actually and necessarily" dependent. Payment of compensation for the benefit of a minor child shall now be made to the person having the lawful custody of such child. No compensation shall be paid while an employee continues to receive full wages during temporary total disability.

Compensation for amputation of a leg so close that an artificial limb can not be worn is increased from $\$ 2,400$ to $\$ 3,000$ and provision is made for the payment of $\$ 3,000$ for the loss of an arm so near the shoulder that an artificial arm can not be worn. Reports and payments are put on a monthly basis instead of 4 -month periods. Where an employer defaults in payment of premiums or fails to produce certain reports, he is now subject to suit by employee or the State and the employer is deprived of the common-law defenses
in such suit. No payments shall be made to beneficiaries or dependents residing in any country with which the United States does not maintain diplomatic relations. The prohibition against the right of assignment of compensation is made stronger. A surplus fund to be used for medical aid to workmen in certain cases is created. In case of injury to a part of the body already permanently partially disabled, resulting in the amputation thereof, or the aggravation of the injury, compensation shall now be adjudged with regard to the previous disability. Authority is now given to settle compensation due an alien residing in a foreign country by a lump-sum settlement, not to exceed 50 per cent of the value of the annuity remaining. The schedule of assessment rates has been revised and a few new classifications added. Several other changes have been made, particularly with regard to procedure.

## Wisconsin

SEVERAL changes were made by Wisconsin. The maximum annual wage for the purpose of computing compensation benefits was increased from $\$ 1,400$ to $\$ 1,500$ by chapter 42 . The legislature further defined "growing out of and incidental to" as including firemen responding to a call outside the city limits (ch. 482). Chapter 45 amended the provision with reference to representation of companies on the rating bureau, and provided that two or more insurance companies may form a corporation for the purpose of carrying special risks (ch. 125). The provisions relating to reports by employers and insurance carriers were amended, probably making the work of the industrial commission lighter (ch. 310).

Chapter 517 made several changes in the law. The maximum amount payable into the State treasury in the absence of dependents where an injury results in death has been increased from $\$ 1,000$ to $\$ 1,600$. Compensation for loss or impairment of one eye was increased 5 per cent. In the event an accident causes more than one scheduled permanent injury it is now provided that compensation for the lesser injury shall be increased 20 per cent, except in injuries to both eyes where compensation shall be trebled. Injury to the second ear is now treated like other special second-injury cases, and the amount payable in certain cases to the State treasurer to provide for second injuries is now $\$ 75$ instead of $\$ 150$. The attorney general now represents the State in payments into and out of the State treasury in second-injury fund cases. Where death occurs to permanently partially disabled employees from other reasons than as a proximate result of the accident, the unaccrued compensation shall be applied toward funeral expenses up to $\$ 200$, and the balance to the dependents. The compensation trebled in the case of certain minors working without permits or at prohibited employment shall not now be less than the actual loss of wage. The industrial commission may now set aside its own awards: Payments to the State treasurer in second-injury cases, certain compensation in the nature of a penalty, and indemnity under the rehabilitation law are not now payable unless specifically mentioned in compensation award.
Chapter 241 provides that certain inmates of State institutions if injured "may" be allowed such compensation by the industrial
commission as they shall be "entitled to," computed on the same basis as though such injury had been covered by the workmen's compensation law, not to exceed $\$ 1,000$.

## Wyoming

SEVERAL changes in the law were made by chapter 111. Certain compensation formerly paid in a lump sum is now to be paid in monthly installments. Certain additional allowances in case of a daughter under 16 years of age are now allowed in the case of a daughter under 18 years, and if children are nonresident aliens only one-third additional compensation is allowed. In the event of the death of a permanent total disability claimant any unpaid balance of an award is to be returned to the accident fund. In fatal cases where the surviving spouse remarries or dies the unpaid balance of the award (except $\$ 270$ in case of remarriage) shall be returned to the accident fund. Where the employee's report of the accident was not filed within the statutory time the period within which a claim must be made is reduced from six to three months. Employers engaged in extrahazardous occupations are now required to pay into the industrial fund, in addition to the monthly premium a "service and policing charge." Many other minor changes were made in the substantive law and several changes were made in matters of procedure such as paying costs and modifying awards.

## United States

THE Federal longshoremen's and harbor workers' compensation act was passed and the Federal employees' compensation act was amended in 1927. The first act fills a gap in compensation legislation by protecting workers within a State who by the nature of their employment are subject to Federal instead of State regulation. The act covers harbor employees injured upon the navigable waters of the United States and Territories and not subject to the jurisdiction of the State, except a master or member of a crew or any public employee or where the vessel is under 18 tons net. Injuries covered are accidental injuries or death arising out of and in the course of employment, and such occupational disease or infection as arises naturally out of such employment or as naturally or unavoidably results from such accidental injury, unless due solely to intoxication or the willful intention of the employee to injure or kill himself or another. Coverage is compulsory and so is securing, by insurance or otherwise, the payment of compensation. The act is administered by the United States Employees' Compensation Commission.

The waiting period, except for medical services and supplies, is seven days unless disability lasts more than 49 days, in which case there is no waiting period. The employer shall furnish such medical services and supplies for such a period as the nature of the injury or the process of recovery requires.

In the case of permanent total or permanent partial disability, compensation shall be two-thirds of the average weekly wages during the continuance thereof. In cases of permanent partial disability two-thirds of the average weekly wage shall be paid according to a schedule of injuries, but if not specifically listed, then two-thirds of
tho difference between average weekly wages and wage-earning capacity thereafter. In cases of temporary partial disability, compensation shall be two-thirds of the difference between average weekly wages before injury and wage-earning capacity after injury, during disability up to five years. Weekly maximum compensation for disability is $\$ 25$, minimum is $\$ 8$ or full wages, and the total maximum $\$ 7,500$.
In fatal cases funeral expenses not exceeding $\$ 200$ are allowed and the widow or dependent husband is allowed 35 per cent of average wage with 10 per cent additional for each child under 18 years, but if there is no widow or dependent husband, 15 per cent to each such child - in no case, however, to exceed $662 / 3$ per cent of the average wage or a maximum of $\$ 7,500$. In computing death benefits the average weekly maximum wage is $\$ 37.50$ and the minimum $\$ 12$, but the total weekly compensation shall not exceed weekly wages of deceased. If there are no dependents $\$ 500$ is to be paid into a special previous-injury fund and $\$ 500$ into a vocational rehabilitation fund.

Compensation can not be assigned, has preference as a lien against certain assets, must be paid periodically, promptly, and directly to the person entitled thereto without an award unless there is a controversy, and in certain cases may be commuted. The act itself should be examined for provisions relating to medical aid, minors, aliens, dependents, notice, filing claims, procedure, insurance, penalties, liability of third persons and administration. ( $44 \mathrm{U} . \mathrm{S}$. Stat. at Large, p. 1424.)

Two amendments were made to the Federal employees' compensation act. Medical benefits were made more liberal (44 U. S. Stat. at Large, p. 772) and certain compensation standards were increased 75 per cent, the maximum and minimum monthly compensation in total disability cases to $\$ 116.66$ and $\$ 58.33$, respectively, the maximum for partial disability to $\$ 116.66$ and the maximum and the minimum basis for computing compensation to $\$ 175$ and $\$ 87.50$, respectively. The term "widow" is newly defined to include decedent's wife living apart for reasonable cause or by reason of his desertion. ( 44 U . S. Stat. at Large, p. 1086.)

## Public Service Retirement Systems in Great Britain and France

THE following account of the retirement systems for public employees in Great Britain and France constitutes part of the study now being made by the United States Bureau of Labor Statistics of the various retirement systems for public employees in effect in the United States and foreign countries. Similar articles covering other foreign countries will appear in later issues of the Labor Review. A study of the systems in effect for public employees generally in Maine, Massachusetts, Connecticut, New York, New Jersey, and Pennsylvania appeared in the Labor Review for August, September, and December, 1927.

## GREAT BRITAIN

THE present retirement system of Great Britain is a development of over a century's growth, the first general superannuation act having been passed in 1810. This established a noncontributory
system, which continued in force for 12 years, until in 1822 an act was passed providing for deductions to be made for pension purposes from the salaries of those receiving more than $£ 100$ a year. This provision was repealed and reestablished, but was not definitely accepted until 1834, when the first of the acts now effective was passed, under which contributions were enforced against all who entered the civil service after August 4, 1829. In 1859 another act repealed most of the act of 1834, and established a system of uniform noncontributory pensions for all persons employed in the permanent civil service of the State. Numerous changes in detail have been made since then, but the system is still noncontributory.

At present the civil service retirement plan is operated under a series of acts grouped together under the general title: "Superannuation Acts, 1834 to 1919," of which eight are treated as a single act for purposes of construction, while four are not so considered. In addition to these there are two other acts in force, the pensions (increase) acts of 1920 and 1924, providing for larger pension payments.

## Digest of the Laws at Present Effective

> General Provisions

THE act of 1834 contained a proviso, continued in force to the present time, that "nothing in this act contained shall extend or be construed to extend to give any person an absolute right to compensation for past services, or to any superannuation or retiring allowance under this act."

Pensions are to be paid without any abatement or deduction "in respect of any taxes or duties whatever at present existing, except the tax upon property or income."

The persons eligible for superannuation allowances are those who hold office direct from the Crown, or who have entered the civil service with a certificate from the civil service commissioners. This certificate will not be granted unless physical fitness has been proved. Various exceptions to these general rules are made. Thus provision is made for cases in which through inadvertence a certificate has not been secured, for cases in which employees are transferred, without certificate, to the civil service as some new service function is taken over, and for similar situations which may arise from time to time.

## Conditions for Retirement

Ordinarily, pensions are granted only to those who have reached the age of 60 , except in cases which are practically disability retirement, although not known by that name. Certain prison officers, however, may retire on pension at 55 , even though they are not disabled. There is no age at which retirement is compulsory. A minimum of 10 years' service is required.

Retirement under age 60 is permitted upon a medical certificate that the employee concerned is unable from infirmities of body or mind to discharge the duties of his position, and that the incapacity is likely to be permanent.

In addition to the age and service requirements the retirant must produce a certificate, signed by the head officer of his department, or
by two head officers if there are more than one, stating that he has served with diligence and fidelity to the satisfaction of his head officer or officers. Pensions are sometimes granted to those not having such certificate but not freely.

In every case in which any superannuation allowance is granted after the refusal of such certificate, the minute granting it shall state such refusal, and the grounds on which the allowance is granted.

Amount and Kind of Retirement Allowances
The retirement allowance differs as between men and women. In general, men receive upon retirement a pension, plus a lump-sum payment. The pension is calculated by multiplying one-eightieth of the final salary and emoluments by the number of years served; if however, the retirant has served more than 40 years, the extra years are disregarded and the pension is fixed at one-half the final salary and emoluments. The "final salary" is the average amount of salary for the last three years of service. The lump sum is equal to one-thirtieth of the final salary and emoluments for each completed year of service, or to one and a half times the salary and emoluments, whichever is the smaller. For women the annual pension is onesixtieth of the final salary and emoluments, multiplied by the years of service, and there is no lump sum payment.

The pension for an employee retired on the ground of ill health before reaching the age of 60 is calculated in the same way as if he had retired at or after 60. No pension is allowed, however, unless he has served at least 10 years, but an employee who has not completed the 10 years before being obliged to retire may be given a gratuity amounting to one month's pay for each completed year of service, plus, in the case of a male employee with not less than two years' service, a lump sum of one-thirtieth of his emoluments for each completed year of service. Special provision is made for those who lose their positions through reorganizations of the service.

A person who retires because his or her office is abolished may be granted compensation not exceeding the pension (plus, in the case of men, the lump-sum payment) he or she would have received if the retirement had been for ill health; and similar provision is made for the case of a civil servant who is removed from his office for inefficiency.

Accidental injury allowances and gratuities.-When a person employed in the civil service is injured in the discharge of his duty, through no fault of his own, if the injury is directly attributable to the nature of his duty, provision is made for his care.

The Treasury may grant to him, or, if he dies from the injury, to his widow, his mother, if wholly dependent on him at the time of his death, and to his children, or to any of them, such gratuity or annual allowance as the Treasury may consider reasonable.

Provided, that a gratuity under this section shall not exceed one year's salary of the person injured, and an allowance under this section shall not, together with any superannuation allowance, to which he is otherwise entitled, exceed the salary of the person injured, or $£ 300$ a year, whichever is less.

## Retirement Gratuities

The above provisions as to qualifications, allowances and the like relate to what is known as the established service, which, broadly speaking, includes the administrative, clerical, and manipulative
classes of the civil service, the industrial classes not being covered, though a certain number of established posts are reserved for them. The provision for the industrial classes in general, however, is limited to gratuities, the position being thus summarized by an official in the service:

An unestablished employee who retires or is removed from his or her employment receives a gratuity of $£ 1$ or one week's pay, whichever is the greater, for each completed year of service, provided that (a) the employment was a wholetime one, and (b) the service was not less than 7 years in the case of abolition of the employment or 15 years in the case of retirement for ill health.

If an unestablished employee who has served for 15 years or more in whole-time employment dies while in employment a gratuity may be granted to his dependents equal to $£ 1$ or one week's pay, whichever is the greater, for each completed year of service.

Marriage gratuities.-A variation of the retirement gratuity is the marriage gratuity, given to women in cases in which their resignation upon marriage is required by the regulations of their department. Persons thus retired, if they have served for at least six years, receive a gratuity calculated on the basis of one month's pay for each completed year of service, the maximum amount being 12 months' pay.

## Expenditures for the Retirement Service

The following figures, taken from the civil estimates for the year ending March 31, 1928, show the amount appropriated for retirement purposes in 1926, and the estimated amount for 1927:

TOTAL EXPENDITURE ON CIVIL SERVICE SUPERANNUATION AND ALLIED ALLOWANCES AND GRATUITIES, 1926 AND 1927

| Item | 1926 | 1927 |
| :---: | :---: | :---: |
| Gross estimate for ailowances, ete., under sundry superannuation | £1, 530, 072 | £1, 644, 941 |
| House of Commons.--------------1. |  | 15,650 |
| Royal commissions, et | 13, 000 |  |
| (eimporatic and consular servic | 1,946,060 | $\begin{aligned} & 1,500 \\ & 1,933,049 \end{aligned}$ |
| Revenue departments: |  |  |
| Inland revenue..--- | 862,000 | 820,850 186,750 |
|  | 2,947, 200 | 3, 349,300 |
| Fighting services (evivilan stain, onlo |  |  |
| Army | 240,100 | ${ }^{247,100}$ |
| Consolidated fund: Judicial, ete., pensions. | 181,550 | 183, 282 |
| Total expenditures |  |  |
| Less total receipts. | 1,847,757 | 1,817,856 |
| Net expenditure. | 6, 971, 433 | 7, 549, 122 |

The total receipts, to be deducted from the gross amount appropriated, are in the main sums recoverable from the Governments of the Irish Free State and of Northern Ireland for pension expenditures on their behalf. For 1927 the amount recoverable from the Irish Free State was $£ 1,447,492$ and from Northern Ireland, $£ 364,948$. Various small receipts in behalf of the army, navy, and air forces, etc., amounted to $£ 5,416$, making a total of $£ 1,817,856$, and leaving the net expenditure of the British Government for retirement purposes at $£ 7,549,122$. This does not include pensions for the combatant forces, only their civilian staff being covered by these figures.

The first item in the above table, "Gross estimate for allowances, etc.," covers the superannuation allowances and gratuities considered in the preceding pages. Detailed figures for these are given, as follows:


#### Abstract

TOTAL EXPENDITURE FOR SPECIFIED CIVIL SERVICE SUPERANNUATION AND ALLIED ALLOWANCES AND GRATUITIES, 1926 AND 1927, AND INCREASE OR DECREASE


| Kind of pension or gratuity | 1926 | 1927 | $\begin{aligned} & \text { Increase } \\ & (+) \text { or de- } \\ & \text { crease }(-) \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Superannuation allowances | £1,085,000 | £1, 118, 500 | +£33,500 |
|  | 59, 500 | 61, 63,150 | +3,650 |
| Additional allowances and gratuities to establish | 258,000 | 301,500 | $+43,500$ $+6,000$ |
|  | 14,000 48,000 | 20,000 | +6,000 |
| Colonial governors' pensions | 13,000 | 13,500 | +500 |
| County court judges, etc., supplementary pen | 6,200 | 5, 600 | -600 |
| Mercantile marine fund, pensions and allowances | 331 |  | -331 |
| British Antarctic expedition 1910-1912 annuities | 741 | 741 |  |
| Marriage gratuities | 17,000 | 37,000 | +20,000 |
| Compassionate fund. | 10, 500 | 10, 800 |  |
| Northern Ireland pensions and gratuities | 17,000 | 25,650 | +8,650 |
| Gross total | 1, 530,072 | 1, 644,941 | +114,869 |
| Deductions. | 90, 780 | 85, 800 | +4,980 |
| Net total. | 1, 439, 292 | 1, 559, 141 | +119,849 |

In this table also most of the amount to be deducted is recoverable from the Irish Free State and the Government of Northern Ireland. The compensation allowances are those granted to persons who have lost their posts through reorganization of the service or abolition of the position. The compassionate gratuities are those given to persons who do not come under the terms of the superannuation acts, and the injury grants are those made to persons injured in the serviceaccidental disability allowances, as they would probably be termed in this country.

The amount of the allowances, as shown above, is affected to some extent by the cost-of-living bonuses, which vary with the rise and fall of the index number. The following explanation is given of this factor:

This bonus, which is given in addition to ordinary remuneration on a pre-war basis and which varies from time to time in accordance with the average increased cost-of-living index figure, ranks as a pensionable emolument but the amount of the pension attributable to the bonus is subject to quarterly revision in accordance with the fluctuations in the average cost-of-living index figure. In calculating gratuities and lump-sum payments, 75 per cent of the bonus counts as salary.

## FRANCE

## Recent Legislation

RETIREMENT and pensions of civil servants in France are governed by the law of April 14, 1924. Provisions of the law were amplified by (1) an administrative ruling of September 2, 1924, (2) a general instruction of the Ministry of Finance of October 12, 1924 , and (3) a decree of September 19, 1926, based upon article 30 of the law of August 3, 1926. The ruling and instruction merely interpret certain provisions in detail and contain regulations for the execution of the law of April 14, 1924, while article 30 of the law of

August 3, 1926, interpreted by the decree, provides for "a supplementary and temporary compensation to civil-service employees, soldiers, agents, and workers of the State"; that is, to all those persons who are retired by the State, and who receive pensions based upon length of service, a supplementary compensation calculated on the basis of a diminishing ratio, from 20 to 5 per cent, of the pension, as follows: 20 per cent up to 1,000 francs; 15 per cent, from 1,001 to 3,000 francs; 10 per cent, from 3,001 to 5,000 francs; and 5 per cent from 5,001 to 10,000 franes.

## Previous Legislation

BEFORE the eighteenth century there were no retirement or pension laws. Material assistance was given to aged or disabled public employees only by the grace of the monarch and even then in rare cases. Assistance to widows and orphans was provided by a regulation issued in 1788. The only public employees for whom assistance was given in cases of dire need were those engaged in postal service, King's domain, and revenue collection.

The first act providing pensions to public employees was issued on August 22, 1790. This act, though it legalized the principle of civil-service pensions, did not recognize the right of public employees to pension. This right was definitely established by the acts of June 9 and November 9, 1853, which also provided assistance to widows and children.

The acts of 1853 were amended and modified a number of times under the pressure of constantly changing conditions. But the underlying principle-the right of public employees and their widows and children to pension-has stood the test up to our day. The decree of December 30, 1913, relates merely to procedure and practice.

However, the development of the field of civil service, the appearance of new classes of employees, and new hazards in their work made it necessary to reform the existing civil service retirement and pension system. The World War caused the reform to be postponed until August 5, 1919, when a special parliamentary commission was formed for the purpose of making a study of the existing pension conditions and of working out recommendations as to the required reform. A number of the recommendations of this commission were embodied in the temporary acts of March 25, 1920, and July 8, 1921, and the reports of the commission served as a basis for a new retirement and pension bill prepared by the Government, introduced to the parliament, and enacted as a law on April 14, 1924.
Provisions of the earlier acts relating to retirement and pensions were in part left in force independently, in part expressly repealed, and in part embodied in the new law, which now covers the entire field of civil service retirement and pensions, with the exception of certain earlier enactments left in force.

No regulative provisions have as yet been issued regarding the operation of the retirement funds provided by article 85 of the law of April 14, 1924. The operation of the pension fund is postponed until January 1, 1928, by the terms of the same article of the law.

## Digest of the Law in Force

GENERAL PROVISIONS.-The provisions of the law apply to civil-service employees on the permanent staff of the State administration and of the Government industrial establishments, and to their widows and children.

The pensions are calculated on the basis of average salary, wages, and various allowances received by an employee during the last three years of service.

The minimum pension for length of service is, as a rule, one-half of the average salary. It is increased to three-fourths, but not more than 4,000 francs, when the average salary is not above 8,000 francs per annum. The minimum is increased over and above the required length of service to one-sixtieth of the average salary for a year of service in office, and to one-fiftieth of the average salary for a year of service in field. The pension is further increased by 10 per cent when the employee has three children under the age of 16 years. For each additional child an increase of 5 per cent is provided. The maximum pension may not exceed three-fouths of the average salary, or 18,000 francs per annum.

Civil service employees contribute 6 per cent of the salary, wages, and allowances received by them.

Retirement age and length of service.-A civil service employee has the right to retire when he is 60 years of age and has had 30 years of office service, or, when he has been 15 years in field service, he can retire at the age of 55 years after 25 years of service. The age limit is not required when the health conditions of an employee become such that he is not able to continue his service. In case of service outside Europe, additional credit of one-third of its actual length is given (one-fourth in the case of service in north Africa).

An employee retires either by his own request or he is put on the retired list officially by the proper authority. The proceedings must be started six months in advance.

Civil service employees detached from the permanent staff, and assigned to and paid, wholly or in part, by a Department, commune, colony, public or private establishment, or foreign Government retain their right to pensions. They must continue contribution on the basis of the salary corresponding to the class and grade of the service from which they were detached, their pension being computed on the basis of the average remuneration that they would have received during the last three years if they were paid by the State.

When a civil service employee, except in case of disability, leaves the service, for any reason, earlier than the retirement age, his contribution is refunded in the following manner: His contribution, with interest, at the time of his leaving the service, is transferred to his credit in the national insurance fund against death to form a deferred capital insurance, the time of payment of which is fixed at not less than five years from the date of his resignation.

Woman civil service employees, when married or mothers of families and when having served at least 15 years, have the right to a retirement pension calculated for each year of service on the basis of one-sixtieth of the average salary in case of office service or one-
fiftieth in case of field service. In determining the time of retirement of such employees, an allowance of one year for each child born to them is added to the age and the length of service.

Disability pensions.-When a civil service employee is disabled through an act of courage in the public interest or through risking his life in saving one or more persons, or through a fight or attack during his employment, he may, in exceptional cases, be retired regardless of age and length of service. The pension in such cases is three-fourths of the last salary received.
A civil service employee disabled by sickness, wounds, or serious infirmity has the right to retire either at his own request or officially.
Disability must be ascertained by a commission consisting of (i) a sworn government physician; (2) three employees appointed by the minister; and (3) two employees in the same service in which the applicant is engaged, selected by their colleagues.

The applicant has the right to see the papers in the case and to have a physician of his own choosing appear before the investigation commission.
A civil service employee disabled in office service has the right to a pension of at least 1,500 francs per annum, or equal to one-third of his last salary in service, or to a longevity pension counted, per year of service, as one-thirtieth for office service or one twenty-fifth for field service of the minimum pension previously quoted, together with any allowances for military or colonial service he may be receiving.
The pension of a colonial civil service employee retired as a result of wounds or infirmity contracted during service may not, on account of the risk incurred, be less than the minimum longevity pension based on his last salary, together with the allowances.
When disability is incurred outside of service, an employee who has had 15 years of service or more has the right to pension at the rate of one-sixtieth of his average salary in case of office service, and onefiftieth in case of field service.

A disabled civil service employee witb less than 15 years of service is given a liie annuity from the national old age retirement fund formed by the deposit therein of the sum contributed by him out of his salary together with the interest credited to the depositors by the Savings and Provident Fund of Paris. This amount, according to the wish of the employee, is either held by the Government and a life pension is paid to the employee, or it is returned to him instead of liie pension. Should the employee prefer pension; the Government adds an equal amount to the sum formed out of his contributions together with the interest, and the sum total is turned over to the old age retirement fund, out of which the pension or life annuity is paid to him.

## Pensions for Widows and Orphans

AWIDOW of a civil service employee bas the right to a pension of 50 per cent of the longevity or disability pension which her husband was receiving or would have received at the time of his death.

The right of a widow to pension, in the case of disability pension, is conditioned upon the marriage having taken place before retirement or death, and in the case of age or length of service pension,
upon its having taken place not later than two years before retirement, except in cases when there were one or more children born of the marriage before retirement.

Each orphan up to the age of 21 years has the right to a temporary pension of 10 per cent of the longevity or disability pension, but the sum of the mother's and the orphan's pensions may not exceed the pension the father received or would have received.

In case of the death of the mother, or her loss of the right to pension, or of not being able to receive pension, such right as she may have had goes to her minor children, and the temporary pension of 10 per cent is maintained for each minor child under 21 years of age within the maximum sum defined in the preceding clause.
The minor children of a deceased woman employee who was receiving a pension or had the right to receive one are entitled to a pension as determined above.
In case the father is living his minor children have the right to a temporary pension of 10 per cent of the pension received by their mother, or which she would have been receiving had she lived.

## State and Employees' Contributions

THE State contributes to the civil service pension about nine per cent of the salary, and the necessary sum is appropriated each year on the basis of the pensions and allowances, permanent and temporary, to be paid civil service employees during the fiscal year. Extra appropriations for pensions are authorized by special law.

The contributions of employees from 1924 to 1927 were as follows:

|  | Contribution, in francs |
| :---: | :---: |
| 1924 | 150, 000,000 |
| 1925 | 206, 000, 000 |
| 1926 | 245, 300, 000 |
| 1927 | 382, 000, 000 |

[^5]The State appropriations for civil pensions each year from 1924 to 1926 and those estimated for 1927 are shown in the following table:

STATE APPROPRIATIONS FOR CIVIL PENSIONS EACH YEAR, 1924 TO 1926, AND ESTIMATED APPROPRIATIONS FOR 1927

| Civil pensions |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

${ }^{1}$ This law provides to ministers, marshals and admirals, and other high public servants and their widows and children a pension up to 20,000 francs, when these officials have rendered eminent services to the nation, and when their lack of means make such pension necessary.
Sources: Great Britain-Great Britain, Civil Service, Digest of Pension Laws and Regulations, London, 1924; Great Britain, House of Commons, Civil Estimates for the Year Ending Mar. 31, 1928, London, 1927; Report from United States Embassy at London, dated Oct. 7, 1927; and United States Bureau of Labor Statistics, Civil Service Retirement in Great Britain and New Zealand, by Herbert D. Brown (printed as S. Doc. No. 290, 61 st Cong., $2 d$ sess.), Washington, 1910;

France-Journal Officiel, Apr. 15, Sept. 10, and Oct. 21, 1924, and Aug. 3 and 4, and Oct. 14, 1926; France, Ministère des Finances, project des loi portant fixation du budget général de l'exercice 1924-1927; Rapport, Commission des Pensions civiles et militaires, Chambre des Deputés, session 1913, No. 2644; Rapport de la Commission des Finances, chargê d'examiner de project de loi portant reforme du régime des pensions civiles, Chambre des Deputés, session 1922, No. 4225; Les Pensions civiles de l'état, Commentaire par Charles Rabany. Paris, 1916; Recueil périodique et critique de jurisprudence, 1925, 4e partie, Pensions civiles et militairè, Dallez; Répertoire gênéral alphabétique du droit français, par Herman Fuzier, Paris, 1902, vol. 30, pp. 379-518;
Unpublished material collected and compiled by the Legislative Reference Division, Library of Congress: and
Unpublished material furnished to the Department of Labor through the Department of State.

## LABOR TURNOVER

## Labor Turnover in American Factories During 1926 and 1927

A
N EASY labor market is indicated by the labor turnover experience of 300 factories reporting to the Metropolitan Life Insurance Co. and local bodies ${ }^{1}$ associated in this project. Together the reporting companies employ over $61 / 2$ per cent of the country's factory workers.

The accompanying table shows the experience of 1926 and 1927. ${ }^{2}$ Due to a smaller volume of factory employment, the accession rates of 1927 are consistently lower than those of 1926. The easy labor market is best illustrated by the lower level of the voluntary quit rate. In fact the quit rate 18.2 is the lowest November on record since the study began in 1919.

AVERAGE TURNOVER RATES DURING 1926 AND 1927 IN SELECTED AMERICAN FACTORIES a
[Each monthly rate is stated on an equivalent annual basis]

| Month | $\begin{aligned} & \text { Accession } \\ & \text { rate } \end{aligned}$ |  | Total separation rate ${ }^{b}$ |  | Voluntary quit rate |  | Lay-off rate |  | $\begin{aligned} & \text { Discharge } \\ & \text { rate } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1927 | 1926 | 1927 | 1926 | 1927 | 1926 | 1927 | 1926 | 1927 | 1926 |
| January | 36.3 | 56.5 | 40.8 | 38.9 | 23.1 | 27.1 | 12.3 | 4.7 | 5.4 | 7.1 |
| February | 41.7 | 56.1 | 36.9 | 40.4 | 21.8 | 27.4 | 9.6 | 6.5 | 5.5 | 6.5 |
| March | 43.2 | 56.5 | 42.5 | 50.6 | 29.8 | 35.3 | 6. 4 | 7.1 | 6.3 | 8.2 |
| April | 47. 5 | 52.3 | 48.3 | 60.8 | 32.4 | 46.2 | 9.7 | 6.1 | 6. 2 | 8.5 |
| May | 48. 0 | 60.0 | 44.7 | 50.6 | 31.9 | 37.7 | 7.6 | 5. 9 | 5. 2 | 7.1 |
| June. | 45.0 | 57.2 | 43. 9 | 46.2 | 29.1 | 35.3 | 8.0 | 6.1 | 6.8 | 4.9 |
| July | 37.8 | 54.2 | 35. 7 | 53.0 | 24.4 | 38.9 | 6.0 | 7.1 | 5. 3 | 7.1 |
| August- | 39.6 | 65.9 | 36. 4 | 51.8 | 23.0 | 40.0 | 8.5 | 4. 7 | 4. 9 | 7.1 |
| September | 43.6 | 64.9 | 46.2 | 58.4 | 33.8 | 47.5 | 6. 4 | 4.9 | 6.0 | 6.1 |
| October- | 40.8 | 57.7 | 39.6 | 43.6 | 25.3 | 31.8 | 8.5 | 4. 7 | 5.8 | 7.1 |
| November | 34.1 | 40.2 | 30.5 | 40.2 | 18.2 | 25.6 | 8.2 | 8.5 | 4.1 | 6.1 |
| December. |  | 27.1 |  | 30.6 |  | 20.0 |  | 7.1 |  | 3.5 |

[^6][^7]
## INDUSTRIAL RELATIONS AND LABOR CONDITIONS

## Recommendations of President Regarding Coal-Mining Situation

IN HIS message to Congress, December 6, 1927, President Coolidge recommended that legislation be enacted authorizing Federal control of fuel distribution as well as a Federal board of mediation and conciliation in case of actual or threatened interruption to coal mining. The recommendation in full is as follows.

Legislation authorizing a system of fuel administration and the appointment by the President of a board of mediation and conciliation in case of actual or threatened interruption of production is needed. The miners themselves are now seeking information and action from the Government, which could readily be secured through such a board. It is believed that a thorough investigation and reconsideration of this proposed policy by the Congress will demonstrate that this recommendation is sound and should be adopted.

## Annual Report of the Secretary of Labor, 1926-27

THE extensive activities of the various administrations of the United States Department of Labor for the fiscal year 1926-27 are summarized in the annual report of the Secretary of Labor for that period. A résumé of this publication is given below.

## Conciliation Service

IN1926-27 the Conciliation Service handled 545 trade disputes, 24 of which were pending at the end of the year. Adjustment was made in 436 cases, 41 of which had been carried over from the previous year. Sixty-nine cases were closed without aid from the commissioner, or were called off or settled with the aid of State or local agencies; and 57 controversies are listed as "unable to adjust."

## Employment Service

IN 1926 the volume of business broke all previous records but toward the last quarter of that calendar year there was considerable unemployment and there was little change in this situation in the first quarter of 1927. Several causes are assigned for this condition.

Influences have been at work during the past few years which greatly reduced labor turnover in practically all basic industries, resulting in fewer opportunities for temporary or casual employment, but, on the other hand, pointing to a more stabilized labor market. Ever-changing methods of production and distribution, especially the increased utilization of labor-saving machinery, are playing an important part. For example, the farmers in the great Wheat Belt are purchasing combines in large numbers. These machines head and thresh the wheat in one operation, and during the current year their use materially reduced labor requirements in Oklahoma, Kansas, Nebraska, and other States.

When the report of the Employment Service for 1926-27 was being prepared industrial employment in general was found to be on a normal basis. Activity in several major industries, however, had declined as a result of seasonal influences, and numerous textile mills were operating on part time. Slight decreases were also noticeable in volume of employment in the iron and steel and automobile industries. According to district reports from New England, employment conditions in the boot and shoe industry were improving. While considerable building was going on there was some surplus labor in the building trade. While at that period municipal undertakings, road building, and agricultural activities offered opportunities for work to many wage earners, yet nowhere was there a labor shortage.

For the year ending June 30, 1927, the number of persons placed through the cooperative employment service was $1,688,476$, the number of registrations being $2,440,640$, and the help wanted 1,991,598.

## Housing Corporation

DURING the year 1926-27 the United States Housing Corporatimon collected $\$ 2,731,175.14$. With the covering of this sum into the United States Treasury the corporation will have returned to the Government more than $\$ 66,969,000$ of the original $\$ 100,000,000$ appropriation for the war housing program.

## United States Bureau of Labor Statistics

ASUMMARY of the work of the Bureau of Labor Statistics was published in the December, 1927, issue of the Review (pp. 1-30).

## Bureau of Immigration

A
CCORDING to the report of the Commissioner-General of Tmmigration there were 538,001 aliens admitted to the United States in 1926-27, or 41,895 more than in the preceding year. Of these 538,001 aliens, 335,175 were immigrants or newcomers for permanent residence. Of the 253,508 aliens who left the United States, 180,142 departed intending to return and 73,366 left without expressing such intention.
Approximately 45 per cent of the immigrants admitted in 1926-27 came from Canada and Mexico- 81,506 from the former country and 67,721 from the latter. The quota restrictions, it will be recalled, do not apply to these countries. The authorized force of the border patrol for 1927 was 781 . During the fiscal year 19,382 persons were apprehended and delivered to other officials; 786 automobiles and 303 boats and other vehicles seized. The number of smuggled aliens captured was 12,098 as compared with 3,382 in the preceding year.

## Bureau of Naturalization

DURING 1926-27, 258,295 declarations of intention to become citizens were made, 240,339 petitions for naturalization were filed, and 199,804 certificates of naturalization were issued. While the number of declarations of intention was 19,244 less than in the
preceding year, the number of petitions for naturalization increased by 68,107 and the number of certificates of naturalization issued increased by 53,473 .

## Children's Bureau

AT THE close of the fiscal year ending June 30, 1927, 45 States (all except Massachusetts, Connecticut, and Illinois) and the Territory of Hawaii were cooperating with the United States Children's Bureau under the Federal maternity and infancy act. . In the 12 -month period, as an outcome of this cooperation, 1,808 combined prenatal and child-health conferences were held and also 21,347 child-health conferences and 3,231 prenatal conferences. The amounts accepted by the States and Hawaii from the appropriation under the act aggregated $\$ 904,824.71$ for 1927.
In the 12 months under consideration the Children's Bureau issued 46 new and revised publications and 6 others were in press at the end of that year. The most important of the issues are given below:
Child hygiene.-Posture clinics, organization, and exercises; Posture exercises; Milk, the indispensable food for children; What is malnutrition (revised)?

Child labor.-Work of children on Illinois farms; Child labor-Outlines for study (fifth edition); Physical standards for working children (appendix revised to include legislation to August 15, 1926); From school to work (folder).

Delinquency and dependency.-Dependent and delinquent children in North Dakota and South Dakota; Dependent and delinquent children in Georgja; Child-welfare conditions and resources in seven Pennsylvania counties; The county as a unit for an organized program of child-caring and protective work; Handbook for the use of board of directors, superintendents, and staffs of institutions for dependent children; The work of child-placing agencies; Public childcaring work in certain counties of Minnesota, North Carolina, and New York; Child welfare in New Jersey.

Recreation.-Recreation for blind children.
Maternity and infant hygiene. - The promotion of the welfare and hygiene of maternity and infancy-The administration of the act of Congress of November 23, 1921, fiscal year ended June 30, 1925; Proceedings of the third annual conference of State directors in charge of the local administration of the maternity and infancy act of November 23, 1921; Maternal mortality, the risk of death in childbirth and from all diseases caused by pregnancy and confinement; A study of maternity homes in Minnesota and Pennsylvania.

## Women's Bureau

THE bulletins issued or prepared by the Women's Bureau in the year ending June 30, 1927, are listed below:
Published.-Lost time and labor turnover in cotton mills; The status of women in the Government service in 1925; Changing jobs; Women in Mississippi industries; Women in Tennessee industries; Women workers and industrial poisons; Women in Delaware industries; Short talks about working women.

In press.-Industrial accidents to women in New Jersey, Ohio, and Wisconsin; The development of minimum wage laws in the United 'States, 1912 to 1927; Women's employment in vegetable canneries in Delaware.

In preparation.-Women workers in Flint, Mich.; State laws affecting working women (revision); Oregon legislation for women in industry.

As in other years, library research work in order to supply information requested has constituted one of the important activities of the bureau.

## Recommendations and Comments

$A^{\text {MONG the recommendations made by the Secretary are the }}$ following:
Bureau of Labor Statistics.-The preparation of a new family budget; a study of labor turnover in the United States by industries; further studies of apprenticeship; a survey of migratory labor.

The Bureau of Immigration.-The entire rewriting of immigration legislation, and meanwhile various amendments to the present immigration law, in order to facilitate the reunion of families; an extension of the selective system of immigration so as to "give preference to those whose services are most needed in American industry"; the elimination of the confusion that now exists in the provision concerning alien students; a penalty in addition to deportation for aliens who gain illegal residence by coming to the United States as seamen; and the registration of aliens, as previously recommended.

Bureau of Naturalization.-A complete new naturalization code based upon the present law and the experience gained in its administration.

Children's Bureau.-The creation of a division for the scientific study of juvenile delinquency; continued interest in protecting children from premature work, too long hours of work, or dangerous conditions of employment.

Women's Bureau.-A careful investigation as to the effect of industrial poisons on woman workers; the gathering of definite, first-hand, current data concerning married women in industry; expansion of news release work and popular literature regarding woman workers.

## Outstanding Statements

THE Secretary touched upon a great variety of subjects. He emphasized his conviction that "so long as the worker is paid in proportion to his greater productiveness, no fear need be felt for the high-speed automatic machinery that is constantly being introduced into industry." He also declared that "A dullard must see the folly of killing the purchasing power of the greatest buyer, the worker, in the market at home which provides us with all but a fraction of our national wealth and prosperity." He pointed out that while no other industrial nation has such a high record for productivity, no other has so many men killed and injured in industry.

In discussing the bituminous coal industry he expressed the belief "that the American people would agree to the modification of any law that stands in the way of order and organization in the mining of coal."

Among other matters taken up were injunctions in labor controversies, the negro in industry, vocational education, and vocational rehabilitation of disabled workers.

In closing his report the Secretary said:
If we keep our national industrial organization well oiled with good will, if we keep our great home market protected against senseless wage reductions from within and against those who would undersell it from without, I see no reason why we should not keep prosperity with us as a permanent thing.

Indexes of the Economic Progress of the United States, 1922 to 1927

$T$HE following table, contained in the Annual Report of the Secretary of Commerce for 1927, presents several of the major economic indexes for the United States for the past six fiscal years:

INDEX NUMBERS OF ECONOMIC PROGRESS
[Based upon calendar year 1919=100]

| Item | Year ending June 30- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 |
| Volume of business (quantities, not value): |  |  |  |  |  |  |
| Manufacturing production. | 89 | 116 | 115 | 118 | 127 | 129 |
| Mineral production- | 91 | 119 | 133 | 129 | 132 | 149 |
| Forest products production | 98 | 117 | 122 | 121 | 124 | 114 |
| Freight, railroad, ton-miles | 89 | 109 | 110 | 110 | 119 | 125 |
| Electric-power production - | 112 | 136 | 148 | 158 | 179 | 198 |
| Building contracts let, square feet | 92 | 107 | 108 | 112 | 142 | 132 |
| Value of sales: |  |  |  |  |  |  |
| Department stores. | 108 | 118 | 125 | 126 | 133 | 136 |
| 5 -and-10 cent stores | 130 | 152 | 173 | 196 | 219 | 240 |
| Mail-order houses | 71 | 91 | 100 | 110 | 122 | 123 |
| Wholesale trade.- | 72 | 80 | 82 | 83 | 85 | 83 |

The Secretary of Commerce comments upon these figures as follows:

Of the 10 indicators presented, all but 3 stood higher in 1926-27 than in 1925-26, and all but 2 stood as high as or higher than in any year preceding 1925-26. One of the two last-mentioned exceptions, the value of wholesale trade, is due solely to the fact that prices are lower at the present than during years immediately at the close of the World War.

The volume of output of manufacturing industry, by all odds the largest branch of productive activity, showed an appreciable gain even above the extremely high level of the fiscal year 1925-26. The improvement was not the result of an exceptionally marked increase in any particular field, but was general in practically every group of industries. Especially noteworthy is the fact that production in the textile industries, which had long been relatively depressed, was materially greater than in the preceding fiscal year.

The most conspicuous gains shown as compared with 1925-26 are in mineral production, freight transportation, output of electric current, and sales of 5 -and10 cent stores. The increase in the two items last mentioned is part of a general upward trend more marked than that in most economic phenomena. Electric current is being used in rapidly increasing quantities for lighting, for domestic power and heat, and above all, for industrial power. This expansion represents both displacement of other sources of light, heat, and power and advance in living standards and in activity of industry.

So, too, the growth of 5 -and- 10 cent stores represents, in part, a shift from other methods of distribution, although there can be no doubt that the total volume of retail distribution has also materially increased. The steadiness and expansion of retail sales during recent years is evidence of the high volume of consumption on the part of the masses of the people.

## Results of Canadian Industrial Disputes Investigation Act, 1907 to 1925

ARECENT publication of the Russell Sage Foundation, entitled "Postponing Strikes," by Ben M. Selekman, reviews the operation of the Canadian industrial disputes investigation act from its passage on March 22, 1907, to March 31, 1925, and
gives special consideration to the practicability of the applieation of its principles in the United States.

The records of the Canadian Department of Labor showed that from March 22, 1907, to March 31, 1925, a period of 18 years, 640 applications were made for boards of conciliation and investigation, 536 cases were handled under the act, 421 boards were actually constituted, and over half of the reports rendered by the boards were unanimous. Of the total of 536 disputes handled under the act, 473 occurred in public utility industries, the term "public utility", being used to cover "all the industries named in the act.." In 429, or 90.7 per cent, of these cases a strike was averted or ended; in only 44 , or 9.3 per cent, was a strike not averted or ended. Of 23 disputes in war industries referred to boards during the two and one-half years in which the act was extended to cover this group of industries, the boards were able to avert strikes in all but 2 cases.

However, these figures relate only to disputes in which the machinery of the act was invoked. During the same period it is estimated that there were 425 strikes in public utilities in which the act was ignored; and in 47 disputes, in which applications for boards were made, strikes occurred in violation of the act.
Strikes in mining were responsible for 42.8 per cent of the average yearly number of working-days lost $(1,137,249)$ through all strikes in Canada from 1907 to 1924, as against 7 per cent in transportation. The majority of the mine strikes occurred in coal mines, the average number each year being 9.4 per cent of all strikes and involving 24.7 per cent of the employees affected in them, with a time loss of 40.7 per cent of all working-days lost as compared with a yearly average of 26.4 per cent from 1901 to 1907, before the passage of the act.

The author states that only a thoroughgoing study of industrial relations in the coal industry of Canada would reveal all the factors responsible for the impotence of the act in the industry for which it was originally drafted, a prolonged coal strike in Alberta having led to its enactment.

During the early history of the act, strikes accompanied the campaigns carried on by the United Mine Workers of America to organize the miners of Canada, and the industrial dislocation created by the World War vitally affected the coal industry and caused discontent among the workers. Organizations more radical in their philosophy than the United Mine Workers-namely, the Communist Party and the One Big Union-made their appeal to the workers and a three-cornered fight for the allegiance of the miners resulted.

These factors also operated in other industries, but in coal mining their influence was especially marked because of the peculiar economic conditions surrounding the coal industry of Canada. The industrial area of Canada, located in the central part of the Dominion along the United States border, is nearer the coal regions of Pennsylvania than to those of Nova Scotia or British Columbia. Consequently, freight costs are higher for coal from Canadian mines than for coal from mines in the United States. For this reason, Canada, although having one-sixth of all the coal in the world, imports three-fifths of all the coal it consumes. Irregularity of employment prevails in the coal industry in Canada as it does in the United States. Canadian operators have maintained, according to the author, that "competi-
tion from the United States has forced them to try to reduce wages and has prevented their yielding to demands for higher wages." The miners, on the other hand, have contended that they could not accept wage reductions because of the impossibility of meeting rising costs of living. In view of these fundamental economic difficulties in the industry, Mr. Selekman questions whether it is fair to regard the strikes in the coal industry as evidence of the failure of the disputes act, and makes the statement that "the ineffectiveness of conciliation under the disputes act in the coal industry indicates that where fundamental economic conditions, such as instability and chronic irregularity of employment, make for strikes, legislation aiming simply to provide machinery for the adjustment of disputes will not afford a solution of the problem."
As regards the effectiveness of the disputes act in preventing strikes on the railroads, attention is called to the fact that there have been few serious strikes on Canadian railroads either before or after the act, and those that have taken place on the railroads and in other branches of transportation have been called largely by members of semiskilled and unskilled crafts, such as freight handlers, teamsters, and expressmen. However, it is believed that the presence of the act has without doubt helped at times to prevent threatened railroad strikes in Canada. For instance, when the railroad companies of Canada proposed wage reductions in 1922, in conformity with those introduced by railroads in the United States, Canadian shopmen did not strike as did those in this country. Instead they applied for boards of conciliation and investigation, and the decisions of these boards were used as a basis for settlement between employees and management. It is reported, however, that most of the railroad disputes since 1918 have been referred to the Canadian Railway Board of Adjustment No. 1.

## Attitude of Labor and of Employers Toward the Act

## Labor's Attitude

THE labor movement as a whole seems to have been definitely in favor of the act when it was passed in 1907, although it was opposed by both the miners and the railroad employees. However, general opposition developed, amendments were repeatedly asked for, and the repeal of the act was demanded. Beginning with 1918 this hostile attitude changed and labor "has on the whole been friendly to the act," and while amendments were still sought after 1918 they were aimed at details of the law rather than at its general operation and administration.
Labor's attitude prior to 1918, as summarized by the author, was one of dissatisfaction with the administration and operation of the act, and, with the possible exception of 1916, when the act was opposed "in its entirety," the Canadian Trades and Labor Congress did not challenge the principles underlying it; indeed, it had repeatedly indorsed them. Many of the complaints revolved about administrative practices. It was contended that, in the majority of cases, representatives of employers and employees could not agree upon a suitable person for board chairman and therefore the selection devolved upon the Minister of Labor. His appointees, in the opinion
of labor officials, were inclined to favor employers, and as the chairman had the deciding vote the boards were in a sense "loaded" against labor from the beginning. However, these contentions were not borne out by the facts obtained in the investigation. It was found that the Minister of Labor was called upon to designate a chairman in more cases between 1918 and 1925 than prior to 1918, the percentage in the later period having been 62.1 per cent of all appointments as compared with 51.9 per cent in the earlier period. In regard to the decisions, employees' representatives dissented from 23.3 per cent of all reports rendered after 1918 as compared with only 18.1 per cent of all reports rendered before 1918.

It was also felt that too much time elapsed in the constitution of boards and in the submitting of reports, with the result that the workers lost money through the postponement of wage increases which they demanded and employers were given time to prepare for a possible strike. Moreover, if the workers were dissatisfied with the awards made, the opportune time for striking had often passed.
For various reasons, delays in the appointment of boards could not always be avoided, and the data show that there was little variation in the periods before 1918 and since in the lapse of time between the applications for boards and their constitution. A general improvement seems to have taken place in the speeding up of reports of boards, but the improvement in this respect has not been striking enough to explain the change of attitude on the part of labor. This change Mr. Selekman sums up as follows:

In summary, then, certain forees were set in operation, beginning with 1918, which were bound to make Canadian labor friendly to the act. The rapprochement reached between labor and Government in 1918 for war purposes led to a further understanding after the war, between these two groups, in an attempt to stem the influence of new and rival unions whose philosophy and tactics were more radical than those of the international, unions which represent the overwhelming majority of the organized wage earners of Canada. The result was the official recognition, on the part of the Government, of the international labor movement, an acceptance of the standards which organized labor sought to establish in industry, a number of amendments to remedy complaints which labor had voiced against certain defects in the operation of the act, and the appointment of former trade-union officials to the Ministry of Labor. In addition, the machinery of the act helped weak unions-especially during the war, when the act was extended to cover munitions industries - to secure increases in wages for their members without having to resort to strikes.

Again, internal strife caused by radical unions has divided the strength of the Canadian labor movement. Beginning with the latter part of 1920 came, too, a period of rapidly falling prices, unemployment and loss in trade-union member-ship-a period when labor was put on the defensive to conserve the gains it had made during the war. On top of this stands the fact that Canada is primarily an agricultural country and consequently trade-unions find themselves a relatively weak minority movement. All these factors have made it seem desirable, since 1918, for labor to utilize the disputes act rather than wield the strike weapon as a means of getting desired results. And, finally, when it is remembered that the conciliatory manner in which the act has always been administered was emphasized even more by the former trade-union officials who have acted as ministers of labor since. 1918, it can be readily seen why Canadian labor not only expressed friendliness to the act but even urged that its scope be widened to include all industries in which either employees or employers wished to invoke its provisions.

## Employers' Attitude

The present attitude of Canadian employers in respect to the act is considered favorable, but, quoting the author, it "is not so enthusiastic as is that of Canadian labor at present," and the employers
have not favored the extension of the act to include all industries in which either employers or employees wish to invoke its provisions. Three main criticisms are voiced by them:

First, there is opportunity for advantage to labor in the power of the Minister of Labor to appoint the personnel of boards; second, there is a want of finality about the act, because employees are free to renew demands and apply for a board directly after an award has been made and accepted; and third, the amendment passed in 1925 has put an unfair burden upon managenent when facing the necessity of immediate reductions in wages. The last criticism is coupled with the complaint that the Government has not enforeed the compulsory features of the law against employees and that, as employers ean be prosecuted much more easily than employees, the amendment of 1925 strengthens the compulsory clauses against employers only. ${ }^{1}$

In considering these criticisms, the study points out that they are mainly based on hypothetical considerations, and that "the specific reasons offered by employers in explanation of their attitude toward the disputes act, like those offered by employees, do not, on the whole, then, seem to find marked substantiation in the facts."

In attempting to arrive at an understanding of the more fundamental factors influencing both employers and employees, Mr. Selekman studied the possible effects of movements in prices and wages and fluctuations in business conditions on the varying positions adopted by organized labor and employers toward the disputes act, and analyzes them as follows:

Thus, it would appear that changes in business conditions, particularly in wages and in cost of living, have coincided more or less closely with ehanges in the attitudes of employers and employees toward the disputes act. Business conditions may affect attitudes toward the act in another way. Analysis of the changes of opinion of the labor groups with reference to this legislation, coupled with a study of fluctuations in business conditions, suggests that ups and downs in prosperity change the relative power which employers and employees bring to the process of negotiating over wages as well as over hours of work, union recognition, and the other issues arising between management and men.

In general, labor occupies a more strategic position during periods of prosperity, while employers have the upper hand during periods of business depression. * * * With these shifts from comparative strength to comparative weakness, the manner in which either employers or wage earners will regard such a law as the disputes act will naturally vary aecording to whether at the time in question general economic conditions make Government intervention appear a barrier against the full and free utilization of their own strategie position, or an aid in combating the more advantageous position of the other side. That is, when business is flourishing we may expect labor, generally speaking, to be critical of such a law and employers friendly to it. On the other hand, when recession sets in, we may look for a reversal in the positions of the two groups, with employers critical of the law and wage earners friendly to it.

## Value of Conciliation

THE Canadian disputes act provides for the compulsory postponement of strikes and lockouts, in the industries coming under its provisions, until an investigation has been made by a board of conciliation and investigation. However, very few of the boards have made use of their compulsory powers and the few instances in which compulsion was used to effect a settlement occurred in the early years of the operation of the act. It is reported that while

[^8]472 illegal strikes occurred from 1907 to 1925 , only 16 appear to have come before the courts and none of them at the instigation of the Government. In fact, the author states that from the very beginning the Canadian law has thrown light on the difficulty of applying compulsion. Although "in general, it may be said that conciliation in Canada has failed in those industries in which fundamental social and economic conditions have made for constant controversy between employers and employees," experience would seem to point to conciliation as an excellent method of Government intervention in industrial disputes.

The extent to which the Government has attained success by disregarding the compulsory provisions of the act and emphasizing its conciliatory features has been clearly indicated by the record of its operation. In a word, then, whatever may have been the theory behind the act, its administration by the Canadian Government has made it essentially a measure for conciliation. The success it has won in averting and settling disputes represents a triumph for intervention on a voluntary basis as contrasted with a compulsory one. So successful, indeed, has this method been found in Canada that, with the exception of a very short period during the World War, it has been consistently employed by the Government in establishing other machinery for handling disputes, such as the railway adjustment boards.

*     *         * The chief value of conciliation, as revealed by Canadian experience, seems to lie in the fact that it enables those intervening in an industrial dispute to take a realistic view of the situation at hand. Not called upon to make a final decision on the basis of abstract justice, conciliators can seek in each controversy that solution which will best resolve the conflict under consideration.

It is also believed that the appointment of a separate board for the consideration of each dispute, as is the practice under the Canadian act, avoids the risk of suspicion and antagonism so often incurred where the personnel is permanent, and that it makes possible the development of a panel of men who have distinguished themselves as successful conciliators. "Individuals who have succeeded in effecting settlements satisfactory to all parties in a dispute find themselves invariably called upon again and again to act as members of boards."

## Provision for Public Intervention in Disputes

WHILE one of the main purposes of the act was to give an opportunity to the community to exercise a restraining influence on employers and employees before a strike or lockout was actually declared, the investigator found that little publicity has been given to the findings of the boards of conciliation and investigation to furnish a basis for the formation of public opinion on the merits of a controversy. In fact, the boards are said to have discouraged publicity in order to expedite amicable settlements, and "Canadian officials have frankly assumed that the community is primarily interested not in knowing the truth but in avoiding any interruption of service that will jeopardize its comfort and routine. * * * Ministers of labor have come to feel, apparently, that when they have succeeded in bringing the disputants to formulate a mutually acceptable agreement they have discharged their duty to the general public."

## Suggestions from Employees

SYSTEMATIC plans by which employees are encouraged to make suggestions and are rewarded for those which result in the elimination of waste, in greater efficiency in production methods, or in reducing health and accident hazards have been used by many industries for years.

A study ${ }^{1}$ has recently been made by Z. Clark Dickinson of the School of Business Administration, University of Michigan, which shows something of the extent of these plans and their results. Information for this study was secured from about 60 firms having a specific plan which, in the majority of cases, had been in effect since 1920, and therefore offered sufficient experience to allow evaluation, to some extent at least, of the results. In this study no account was taken of the occasional use of suggestion boxes and prizes which do not involve a continued effort toward stimulating the employees' interest in the industry.

Certain features are common to most suggestion plans. In order to carry out such a plan successfully suggestions must be acted upon promptly, and this requires the appointment of a sufficient number of qualified persons to receive, record, and investigate all suggestions offered by the employees. The identity of the suggestor is also usually kept secret by the committee receiving the suggestions since there might be a tendency on the part of the immediate superiors of the employee to undervalue or to take offense at the suggestion. Usually there is no limitation on the scope of the suggestions but they may deal with virtually all questions relating to the practical operation of the industry.

Some of the advantages of a fairly operated suggestion plan are said to be that it promotes constructive thinking and cooperation of employees and reduces opposition on the part of those in a supervisory capacity to the idea that their methods might be improved by a subordinate. It also gives the common workers an additional means of communication with the management. These results are said to be valuable to the management, "not merely through (a) the technical or business worth of the ideas themselves, though in many cases this item is surprisingly large, but also through (b) removing grievances, (c) satisfying the worker, when necessary, that the prescribed method is really sound ('Knowing why makes doing easier' as the Philadelphia Rapid Transit Co. expresses it), (d) leading the worker, by studying his employment, to increase his total productive knowledge, even if his inventions never amount to anything, and (e) revealing able employees for quicker promotion." It is considered, too, by some observers that suggestion plans are potential means of restoring some of the interest in work which repetitive industry is supposed to destroy.

In contrast to the advantages offered by a suggestion plan, it is maintained by those objecting to such a system that the business value of the suggestions is not enough to cover the total costs of a reward system, since there are always numerous cases of dissatisfaction on the part of those who make unreasonable suggestions and the administration of the plan also requires part of the time of the higher-

[^9]paid workers or officials. Team work is said to be interfered with by the individualistic appeal of "cash for ideas" and cooperation, it is thought, may be much more effectively promoted in other ways, such as the maintenance of an employees' representation plan and improving the qualities for leadership among foremen and others in a supervisory capacity. In general it is questioned by objectors to the plan, whether the rank-and-file worker has the capability or the interest which would enable him to make any very important contributions to the business as compared with the services, for example, of a good industrial engineer.

In spite of objections on the part of some executives to such a scheme, however, it appears that the number of such plans is on the increase, as a recent classification, by Industrial Relations Counselors (Inc.), of the names of firms which had been listed as operating suggestion plans included a total of 316 firms, 232 of which were industrial, 21 mercantile, 10 financial, 8 insurance, 31 public utility, 9 railway, 1 Government, and 4 miscellaneous.

## Rewards According to Importance of Suggestions

THE incentives offered by the companies may include the following plans: A fixed award for major and minor suggestions; a graduated award offering fixed prizes for the best, second-best, etc., suggestions submitted within a given period; awards based upon the savings affected through the suggestion; and nonfinancial incentives, such as promotion and advancement, the awarding of medals and "honorary" awards. The great majority of the plans, however, use cash awards as the main incentive.
Satisfactory measurement of the value of a suggestion is extremely difficult if not impossible in the majority of cases, even when it is evident that it is a suggestion of major importance. For this reason the practice of offering fixed prizes according to the degree of excellence of the suggestion is favored by a considerable number of companies, as it is easier to determine the relative importance of two suggestions than to fix their exact value. The plan of the National Cash Register Co. provides for a reward of $\$ 100$ every six months for the best suggestion submitted, with lower prizes tapering down to $\$ 1$ for every idea adopted at all. Difficulties of measurement grow less as time elapses, and it is often possible to estimate the saving after six months or a year after the suggestion has been put into effect. In accordance with this idea, the Cadbury Co. in England makes a small cash award for every suggestion adopted, and a final prize, based on evaluation of the merit of the suggestion through trial, is given at the end of the semiannual period.
Still another method of fixing the award is by a system of classification which makes no attempt to fix the value of the savings but provides for a rather rough classification covering different types of suggestions. Such a system is followed by the Dennison Manufacturing Co. which, in the field of major suggestions, classifies the suggestions according to whether they involve fundamental or basic changes in manufacturing or selling methods, or the adaptation of present methods so that there is a saving in costs or an increase in profits or sales. For the first class the minimum award is $\$ 25$, the
standard award is $\$ 50$, and the award for exceptional merit $\$ 100$ or more, while in the second class the awards range, respectively, from $\$ 10$ to $\$ 50$ and more.

The question of patentable inventions comes into the questions of suggestions. The ownership of patent rights is defined in law, and employees working in corporation experimental departments generally contract specifically, in consideration of their salaries, to assign to the employer any patent rights. Ordinary employees who have not so contracted are entitled to inventions developed "on their own time" and with their own facilities. It is often difficult, however, to determine the circumstances of invention, or of the employment contract, and various methods are followed in meeting this situation when it develops, such as allowing all royalties to go to the inventor, giving a cash bonus, etc.

## Awards for Minor Suggestions

S UGGESTIOITS which carry only a slight business value are commonly paid for by a small cash prize, which is usually less than $\$ 5$. A number of companies, however, in addition to the small awards for this class of suggestions, give special prizes to those employees who have had a certain number of suggestions accepted, and one company reported that a record is kept of every suggestion received and that these suggestions are considered in the promotion of employees.
Although one company insists that such a plan keeps workers thinking about their jobs and thus increases their knowledge and skill, it is considered that the practice of giving many small awards may defeat the purpose of the suggestion system, since matters of plant housekeeping, complaints, etc., which should be attacked through improved supervision, may form the principal subject of suggestions and thus in a measure discredit the scheme.

The Baltimore \& Ohio plan ${ }^{2}$ of union-management cooperation, which has been adopted by several other railroads, is cited in the report as an example of a successful attempt to secure the cooperation of the employees. In the first three years that the plan was in effect more than 18,000 suggestions were received which had first received the approval of the local union and a committee of the employees. About 85 per cent of these suggestions were approved and the high rate of acceptance was considered to be due to the fact that the suggestions had first received the approval of these bodies. This plan does not carry with it any individual rewards but benefits the men through better working conditions and methods and stabilized employment. An attempt was made to learn whether patent records might constitute an index of the value of these suggestions but it was said that in general there was not much opportunity for the development of ideas leading to patents since "in this day and age of high-class engineering research and design, such developments as do eventually become patentable are by no means the product of the minor suggestions and ideas that are conceived in shops by the ordinary run of mechanics."

[^10]
## Conclusions

IN SUMMING up the results of the study it is shown that in the majority of the establishments about 90 per cent of all suggestions receive only the minimum award or little more, and that in general the cash awards approximate 10 per cent of the estimated first year's saving due to the suggestions. In many cases where plans have been discontinued it has been due to causes baving no relation to the plan, such as business slumps and turnover among the higher executives.

It appears to be important in sustaining and directing creative interest on the part of employees that there should be no limitation as to subjects or persons so that real competition will be promoted. Combination of substantial individual and group recognition is also desirable, as well as continuous and varied publicity regarding the plan, fair consideration of the plan through withholding the sucgestor's name during investigation, investigation by properly quali. fied individuals or a committee, and prompt handling of cases.

Finally, it is said that "an obstacle to the maximum development of employee cooperation, system or no system, is the human weakness which these plans are designed to counteract-complacency in executives as to their own methods and judgments. The manager may decree suggestion or representation machinery, realizing perfectly that his supervisors' ideas may often be improved upon by their subordinates; but his actual intolerance of suggestions from these supervisors to himself will go far toward encouraging the same attitude in them toward their underlings, and thus toward neutralizing the cooperation program."

## Suiting the Speed of the Machine to the Worker

THE question of whether, in machine operations, the operative may be imperfectly adjusted to the requirements of the machino or vice versa, and the relation of these factors to output, wes made the subject of a series of laboratory tests and of experiments in the actual operation of machines in a toffee factory in Great Britain. A report of this study is published in the October, 1927, issue of the Journal of the National Institute of Industrial Psychology, London, under the title, "Machine speeds and output," by S. Wyatt, an investigator for the Industrial Fatigue Research Board.

Without going into the technical details of the experiments, it may be stated that in the laboratory the lower speeds were found to be objectionable owing to the limitations imposed by the machine; that is, annoyance was expressed at the restricted conditions of work. The higher speeds were found to be conducive to increased strain and fatigue. Finally, it was discovered that the different subjects reached their maximum output at different speeds, which is an important result considering the purpose of the study.

In actual practice in the toffee factory the results were much the same. The productive capacity of the operatives generally was restricted when machines were run at a speed adapted to the slowest worker, and when the speeds of the machines were increased as much as 18 per cent the result was greater output and less fatigue. Some workers were able to feed machines efficiently while running at an increase in speed much greater than 18 per cent, suggesting the
desirability, because of greater profit to the worker and to the factory, of putting these operatives on the higher-speed machines and not requiring their output to be diminished by placing them on the slower-running machines.

The study apparently shows that in any group of individuals selected at random considerable differences in ability will be found to exist, "amounting to 30 to 40 per cent in repetitive hand work where working capacity can be fully expressed in productive activity." In view of this fact it is recommended that the speed of machines be regulated so that they constitute a progressive series, thus affording an arrangement by which a novice during the early stages of the learning period could be assigned to the slowest machine and gradually be advanced as she developed proficiency.

Such a scheme would provide a natural and reasonable system of promotion, with its accompanying incentives to activity, and would eventually result in each operative finding a machine adapted to her natural rate of working. Individual differences in ability would in consequence be adequately expressed in productive efficiency, and each operative would be most comfortably and effectively employed.

It is added, however, that it would be necessary for the operative to attempt work at a higher speed as soon as she had become proficient at the lower one; otherwise prolonged performance at the slower rate might lead to the development of slow habits of work.

## English Miners' Welfare Fund, 1926

THE fifth annual report of the committee appointed by the Board of Trade to allocate the Miners' Welfare Fund, recently issued by the Mines Department of Great Britain, contains a general summary of the work so far accomplished and of the general situation at the close of 1926. The fund, it will be remembered, is financed by a levy of a penny on every ton of coal mined, and is divided into two parts, from one of which allocations are made to the separate districts for local welfare purposes, while the other is administered by the central committee for the benefit of those in the industry without regard to locality. The act of 1920, establishing the levy, became effective in August (see Labor Review, November, 1920, p. 201), and for that year the amount received by the fund was only $£ 452,837 .{ }^{1}$ For 1925 , the proceeds of the levy amounted to $£ 1,003,-$ 658 , and the total amount accruing to the fund, during the five years, including interest, was $£ 5,848,718$. Of this amount, $£ 3,253,914$ had been paid over to the district bodies, and $£ 675,323$ had been used by the central committee as a general fund.
During 1926, the coal stoppage interfered with receipts, but the work went on.
The activity of the fund as a whole was well maintained as compared with previous years. During the 12 months the total number of allocations made was 588 , and, although this was 5 less than in 1925, the total sum allocated, $£ 1,283,200$, was more than double the corresponding sum in the previous year, while, with 1,348 payments, as against 1,480 , the amount actually paid out was $£ 1,208,135$, as compared with $£ 948,082$. The sum accruing to the fund was, however, owing to the increasing depression in the industry, over $£ 100,000$ less than in the previous year and amounted to only $£ 1,108,380$.

[^11][58]

Up to the close of 1926 the total amount spent by the districts was $£ 3,701,093$, which had been divided among the various objects as follows:

|  | Amount | Per cont |
| :---: | :---: | :---: |
| Recreation | \&2, 371, 605 | 64.1 |
| Health | 1, 265, 593 | 34.2 |
| Education--- | 30,075 33,820 | . 8 |
|  |  |  |

It will be noticed that the costs of administration are very small, and that the amount devoted to education is smaller still. In considering the amount spent on recreation, it must be remembered that many of the plans financed from these funds include recreational opportunities for the whole community, of both sexes and all ages. Community centers and community playgrounds appear frequently in the list of recreational projects. Their comprehensive nature may be judged from details given of one which was in course of development during 1926. A site of 8 acres had been obtained, and the plans under consideration included junior and senior football grounds, cricket grounds, a bandstand, a dancing area, six hard tennis courts, a putting course, a bowling green, a lawn skittles area, two quoit pitches, and a children's section with playground apparatus and sand pit, the whole to be laid out with shrubbery, paths, and seats for those who did not wish to take any active part in the recreational program.
Much the larger part, nearly 75 per cent, of the expenditure for health purposes has gone into providing convalescent homes for miners, six of which had been completed while three were still unfinished at the date of the report. Three of the districts having convalescent homes, Ayr, Lancashire, and North Staffordshire, have never carried out any other plan under the welfare scheme, a fact which the central committee deplores.
We do not question in principle the value of these convalescent schemes, but it must be remembered that they provide benefit for only a relatively small section of the mining community, and that the fund was intended for the welfare of the fit and healthy as well as for that of the injured or sick. We doubt, indeed, if it can be said that the act is being fairly interpreted if either recreation or health is entirely ignored in any district.

Pithead baths and shelters took up about 10 per cent of the money allocated to health purposes, 8 per cent was used for existing hospitals, 4 per cent went to the provision of ambulance services, and about 2 per cent was devoted to the provision of district nursing facilities.

During the year only $£ 3,712$ was assigned to educational purposes by the district committees, as against $£ 11,309$ in 1925. Nonvocational lecture schemes accounted for the greater part of the money thus expended.

An interesting part of the report deals with the effect of the coal stoppage upon the welfare plan. The most immediate and obvious effect was a marked loss of income, but equally serious was the falling off in the financial support of the local schemes. Many of these are founded in the expectation that after they have once been installed they will be supported from local sources, and they naturally suffered from the general cutting off of income in mining towns and villages.

$$
78271^{\circ}-28-5
$$

In some cases, it is suggested, the mine owners may themselves have financed the plans temporarily, but in others the schemes, it is feared, have become burdened with heavy debts, from which it will be hard for them to free themselves. The utility of the schemes was very evident during the stoppage, as they afforded a resource and distraction for the men out of work. The stoppage even proved profitable for certain schemes.

Recreation grounds, though suffering more than institutes and halls from the effects of abnormal use, have, however, derived a certain amount of compensating benefit from the stoppage in a very large number of cases, because of the numbers of men who have been available to do voluntary or practically voluntary labor. It is perhaps a rough and ready way of measuring the local popularity of the scheme to ask whether voluntary work has been done. All over the country a great deal of progress has been made and a great deal of money saved in consequence of the voluntary labor which has been available.

## WOMEN IN INDUSTRY

## Hours and Earnings of Women in New York Laundries

THE New York Bureau of Women in Industry has recently issued a bulletin giving the results of a study of the hours of work and earnings of women in laundries, made in the spring of 1926. The investigation covered 64 laundries, employing 3,216 women, these figures representing 12 per cent of all the laundries in the State and 30 per cent of all the women employed in laundries. Thirty-four of the laundries, employing 2,212 women, were in the five boroughs of New York City, and the others were in cities and towns scattered throughout the State.

## Scheduled Hours and Hours Actually Worked

AT THE time of the investigation the New York laws permitted a 54 -hour week for woman workers. In 20 of the laundries the scheduled hours were under 48, in 5 they were 48 , in 18 they were over 48 up to and including 50 , in 15 they were over 50 but under 54, and in 7 were 54 . The 3,125 women for whom details on this point were secured were grouped as follows as to scheduled hours:

|  | Number | Per cent |
| :---: | :---: | :---: |
| Under 48 hours | 532 | 17.0 |
| 48 and under 50 hours. | 530 | 17. 0 |
| 50 hours --......- | 1,098 | 35. 1 |
| Over 50 and under 54 hours | 699 | 22.4 |
| 54 hours | 266 | 8. 5 |
|  | 3,125 | 100.0 |

It will be seen that practically two-thirds ( 66 per cent) had a scheduled week of 50 hours or more. The hours actually worked showed a different grouping of the women, as follows:


The proportion actually working less than 48 hours in the week taken as typical was more than twice as large as the proportion having that scheduled week, and the proportion actually working 50 hours or more was 48 per cent, against the 66 per cent scheduled for such hours. But the most important feature of this second grouping is the new category which appears, those working over 54 hours, i. e., those employed for illegally long weekly hours. The detailed figures given in the study show that in this respect New York City differed from the rest of the State.

These figures show first, that hours worked as well as scheduled hours were longer in New York City than up-State. Second, New York City laundries show a striking proportion of women employed beyond the maximum hours permitted by law. Up-State, cases of only 4 women exceeding the legal maximum were found and these violations were less than an hour in length. In New York City 308 women worked more than 54 hours. Of these, 64 had 60 hours or more of work in this week and 8 women worked at least 70 hours. These hour conditions bring out, as does the study of overtime which follows, that New York City laundries had not effectively coordinated hours of work, number of employees, and volume of output. It is also significant that although New York City laundries far exceed those up-State in the relative number of women employed more than 48 hours, they also exceed in the proportion of women employed very short hours.

## Earnings

THE piecework system prevails to only a limited extent in the laundry industry. Ninety-three per cent of the workers studied were paid on a time basis and 7 per cent for output; 85 per cent of the whole group were paid weekly rates. For a group of 2,898 for whom weekly rates were secured, 5.7 per cent ( 167 women) had rates under $\$ 12$ a week, 69.2 per cent had rates under $\$ 16$, and 92.5 per cent under $\$ 20$; the median rate for the whole group was $\$ 14.76$. The weekly earnings show a different grouping, 20.5 per cent ( 659 women) having made less than $\$ 12,66$ per cent less than $\$ 16$, and 89.2 per cent less than $\$ 20$. The median earnings, $\$ 14.67$, did not vary greatly from the median rate, and 10.8 per cent of the group (348 women) earned $\$ 20$ and over, against 7.5 per cent who had rates of this amount.

One of the most striking features of the study is the relation shown between scheduled hours and scheduled rates of pay. Throughout the State the better rates were found in connection with the shorter hours.

In the laundry industry as in the factory industries studied in 1923, plants with shorter hours were not found to pay lower wages. Rather, shorter hours and higher wages were likely to be found together. The following comparison shows median weekly rates in laundries operating under long and short schedules: New York State-
$\$ 15.42$ in laundries with seheduled hours of 48 or less.
$\$ 14.60$ in laundries with scheduled hours in excess of 48.
New York City-
$\$ 15.11$ in laundries with seheduled hours of 48 or less.
$\$ 14.66$ in laundries with scheduled hours in excess of 48.
Outside New York City-
$\$ 15.77$ in laundries with scheduled hours of 48 or less.
$\$ 14.42$ in laundries with scheduled hours in excess of 48.

## Married Women in Industry in Binghamton, N. Y.

THE increasing importance of the question of married women in industry is emphasized by a study of women industrially employed in Binghamton, N. Y., recently made by the State bureau of women in industry. Some data from this study are given in the Industrial Bulletin for November, 1927, issued by the industrial commissioner of New York State. Binghamton shows an unusually large proportion of married women gainfully employed, 48.5 per cent, against 23 per cent in all cities of the United States having a population of from 25,000 to 100,000 . The following table shows their industrial distribution:

DISTRIBUTION OF WORKING WOMEN IN BINGHAMTON, N. Y., BY INDUSTRY AND BY MARITAL STATUS

| Industry | $\begin{aligned} & \text { Number } \\ & \text { em- } \\ & \text { ployed } \end{aligned}$ | Single |  | Married |  | Widowed, divorced, or separated |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Per cent | Number | Per cent | Number | Per cent |
|  |  |  | 43. 6 | 3, 365 |  | 365 | 5.5 |
| Shoe | $4,060$ | 1,847 | $45.5$ | 2, 067 | $50.9$ | 146 | 3.6 |
| Cigar | 714 | 214 | $29.9$ | 441 | $61.8$ | 59 | 8.3 |
| Clothing | $471$ | 183 | $38.8$ | $236$ | 50.1 | 52 | 11.1 |
| Metal and machinery | $333$ | 106 | 31.7 | $194$ | 58.4 | 33 | 9.9 |
| Textile | $217$ | 116 | $53.6$ | 87 | $39.8$ | 14 | 6. 6 |
| Paper, printing, etc. | 219 | 137 | $62.5$ | 77 | $35.1$ | 5 | 2.4 |
| Wood | 169 | 74 | $44.0^{\prime}$ | 87 | 51.5 | 8 | 4.5 |
| Food | $127$ | 87 | 68.3 | 40 | 31.7 |  |  |
| Laundry | $136$ | 25 | $18.3$ | $75$ | 54.9 | $36$ | 26. 8 |
| Chemical | $161$ | 88 | $54.9$ | $61$ | 37.8 | 12 | 7.3 |
| Mercantile | $990$ | 548 | 55.4 | 326 | 32.9 | 116 | 11.7 |
| Restaurant |  | 33 |  | 28 | 44.8 | - 2 | 3.5 |
| Total | 7,660 | 3,458 | 45.2 | 3,719 | 48.5 | 483 | 6.3 |

It will be observed that of the total number of women engaged in manufacturing industries less than one-half-43.6 per cent-were single, and that in only 4 of the 10 groups of such industries considered did the proportion of the single rise above 50 per cent. Among those engaged in restaurant work a trifle over one-half- 51.7 per centwere single, and of those in mercantile occupations 55.4 per cent had not been married. In the total group considered, 54.8 per cent had been married and 48.5 per cent were living with their husbands, as distinguished from those who had been widowed, divorced, or separated. In the separate industries the married women, using the term in this restricted sense, ranged from 31.7 per cent of those engaged in food industries to 61.8 per cent of those in cigar manufacturing.

There is little difference in earnings among the three groups of woman workers, their median earnings being as follows:

| Marital status | Median annual earnings |
| :---: | :---: |
| Single | \$855. 68 |
| Married | 877. 72 |
| Widowed, separated, | 868.75 |

It is suggested that the single women as a group are younger, and consequently less experienced than the others, and that this accounts for the slightly lower earnings shown.

In relation to hours worked, there is little difference between single and married women, except that the single show a greater amount of overtime worked.

In summing up the results of the study, the report stresses the fact that marriage can no longer be regarded as ending the industrial life of women, and that consequently they can not be considered as merely temporary workers filling in the period between leaving school and getting married.

Here, then, is an industrial city with a total population of approximately 67,000 , of which 25,000 are wage earners. About one-third of all the industrial workers are women, and 49 per cent of these are married. The length of their working-day, their wages, differ but little or not at all from those of their unmarried sisters.

Whether married women go to work because of economic necessity, whether it is from personal preference for work outside of the home, or whether it means a desire to be economically independent of their husbands, they are being employed in increasingly large numbers. Their presence in our industries can no longer be ignored or pushed aside because of prejudice or fear. They are to be accepted and reckoned with as any other group of industrial workers.

## CHILD LABOR

## Accidents to Employed Minors in Illinois

ASTUDY made by the Bureau of Labor Statistics of Illinois on accidents to employed minors in that State covers 1,803 such accidents befalling children under 18 years of age during the year 1923. Of these, 237 caused permanent partial disability, 88 caused serious and permanent disfigurement of the hand, head, or face, and 12 were fatal. The age incidence of the accidents was somewhat different from that found in some other studies. According to the census of 1920 , children under 16 formed 24.4 per cent of employed minors under 18, while they constituted 5.9 per cent of those injured in 1923; children aged 16 formed 34.6 per cent of the minors employed and 32.9 per cent of those injured; those aged 17 formed 41.4 per cent of the minors employed and 61.2 per cent of those injured. Ten of the 12 fatalities were found among those aged 17. Manufacturing led all other industries in the number and proportion of serious injuries (199, or 59.1 per cent), followed by coal mining ( 104 , or 30.9 per cent). Of the 106 children under 16 who were injured, 55 , or over one-half, were employed illegally.

As a result of this study, it is recommended that Illinois should have a more complete collection and tabulation of accident data, a general program for accident prevention, a widening of the list of occupations prohibited to minors under 16 , and the extension to 16 and 17 of the age at which prohibition of certain occupations expires, and better observance of the child labor law. One recommendation, that minors illegally employed should be included under the compensation act with additional compensation, was adopted and went into force in July, 1927.

## Compensated Accidents to Working Children in Pennsylvania

ARATHER exhaustive and detailed analysis of compensated accidents to minors (under the age of 21) in Pennsylvania during the year 1924 has been issued by the State department of labor and industry as its Special Bulletin No. 17. The report includes only accidents which were compensated in that year under the Pennsylvania law, amounting to about 40.5 per cent of the reported accidents and about one-eighth of the compensated accidents, and only those resulting in disabilities extending beyond the 10 -day waiting period. Although the tabular matter in the report is extensive and covers age and sex of minors injured, extent of disability, industries in which employed, causes of the injuries, compensation paid, etc., only a brief summary of these points can be included here.

The report notes the cases of 9,197 boys and 773 girls, of whom 270 were under the age of 16 years. An indication of the severity of the accidents sustained by these children is the fact that the aver-
age time lost in cases of temporary duration was 35.2 days, as compared with an average of 42.7 days lost by adults. There were 117 death claims, 2 permanent total disability claims, 425 permanent partial disability claims, and 9,426 temporary injury claims. Accidents to these minors resulted in about the same degree of impairment as those to adults. Thus, of 68,804 compensated claims of adults during 1924, the percentages were: Death, 2.7; permanent disability, 4.2 ; temporary disability, 93.1 ; while the percentages of minors in these classes were, respectively, $1.2,4.3$, and 94.5 .

Most of the minors suffered injuries to hands, arms, and fingers, comprising 55.8 per cent of the permanent disability claims and affecting 54.2 per cent of the boys and 75.4 per cent of the girls. Of the 624 (6.3 per cent of all cases) cases of blood poisoning developing, 84.9 per cent were boys, and cuts and lacerations were responsible for 43.6 per cent of these cases. Crushes and bruises and cuts and lacerations were the kinds of injury in three-fifths of all cases (63 per cent). Crushes and bruises caused 35.1 per cent of the deaths, and amputations resulted in 49.2 per cent of the permanent disabilities.

As may be expected, the largest number of minors were injured in manufacturing industries,. and the next largest number in mining and quarrying, 49.3 per cent in the former and 29.1 per cent in the latter. Eighty and five-tenths per cent of the girls and 46.6 per cent of the boys were injured in the manufacturing branches of industry and 31.6 per cent of the boys were injured in mines and quarries. However, when degree of disability is considered, we find that mines and quarries caused 53 per cent of the deaths and manufacturing 29.1 per cent; that manufacturing caused 69.6 per cent of the permanent disabilities and mines and quarries caused 18.8 per cent; and that manufacturing caused 48.6 per cent of the temporary disabilities and mines and quarries caused 29.3 per cent. The percentage in each of these cases is far above the percentage in other industries. In all instances where manufacturing industries figured, metals and metal products stand highest, with 12.8 per cent of the deaths, 39.4 per cent of the permanent injuries, and 24.8 per cent of the temporary cases.

Vehicles (mostly in coal mining) caused the greatest number of accidents to boys ( 23.8 per cent) and machinery the greatest number to girls ( 53 per cent). These figures may be compared with 21.4 per cent in the handling-objects group, in which group occurred the greatest number of accidents to adults. Vehicles were responsible for 33.3 per cent of the deaths, and falling objects for 23.1 per cent, while 63.5 per cent of the permanent disabilities were due to machinery. The temporary disabilities were largely due to vehicles (22.4 per cent), to handling objects ( 20.6 per cent), and to machinery (20.2 per cent).

It appears that the median average weekly wage of minors injured was $\$ 10.56$ for those 14 and 15 years of age, $\$ 17.89$ for those 16 and 17 years of age, and $\$ 24.70$ for those 18,19 , and 20 years of age. This is significant in view of the fact that compensation is payable up to 60 per cent of the average weekly wage, with a maximum of $\$ 12$ and a minimum of $\$ 6$, unless the employee was receiving less than $\$ 6$ at the time of injury, in which case an amount equal to the full wages is paid. Most of the injured ( 7,118 , or 71.4 per cent) were in the
highest age group, of whom 5,186 , or 72.9 per cent, received earnings of more than $\$ 20$ a week, the compensation therefore being limited to the maximum of $\$ 12$. There being also 36.7 per cent of the age group 16 and 17 years receiving earnings of over $\$ 20$ a week, it will be seen that more than half ( 61.6 per cent) of the injured children received less than 60 per cent of their wages in compensation. Only 4.3 per cent received more than 60 per cent of their wages in compensation, showing that comparatively few (414, or 4.2 per cent) were, before their injury, receiving less than $\$ 10$ a week and consequently were awarded the minimum of $\$ 6$ per week, or their actual wages if less than $\$ 6$.

The average compensation awarded to minors was $\$ 1,496.04$ in death claims, $\$ 635.58$ in permanent disability claims, and $\$ 40.04$ in temporary disability claims, or an average of $\$ 82.63$ for all cases. This compares with an average of $\$ 177.35$ awarded to adults. The total compensation awarded was $\$ 823,831$, apportioned as follows: Death, $\$ 175,037$; permanent disability, $\$ 271,392$; temporary disability, $\$ 377,402$.

## INDUSTRIAL ACCIDENTS

## The Newer Industrial-Accident Prevention and Workmen's Compensation Problem

By Ethelbert Stewart, United States Commissioner of Labor Statistics ${ }^{1}$

THE industrial accident-prevention problem, as well as the workmen's compensation problem, that we are facing most seriously to-day is the problem of the small establishment.
The large concerns like the United States Steel Corporation, the International Harvester Co., etc., are not only able but find it profitable to spend the money that is required to equip their plants with safety devices and to install safety methods and schemes which reduce their accidents practically to a minimum. Corporations of this type are practically all self-insurers, and their employees are therefore thoroughly protected in case of accident.

The serious fact, however, is that over 40 per cent of the manufacturing establishments in the United States employ from 1 to 5 persons each, and practically 28 per cent of the manufacturing establishments employ from 6 to 20 wage earners each. The average in the former group is 2.7 wage earners per establishment; the average in the second group is 11.2 employees per establishment. The total number of employees in these two groups is practically 824,000 workers. It is in these small establishments that accidents are on the increase.

It is not the purpose here to go into the details of causes of increased accidents in smaller plants. As a general proposition it is due to the tendency to push production to the highest possible point by means of improved machinery, new mechanical appliances, conveyors, power hoists, power trucks, and by speeding up the workers. These new devices are not accompanied by the same safety equipment that the large corporations provide when they install the same devices. There is seldom a safety organization in the small plant. The manager and the superintendent or foremen are not acquainted with modern safety rules, and the plants are too small to have a real safety man.

An enormous amount of money is being spent on safety work, and it is having a tremendous effect in the way of accident prevention, but it is being spent in and by the large plants; and the large plants are comparatively few in number. Only nine-tenths of 1 per cent of the manufacturing establishments employ from 501 to 1,000 wage earners each, and the average of employees in this group per establishment is 690 . The next higher group, employing over 1,000 , constitutes only one-half of 1 per cent of the total number of establishments; yet these employ more than 24 per cent of all employees and have an average of 2,194 workers each.

[^12]We are therefore faced with a peculiar situation-a very few establishments doing an enormous amount of safety work and making an enormous amount of noise about it and really reducing their accident rates to a very wonderful degree; on the other hand the great majority of plants-over 90 per cent-doing nothing or practically nothing in the way of safety work and saying nothing about it, and having a rather startling progressive increase in accidents.

With the passage of the workmen's compensation acts in nearly all of the States of the Union we settled down to a smug reliance upon the operation of these laws to take care of the destitution that had formerly resulted from such accidents. The reason that workmen's compensation legislation was put through the various State legislatures so easily was at bottom because everybody knew that somebody was having to pay for the results of industrial accidents. The injured workman and his family were being taken care of by charitable organizations and the charitable organizations were getting their money from business men and from persons of wealth who were charitably inclined; or they were being thrown upon the taxpayers through outdoor relief funds and through almshouses. So the general public was pretty well prepared for a specific proposition to provide some legal remedy through which the injured worker should be cared for, in part at least, by the industry in which he was engaged at the time of the accident, and thus the burden be distributed over the whole population by allowing the employer to include the insurance premium or the cost of workmen's compensation in his general cost, just as he did taxes and fire insurance, and make it a part of the price of the commodity produced and spread the burden over the entire consuming public.

Once this legislation was on the statute books we settled back with a sigh of relief that all our social troubles, from that source at least, were at an end.

The machinery to take care of these risks assumed three forms-self-insurance, private organizations of insurance carriers, and State insurance funds, whether competitive or monopolistic. The private insurance organizations group has with the lapse of time split into two groups-the mutuals and the stock insurance companies.

Now let us see what has happened. The large employers of labor, which do not comprise more than 2 per cent of the total number of establishments, have become self-insurers. The next group-which still comprises a very small percentage of employers-have formed mutual insurance organizations to carry their risks on a cooperative basis. The great mass of employing establishments, which employ 20 people or less, were left for the stock companies and the State funds. Of course I do not mean to say that the stock companies and the State funds do not get a reasonable share of the larger plants; nevertheless the fact remains that the cream of the insurance business is in the hands of self-insurers and mutual companies.

The insurance companies find that, with the high accident rate in small plants and the increased accidents in small plants, the smallplant accident insurance taken by itself is a losing game.

Take, in the State of New York, the experience of all insurance carriers combined-stock companies, mutuals, and State fund.

Consolidation of the two years 1924 and 1925 affords a fair sample of what is happening. Twenty-five per cent of the firms insured were paying the minimum premium in their class, which minimum varies according to the class. From this group the premiums earned amounted to $\$ 1,830,630$ or 2.14 per cent of the total premiums earned. But the losses sustained in this group were 2.15 per cent of the total losses sustained and 61.8 per cent of the premium earned.

But this is not so startling as in the next group, which is composed entirely of small plants, where the premium paid is more than the minimum, but less than $\$ 25$ per year. This constitutes practically 17 per cent of the total number of plants. But note this-that while the premium earned from this group was 1.28 per cent of the total premium earned, the losses paid were 1.97 per cent of the total losses paid, and within this group 94.2 per cent of the premium received was paid back in losses. Of course the remainder does not anywhere near pay the overhead and operating costs.

In the next group of small establishments, paying $\$ 25$ and less than $\$ 50$ premium and constituting practically 17 per cent of the total risks, the premium earned was 2.71 per cent of the total premiums earned, while the loss was 3.97 per cent of the total loss and 89.8 per cent of the premium earned. When you compare these with the higher groups, say the group that pays $\$ 30,000$ and over in insurance premiums, while this group constitutes only four-hundredths of 1 per cent of the total number of firms the premium earned from this group constitutes 9.2 per cent of the total premiums earned, the percentage of loss was 7.85 per cent of the total losses and 52.4 per cent of the premium earned, you will note the enormous difference in the percental cost of carrying the small plant as compared with the large one.
The result of this is that the stock companies either put the premium rate so high that the small employer can not pay it or they refuse to take the risk in any event. In other words the list of prohibited risks is expanding to cover in many States such industries as coal mining and the smaller type of sawmill, and is gradually tending to exclude all the smaller establishments.

One of the most far-reaching subjects, therefore, in connection with this whole accident-prevention and accident-insurance question is what shall be done in cases of extrahazardous industries and small establishments which the insurance companies refuse to insure and which are not able to qualify as self-insurers and which are too widely scattered and too unorganized to form mutual insurance organizations.

The States most seriously affected are probably Georgia, Illinois so far as coal mining is concerned, Missouri, Oklahoma, Tennessee, Texas, and Virginia. In fact it is more or less true in all States not having some sort of State fund.

A very large number of States report that the situation as regards workmen's compensation insurance for these small plants is steadily growing worse. In Arizona and Utah private insurance companies are required to accept any risk that is offered them. In the States having competitive State insurance funds, while the private insurance companies are not compelled to take undesirable risks the State fund is so compelled, with the result that the small and expensive
risks are thrown into the State fund. This puts the competitive State funds at a disadvantage and may ultimately operate to create a situation where the competitive State compensation insurance fund will have to be supported by general taxation.

The question of compelling private stock companies to accept all insurance business offered has been referred to. This is the law in Arizona, which, however, is not entirely protected against certain methods by which it can be side-stepped; in other words, the insurance companies can make the conditions of carrying this undesirable business so unpleasant that the purpose of the law is more or less defeated.

In Massachusetts they are at present experimenting with a compulsory insurance law for automobile drivers. Every automobile must carry liability insurance. This being compulsory upon the owner of the automobile, it is also made compulsory upon the insurance companies to accept these risks. The insurance companies, however, are partially protected at least by a clause which says if any insurance company has reason to believe that a driver or owner of an automobile is an unfit person to operate a car it can bring this evidence before the State licensing bureau and the license to operate a car will upon sufficient proof be taken from this person. But if the State licensing bureau insists upon issuing the license, then the insurance company must take the risk. The operation of this law will be watched very carefully by those interested in workmen's compensation to see whether or not it can be made applicable to the accident insurance problem here discussed.

Of course if the insurance companies can be compelled to carry these small and dangerous risks they will in the nature of things require that the smaller plants give more attention to safety work and take positive and intelligent steps toward reducing their number of accidents. In the meantime, however, we find that in some States in an entire industry-namely, bituminous coal mining-the employees are not insured against the result of industrial accidents, notwithstanding the State law which is supposed to be in effect. Large numbers of employees in other industries are not insured, in fact, notwithstanding the existence of the law and the paper evidence of insurance in some cases.

To the extent that this picture is true society is fooling itself. We believe that we have secured for the workman at least a reasonable degree of compensation for accidents, enough to keep his family from suffering and to keep them secure from the need of charitable contributions, while as a matter of fact when an accident occurs they have no protection and are thrown upon public charity just as they were before the enactment of workmen's compensation laws, notwithstanding the fact that the cost of the insurance which society is supposed to have has been charged into the price of the commodities produced and is being paid for by the consuming public. In other words, to the extent to which this picture is true society is paying for something that it does not get, and the purpose of workmen's compensation laws is to that extent being defeated, notwithstanding that it is being paid for.

While the people of New York are not facing this difficulty in its worst form, you are facing it to the extent that these undesirable
risks are being driven into the State fund, which in the nature of things can not select its business and which in the nature of things can have no prohibited list.

It must be admitted that for the length of time in which workmen's compensation laws have been in operation in the United States and for the legnth of time in which active and intensive acci-dent-prevention work has been going on we have achieved along both lines most wonderful results. While we may be fairly well satisfied with the record of the past we should not blind ourselves to the fact that the operation of the laws is developing certain difficulties, that the method and plan of our private insurance companies are developing difficulties which seem to me to be inherent in their methods, which produce a cost of doing business which is so great as to develop a premium rate that can be paid only by the largest and wealthiest corporations. These corporations in turn are in a position to refuse to pay it by becoming self-insurers or by developing cooperative mutual companies, which from an insurance point of view amounts to practically the same thing as self-insurance; this in turn makes necessary the high rates which the smaller concerns can not pay, while tending at the same time to eliminate from the field all the risks except those who either can not pay or whose accident rate is so high that the insurance companies can not carry them with profit-in other words, a scheme which defeats itself and which in turn reacts upon the operation of the compensation laws so as partially to defeat them, thus throwing back upon the workers and the community the evils, within this group, for which compensation laws were enacted and compensation insurance carrier companies were developed.

It is too early in the development of these menacing conditions to discuss dogmatically any scheme for their solution, but these clouds on the horizon which at first blush may seem to be no bigger than a man's hand are in fact shaping themselves into very definite outlines; and it is important that the business interests of this country should see the outline of the conflict and should begin to think about wise methods of solution.

For the information of those who desire to go deeper into the statistical side of the problem outlined in this paper there are presented below the tables from which the statements in the paper itself were derived.

The purpose of Table 1 is to show the relatively large number of manufacturing establishments employing very few wage earners, as against the relatively few establishments employing large numbers. For instance, the table shows that 40.3 per cent of all manufacturing establishments covered by the Census employ from 1 to 5 wage earners, that there are 79,101 such establishments in this group employing 212,938 wageworkers, that the number of wage earners employed in these establishments is only 2.4 per cent of the total number of wage earners employed in manufacturing, and that the average number of wage earners per establishment in these small plants is 2.7 persons. The next size establishments, employing from 6 to 20 wage earners, constitute 27.8 per cent of all establishments and employ 7 per cent of the wage earners, the average being 11.2 persons per establishment. On the other hand, the big concerns employing over

1,000 persons number but 963 , or five-tenths of 1 per cent of the total number of establishments. They employ, however, 24 per cent of the total wage earners and have an average of 2,194 employees per establishment. The average number of wage earners per establishment in the United States, taking them all together, is but 44.7 persons, indicating that from a compensation-insurance and accidentprevention point of view the problem in the United States is the small and not the large establishment.

Table 2 shows the workmen's compensation experience in the State of New York for the stock and mutual companies and the State fund consolidated for the years 1924 and 1925 combined. The table needs no comment except that in the loss ratios the ratio form instead of percentages is used. Of course to change a ratio to percentage it is necessary only to move the decimal point two places to the right. In other words a ratio of 0.618 becomes a percentage of 61.8 .
Table 3, which lists the establishments by value of product, is inserted here for two reasons. One is to show the very large percentage of establishments having a very small individual production, and the other is to show the value of production per wage earner. These two points have special bearing on the insurance question. In this connection it should be noted that the Census no longer lists manufacturing establishments which produce less than $\$ 5,000$ worth of "product, thus making it impossible to know the number of plants smaller than this. The only thing that can be said is that in 1919. the last census year in which these plants producing less than $\$ 5,000$ worth of product were enumerated, there were 60,125 of them, employing, however, only 41,252 wage earners. In this table the first group, producing from $\$ 5,000$ to $\$ 20,000$ worth each, constitutes 31.6 per cent of all manufacturing establishments, and produces an average value of product of $\$ 11,261$. The value of the product per wage earner is $\$ 3,679$. While in the group with the highest value of product-constituting 5.3 per cent of the total establishments-the value of product per establishment is $\$ 3,890,981$ and the value of product per wage earner is $\$ 8,015$. It will be readily understood that the establishment where the workers are producing an average of $\$ 3,679$ each can not pay the premium rate based upon pay roll that the establishments whose workers are producing $\$ 8,015$ each can pay.
TABLE 1.-MANUFACTURING ESTABLISHMENTS CLASSIFIED BF NUMBER OF WAGE EARNERS, 1923
[From Repert of U. S. Census of Manufactures]

| Number in wage earning group | Number of establishments | Number of wage earners | Per cent in each group |  | Wage earners pes establishmont |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Establishments | Wage earners |  |
| None. | 8, 436 | 0 | 4.3 | 0.0 | 0 |
| 1 to 5 | 79, 101 | 212,938 | 40.3 | 2.4 | 2.7 |
| 6 to 20 | 54,609 | 611,524 | 27.8 | 7.0 | 11.2 |
| 21 to 50 | 25, 212 | 818, 403 | 12.8 | 9.3 | 32.5 |
| 51 to 100 | 12,346 | 882,965 | 6.3 | 10.1 | 71.5 |
| 101 to 250 | 10, 023 | 1, 576, 218 | 5.1 | 18.0 | 157.3 |
| 251 to 500 | 3,835 | 1,332, 393 | 2.0 | 15. 2 | 347.4 |
| 501 to 1,000 Over 1,000 | 1,784 | 1, 230, 888 | . 9 | 14.0 | 690.0 |
| Over 1,000. | 963 | 2,112, 827 | . 5 | 24.1 | 2,194.0 |
| Total | 198, 309 | 8, 778, 156 | 100.0 | 100.0 | 44.7 |

TABLE 2.-NEW YORK WORKMEN'S COMPENSATION EXPERIENCE, 1924 AND 1925 COMBINED
[Combined figures for stock companies, mutual companies, and State fund, 1924 and 1925. Data furnished by National Bureau of Casualty and Surety Underwriters]

| Premium group | Risks (firms) |  | Premium earned |  |  | Losses |  |  | $\begin{aligned} & \text { Loss } \\ & \text { ratio } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\substack{\text { Num- } \\ \text { ber }}}{\text { N }}$ | Per of total | Amount | Per cent of total | $\begin{gathered} \text { A ver- } \\ \text { age } \\ \text { per } \\ \text { risk } \end{gathered}$ | Amount | Per of total | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { per } \\ \text { risk } \\ \text { (firm) } \end{gathered}$ |  |
|  | 95, 833 | 24.89 | \$1, 830, 630 | 2.14 | \$19 | \$1, 132, 123 | 2.15 | \$12 | 0.618 |
|  |  |  |  |  |  |  |  |  |  |
|  | 64, 990 | 16. 88 | 1, 100, 781 | 1. 28 | 17 | 1, 037, 394 | 1. 97 | 16 | . 942 |
|  | 64, 649 | 16. 79 | 2, 325, 233 | 2.71 |  | 2, 088, 833 | 3.97 | 32 | 898 |
|  | 22, 974 | 9.73 5.97 | 2, 2898,912 | 2. 67 | 61 86 | $1,806,179$ <br> $1,586,043$ | 3. 43 | 48 69 | .789 .800 |
|  | 26, 890 | 6.98 | 3, 267, 398 | 3.81 | 122 | 2,551, 883 | 4.85 | 95 | . 781 |
|  | 14, 955 | 3. 88 | 2, 588, 090 | 3. 02 | 173 | 1, 792, 393 | 3.41 | 120 | . 693 |
|  | 16,785 | 4. 36 | 4, 102, 468 | 4. 79 | 244 | 2, 770, 322 | 5. 27 | 165 | . 675 |
|  | 9,385 | 2. 44 | 3, 248, 349 | 3. 79 | 346 | 2, 085, 825 | 3.97 | 222 | . 642 |
|  | 5,714 | 1. 49 | 2, 551,052 | 2.98 | 446 | 1, 671, 971 | 3. 18 | 293 | . 655 |
|  | 12, 141 | 3. 15 | 8,510, 456 | 9. 93 | 701 | 5, 195, 488 | 9. 88 | 428 | . 610 |
|  | 6,616 | 1. 72 | 9,302, 688 | 10.86 | 1,406 | 5, 306, 453 | 10. 09 | 802 | . 570 |
|  | 2,409 | . 63 | 5, 840, 487 | 6.82 |  | 3, 409, 644 | 6. 48 |  | . 584 |
|  | 1,898 | . 49 | 7, 287, 443 | 8.50 | 3,840 | 3, 912, 959 | 7.44 | 2, 062 | . 537 |
|  | 1,381 | . 36 | 9, 352,621 | 10. 91 | 6,772 | 5, 095, 534 | 9.69 | 3,690 | . 545 |
|  | 578 | . 15 | 7,896, 475 | 9. 22 | 13, 662 | 4,558,751 | 8. 67 | 7,887 | . 577 |
|  | 178 | . 05 | 4,333, 991 | 5. 06 | 24,348 | 2, 457, 202 | 4.67 | 13,805 | . 567 |
|  | 153 | . 04 | 7,879, 333 | 9. 20 | 51, 499 | 4, 129, 230 | 7.85 | 26, 988 | . 524 |
| Total | 385, 006 | 100.00 | 85, 690, 563 | 100.00 | 223 | 52, 588, 227 | 100.00 | 137 | . 614 |

${ }^{1}$ The minimum premium may be as low as $\$ 10$ or as high as $\$ 585$, according to class, Each other group is made up of firms paying over the minimum of their classification but within the range stated.

Table 3.-MANUFACTURING ESTABLISHMENTS CLASSIFIED BY VALUE OF PRODUCT, 1923
[From report of U. S. Census of Manufactures]

| Value of product | Number of estab-lishments | Number of wage earners | Value of product | Value of product |  | Number of wage earners |  | Per cent of total formed by- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per establishment | Per wage earner | Per es-tab-lishment | Per $\$ 1,000,000$ of product | Estab-lishments in each group | $\begin{aligned} & \text { Wage } \\ & \text { earn- } \\ & \text { ers } \\ & \text { in } \\ & \text { each } \\ & \text { group } \end{aligned}$ | $\begin{aligned} & \text { Value } \\ & \text { of } \\ & \text { prod- } \\ & \text { uct } \\ & \text { in } \\ & \text { each } \\ & \text { group } \end{aligned}$ |
| \$5,000 to \$20,000 | 61,981 | 189, 738 | \$697, 996, 736 | \$11, 261 | \$3,679 | 3.1 | 271.8 | 31.6 | 2. 2 | 1. 2 |
| \$20,000 to \$100,000 | 72, 370 | 718, 746 | 3, 426, 433, 520 | 47, 346 | 4,767 | 9.9 | 209.8 | 36.9 | 8. 2 | 5. 7 |
| \$100,000 to \$500,000.. | 42, 075 | 1, 721, 266 | 9, 496, 592, 898 | 225, 706 | 5,517 | 40.9 | 181.3 | 21.4 | 19.6 | 15.7 |
| \$500,000 to \$1,000,000_ | 9,556 | 1, 134, 897 | 6, 752, 818, 172 | 706,657 | 5,950 | 118.8 | 168.1 | 4. 9 | 12.9 | 11.2 |
| \$1,000,000 and over .- | 10,327 | $5,013,509$ | 40, 182, 156, 874 | 3, 890,981 | 8,015 | 485.5 | 124.8 | 5.3 | 57.1 | 66.4 |
| Total | 196, 309 | 8, 778, 156 | 60, 555, 998, 200 | 308, 473 | 6,898 | 44.7 | 145.0 | 100.0 | 100.0 | 100.0 |

## Accident Rates, by Type of Injury, for Various Industries, 1926

A
N ARTICLE in the November Labor Review (p. 62) gave the accident experience, by industry and State, of a large number of establishments for which the Bureau of Labor Statistics had obtained data for the years 1925 and 1926. The 1926 data there presented are further analyzed in the following tables, which give, by industry, the number of accidents and the frequency and severity rates for each type of injury.

| O1 | Permanent total disability ${ }^{1}$ |  |  |  |  |  |  | Grand total, permanent disability | Temporary disability terminating in- |  |  |  |  |  |  |  | Total, temporary disability |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loss of both arms | $\begin{gathered} \text { Loss } \\ \text { of } \\ \text { both } \\ \text { legs } \end{gathered}$ | $\begin{array}{\|c} \text { Loss } \\ \text { of } \\ \text { both } \\ \text { hands } \end{array}$ | $\begin{aligned} & \text { Loss } \\ & \text { of } \\ & \text { both } \\ & \text { feet } \end{aligned}$ | Loss of both eyes | Other | Total |  | First week ${ }^{2}$ | Second week ${ }^{3}$ | Third week | Fourth week | Fifth week | $\begin{gathered} \text { Sixth } \\ \text { to } \\ \text { thir- } \\ \text { teenth } \\ \text { week } \end{gathered}$ | Fourteenth week or later | Duration of disability not known |  |
| Agricaltural implements |  |  |  |  |  | 2 | 2 | 98 | 229 | 262 | 179 | 107 | 75 | 132 | 34 | 35 |  |
| O Automobiles .-.- |  |  | 2 |  |  |  | 2 | 1,102 | 1,296 | 2, 213 | 1,402 | 812 | 566 | 975 | 254 | 222 | 7,740 |
| Automobile tires. |  |  | 1 |  |  |  | 1 | - 67 | 1,286 | 2, 625 | 1,448 | 332 | 211 | 154 | 45 | 8 | 3, 109 |
| Boots and shoes |  |  |  |  |  |  |  | 68 | 185 | 210 | 120 | 77 | 50 | 60 | 37 | 42 | 781 |
| Brick <br> Carpets |  |  |  |  |  | 2 | 2 | 67 | 423 | 264 | 186 | 88 | 73 | 124 | 42 | 51 | 1,251 |
| Carpets .-.-.-.-.-....- |  |  |  |  |  |  |  | 24 | 7 | 48 | 26 | 16 | 14 | 13 | 6 | 32 | 162 |
| Chemicals .....-.-...- |  | 1 |  |  |  |  | 1 | 17 | 21 39 | $\begin{array}{r}18 \\ 182 \\ \hline\end{array}$ | 11 95 | 12 | 4 | 17 | 1 | 2 | 86 |
| Cotton goods |  | 1 |  |  |  |  | 1 | 58 76 | 39 461 | 182 | $\begin{array}{r}95 \\ 260 \\ \hline\end{array}$ | 82 | 37 99 | $\begin{array}{r}77 \\ 236 \\ \hline\end{array}$ | 25 57 | 47 | 1,684 |
| Electrical machinery |  |  |  |  |  |  |  | 265 | 438 | 455 | 306 | 219 | 135 | 240 | 195 | 104 | 1,660 2,092 |
| Fertilizers |  |  |  |  |  |  |  | - 5 | +36 | 79 | 46 | 219 | 135 17 | 240 32 | 195 | 104 | 2,092 |
| Flour--.-................... |  |  |  |  | 1 |  | 1 | 28 | 116 | 111 | 51 | 28 | 30 | 32 51 | 19 | 15 | 259 427 |
| Foundries and machine shops |  |  |  |  |  | 2 | 2 | 638 | 2, 088 | 1,227 | 803 | 534 | 395 | 597 | 235 | 341 | 6, 220 |
| ©̌T Furniture |  |  |  |  |  |  |  | 200 | 384 | 371 | 220 | 134 | 72 | 140 | 58 | 43 | 1,422 |
| C Glass.....- |  |  |  |  |  |  |  | 31 | 416 | 153 | 79 | 49 | 18 | 56 | 8 | 18 | -797 |
| Leather.. |  |  |  |  |  |  |  | 51 | 11 | 51 | 34 | 16 | 13 | 21 | 6 | 9 | 161 |
| Lumber-Planing mills |  |  |  |  |  | 1 | 1 | 150 | 191 | 201 | $\begin{array}{r}92 \\ 233 \\ \hline\end{array}$ | 71 132 | 50 <br> 81 | 84 | 28 | 22 | 604 +312 |
| Lumber-Sawmills |  |  |  |  |  | 1 | 1 | 208 | 683 | 577 | 396 | 305 | 249 | 463 | 117 | 74 | 1, 312 |
| Machine tools. |  |  |  |  |  |  |  | 64 | 417 | 143 | 100 | 62 | 38 | 73 | 16 | 26 | 2, 864 |
| Paper and pulp .-. |  |  |  |  |  | 2 | 2 | 172 | 747 | 729 | 446 | 245 | 187 | 281 | 139 | 161 | 2,935 |
| Petroleum refining |  |  |  |  |  |  |  | 107 | 45 | 125 | 71 | 31 | 31 | 40 | 26 | 23 | 2,392 |
| Potteries -...-- |  |  |  |  |  |  |  | 10 | 54 | 78 | 39 | 32 | 15 | 44 | 5 | 9 | 276 |
| Shipbuilding, steel ....-....-.-. |  |  |  |  |  |  |  | 77 | 63 | 98 | 68 | 58 | 34 | 50 | 15 | 36 | 422 |
| Slaughtering and meat packing |  |  | 1 |  |  | 1 | 2 | 214 | 1,304 | 1,210 | 669 | 341 | 174 | 364 | 65 | 101 | 4,228 |
| Stamped and enameled ware |  |  |  |  |  |  |  | 79 | 1,99 | 1, 87 | 50 | 34 | 20 | 25 | 14 | 25 | +355 |
| Steam fittings, apparatus, and sup |  |  | 1 |  |  |  | 1 | 57 | 604 | 276 | 148 | 75 | 61 | 107 | 39 | 36 | 1,346 |
| Stoves...--.-.-.-.------ |  |  |  |  |  | 1 | 1 | 34 | 242 | 139 | 112 | 60 | 49 | 66 | 15 | 20 | 1,703 |
| Structural-iron work |  |  |  |  |  |  |  | 62 | 173 | 103 | 74 | 59 | 42 | 76 | 29 | 25 | 581 |
| Woolen goods.. |  |  |  |  |  |  |  | 36 | 154 | 78 | 44 | 32 | 20 | 57 | 25 | 28 | 438 |
| Total |  | 1 | 5 |  | 1 | 12 | 19 | 4,139 | 12, 268 | 10,796 | 6,808 | 4, 223 | 2,860 | 4,838 | 1,628 | 1,714 | 45,135 |

[^13]${ }^{2}$ Not all States report disabilities under one week.
${ }^{3}$ All States except Virginia and Alabama.

| Industry | Permanent total disability ${ }^{1}$ |  |  |  |  |  |  | Grand total, perma- nent disa- bility | Temporary disability terminating in- |  |  |  |  |  |  |  | Total, temporary disability |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agricultural implements |  |  |  |  |  | 0.04 | 0.04 | 2.02 | 4.97 | 5. 69 | 3.89 | 2. 33 | 1. 63 | 2, 87 | 0.74 | 0.76 |  |
| Automobiles - |  |  | (2) |  |  | 0.04 | ${ }^{(2)}$ | 1.46 | 1.78 | 3. 34 | 1. 93 | 2. 12 | 1.63 .78 | 1.34 | 0.74 .35 | 0.76 .31 | 10.65 |
| Automobile tires |  |  | 0.01 |  |  |  | . 01 | . 80 | 18.77 | 9.12 | 6. 54 | 4.85 | 3. 08 | 2. 25 | . 66 | . 12 | 45. 39 |
| Brick.......- |  |  |  |  |  | 04 | . 04 | + 4.18 | 1. 45 | 1. 65 | -94 | . 61 | . 39 | , 47 | . 29 | . 33 | 6. 13 |
| Carpets.............. |  |  |  |  |  |  | , | 1.18 .66 | 10.87 | 6. 79 | 4.78 | 2. 26 | 1.88 | 3.19 | 1.08 | 1.31 | 32. 16 |
| Carriages and wagon |  |  |  |  |  |  |  | 6. 67 | 8.81 | 1.55 7.55 | 4.85 | - 52 | - 46 | . 43 | . 20 | 1. 05 | 5. 31 |
| Cotton goods |  | 0.02 |  |  |  |  | . 02 | 1. 16 | . 78 | 3. 65 | 1. 91 | 1.65 | . 74 | 1. 55 | . 50 | . 84 | 36. 07 |
| Cotton goods Electrical machinery |  |  |  |  |  |  |  | . 30 | 1.91 | 1.34 | 1.08 | . 65 | . 41 | . 98 | . 24 | . 94 | 11.72 6.89 |
| Fertilizers .-..-.-.--- |  |  |  |  |  |  |  | 1. 19 | 2. 69 | 2, 80 | 1.88 | 1.35 | . 83 | 1.48 | 1. 20 | . 64 | 6. 89 |
| Flour |  |  |  |  | 0.05 |  |  | . 55 | 4. 12 | 9. 04 | 5. 26 | 2.63 | 1. 95 | 3. 66 | 1. 26 | 1. 72 | 12.87 29.64 |
| $\checkmark$ Foundries and machine shop |  |  |  |  |  |  | . 05 | 1. 50 | 6. 43 | 6. 16 | 2. 83 | 1. 55 | 1. 66 | 2.83 | 1. 05 | 1.16 | 23. 62 |
| ä Furniture. |  |  |  |  |  | . 01 |  | 1. 1.81 | 9.30 3.87 | 5. 47 <br> 3.74 | 3. 58 | 2.38 | 1. 76 | 2. 66 | 1. 05 | 1. 52 | 27.72 |
| Hass Hare. |  |  |  |  |  |  |  | . 90 | 20.65 | 7. 59 | 3. 92 | 2. 43 | . 89 | 1. 41 | .59 .40 | . 89 | 14.34 |
| Leather... |  |  |  |  |  |  |  | 2.71 | . 94 | 4.36 | 2.91 | 1.37 | 1.11 | 1. 79 | . 51 | . 77 | 13. 76 |
| Lumber-Planing |  |  |  |  |  | . 02 | . 02 | 1. 25 | 1. 21 | 4, 35 | 1.99 | 1.54 | 1. 08 | 1.82 | . 61 | . 48 | 13. 08 |
| Lumber-Sawmills |  |  |  |  |  | . 01 | . 01 | 2.04 | 11.11 | 8.17 9.38 | 5. 29 6.44 | 3.00 4.96 | 1.84 | 4. 16 | 1. 41 | 1. 59 | 29.80 |
| Machine tools.- |  |  |  |  |  |  |  | 1.43 | 9.31 | 3. 19 | 2. 23 | 1.38 | . 85 | 1. 63 | 1.90 .36 | 1. 20 | 46. 57 |
|  |  |  |  |  |  | . 02 | . 02 | 1.61 | 7. 10 | 6. 93 | 4. 24 | 2.33 | 1. 78 | 2. 67 | 1. 32 | 1. 53 | 19. 53 |
| Petroleum refining. |  |  |  |  |  |  |  | 1. 52 | . 70 | 1. 93 | 1. 10 | . 50 | . 50 | . 62 | . 40 | . 36 | 6. 11 |
|  |  |  |  |  |  |  |  | + 40 | 2. 23 | 3. 23 | 1.61 | 1.32 | . 62 | 1.82 | . 21 | . 37 | 11.41 |
| Slaughtering and meat packing |  |  | . 01 |  |  | . 01 | . 02 | 1. 56 | 9.66 | 2. 16 8.96 | 4.96 | 1.28 | -75 | 1. 10 | . 33 | . 79 | 9. 30 |
| Stamped and enameled ware_- |  |  |  |  |  |  |  | 2. 01 | 2. 48 | 2. 18 | 1. 25 | . 88 | - 50 | 2. 63 | . 48 | . 75 | 31.33 |
| Steam fittings, apparatus, and su |  |  | . 02 |  |  |  | . 02 | 1.34 | 17. 19 | 7.86 | 4. 21 | 2.13 | 1. 74 | 3. 05 | 1.11 | 1. 02 | 8. 90 |
| Stoves <br> Structural-iron wor |  |  |  |  |  | . 04 | . 04 | 1. 37 | 10.63 | 6. 10 | 4.92 | 2. 63 | 2.15 | 2. 90 | . 66 | . 88 | 38.31 30.87 |
| Structural-iron wor <br> Woolen goods |  |  |  |  |  |  |  | 2. 63 | 13. 70 | 8.16 | 5.86 | 4.67 | 3.33 | 6. 02 | 2. 30 | 1. 98 | 30. 87 |
| woolen goods... |  |  |  |  |  |  |  | . 66 | 3. 51 | 1. 79 | 1. 00 | . 73 | . 46 | 1.30 | . 57 | . 64 | 10.00 |
| Total. |  | $\left.{ }^{2}\right)$ | $\left.{ }^{2}\right)$ |  | ${ }^{(2)}$ | ${ }^{(2)}$ | ${ }^{(2)}$ | 1.37 | 4.71 | 4.15 | 2. 62 | 1.62 | 1.10 | 1.86 | . 63 | . 66 | 17.35 |

${ }^{1}$ Amputation between knee and ankle or between elbow and wrist is considered as loss of a foot or a hand; at or above knee or elbow as loss of a leg or an arm. Loss of a phalanx, permanent malformation, or permanent stiffness of a joint is regarded as loss of member.
${ }^{2}$ Less than 0.005
4 Ali States do not report disabilities under one week
${ }^{4}$ All States except Virginia and Alabama.

Table 2 records frequency rates based on the figures presented in Table 1. The highest frequency rates for death are found in the following industries: Structural-iron work (1.01), fertilizers (0.65), sawmills ( 0.63 ); for permanent disability the highest frequency rates are for carriages and wagons (6.67), planing mills (2.83), hardware (2.71) ; and for temporary disability the highest frequency rates are for sawmills (46.57), structural-iron work (46.02), automobile tires (45.39).

Table 3 records severity rates based on the figures of Table 1. The highest severity rates for death are found in structural-iron work (6.06), fertilizers (3.93), and sawmills (3.76). The highest severity rates for permanent disability are those for carriages and wagons (6.94), planing mills (2.96), and sawmills (2.27). The following have the greatest severity in temporary disability: Sawmills (1.15), structural-iron work (1.10), and carriages and wagons (0.79).

The indications of the frequency and severity rates are not the same. This is to be expected. It often happens, for example, that an industry will have a large number of minor injuries and comparatively few of a more severe character.

While this compilation has interest and value, it is desirable to call attention to the fact that in some classifications the number of cases is not large enough to warrant any positive conclusions. In the course of time material should accumulate affording a basis for definite statements.

TABLE 3.-SEVERITY RATES (PER 1,000 HOURS' EXPOSURE) FOR ACCIDENTS RESULTING IN DEATH, PERMANENT DISABILITY, OR TEMPORARY DISABILITY BEYOND DAY OF INJURY

| Industry | Death | Permanent partial disability ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Loss } \\ \text { of } 1 \\ \text { arm } \end{gathered}$ | $\begin{gathered} \text { Loss } \\ \text { of 1 } \\ \text { hand } \end{gathered}$ | $\begin{array}{\|c} \text { Loss } \\ \text { of } 1 \\ \text { leg } \end{array}$ | Loss of 1 font <br> foot | $\begin{array}{\|c\|} \text { Loss } \\ \text { of } 1 \\ \text { eye } \end{array}$ | $\begin{gathered} \text { Loss } \\ \text { of 1 } \\ \text { thumb } \end{gathered}$ | Loss of 1 finger | Loss of 2 fin- gers | Loss of 3 fingers | Loss of 4 fin- gers | Loss of thumb and 1 finger | Loss of thumb and 2 fingers | Loss of thumb and 3 fingers | Loss of thumb fingers <br> ningers | $\begin{gathered} \text { Loss } \\ \text { of } \\ \text { great } \\ \text { toe } \end{gathered}$ | Loss of any2 toes | Other | Total |
| Agricultural implements | 0.37 |  | 0.31 | 0.25 |  | 0.34 | 0.20 | 0.27 | 0.14 | 0.07 | 0.04 | 0.10 |  |  |  |  |  | 0.02 | 1.74 |
| Automobiles.-.- | . 52 | 0.06 | . 19 | . 01 | 0.02 | . 25 | . 07 | . 24 | . 11 | . 06 | . 05 | (2) | 0.01 | 0.01 |  |  |  | . 03 | 1.13 |
| Automobile tires. | . 52 | . 05 | . 07 |  |  | . 11 | . 05 | . 11 | . 06 | . 03 | . 02 |  | . 02 |  | . 03 | . 01 | (2) | . 04 | - 60 |
| Brick----------- | . 74 | . 07 | . 26 | . 21 | . 38 | . 09 | . 03 | . 13 | . 02 |  |  | . 01 |  |  | . 04 | . 02 | 0. ${ }^{(2)}$ |  | .37 1.39 |
| Carpets | . 16 | . 0 | . 08 |  | . 06 | . 10 | . 02 | . 10 | . 04 | . 03 | . 05 | . 03 |  |  | . 04 | . 02 | . 01 | . 01 | 1.39 |
| Carriages and wagon Chemicals |  | 1.57 | 1.18 |  |  |  | . 24 | . 71 | 1.47 | . 47 | . 71 |  | . 59 |  |  |  |  |  | 6. 94 |
| Cotton goods. | 1.08 | . 40 | . 24 | . 08 | . 14 | . 25 | . 07 | . 13 | . 06 | . 02 |  |  | . 03 |  |  | . 01 |  | . 02 | 1.45 |
| Electrical machiner | . 02 | . 02 | . 06 | . 02 | . 02 | . 02 | . 01 | . 04 | . 04 | . 02 | . 02 | 03 | 01 |  |  | ${ }^{(2)}$ |  | . 04 | . 29 |
| Fertilizers | 3. 93 | . 87 |  |  |  |  | . 07 | . 03 | . 10 |  |  | . 03 | . 01 |  |  | . 01 | (2) | . 02 | 1.04 1.02 |
| \% Foundries and machine shop | 1.31 |  | . 97 | . 22 |  |  | . 06 | . 24 |  |  | . 10 |  |  |  |  | . 03 |  |  | 1. 62 |
| e Foundries and machine shop | 1. 22 | . 14 | . 33 | . 09 | . 17 | . 30 | . 09 | . 28 | . 11 | . 05 | . 03 | . 02 | . 02 |  | . 01 | . 04 | . 01 | . 07 | 1. 76 |
| Glass...-- | . 16 | .07 .12 | .38 .52 |  | . 02 | . 13 | . 14 | . 28 | . 12 | . 08 | . 10 | .07 .03 | . 05 | . 02 |  | . 01 |  | . 01 | 1. 48 |
| Hardware |  |  | . 16 |  | , 13 | . 10 | . 19 | . 56 | . 20 | . 06 |  |  |  |  |  |  | . 02 | . 01 | 1. 1.42 |
| Leather.- | . 60 | . 20 | . 40 | . 07 | . 04 |  | . 07 | . 19 | . 09 | . 04 |  | . 04 | . 03 | . 03 |  | . 01 |  | . 01 | 1. 22 |
| Lumber-Planing mil | 1. 69 | . 45 | . 62 | . 15 | . 18 | . 17 | . 14 | . 37 | . 21 | . 14 | . 17 | . 05 | . 06 | . 04 |  | . 01 | . 01 | . 08 | 2.85 |
| Lumber-Sawmills | 3.76 | . 27 | . 12 | . 35 | . 24 | . 46 | . 08 | . 22 | . 07 | . 11 | . 05 | . 04 | . 01 |  | . 02 | . 01 |  | . 16 | 2.21 |
| Machine tools.- | . 66 |  | . 20 | . 35 | . 11 | . 16 | . 08 | . 23 | . 02 |  | . 04 |  |  |  |  | . 03 | . 01 | . 03 | 1.26 |
| Paper and pulp... Petroleum | 1. 17 | . 50 | . 29 | . 07 | . 13 | . 11 | . 09 | . 18 | . 07 | . 03 | . 02 |  | . 03 |  |  | . 01 |  | . 11 | 1. 64 |
| Petroleum refining | 1.81 | . 12 | . 86 | . 06 | . 14 | . 18 | . 06 | . 13 | . 05 | . 05 | ----- |  |  |  |  | . 01 | . 01 | . 17 | 1.84 |
| Shipbuilding, steel | . .96 | . 07 | . 16 |  | . 13 | . 23 | . 11 | . 16 | . 03 | . 02 |  |  |  |  |  | . 01 | (2) | . 02 | 1.48 1.06 |
| Slaughtering and meat packing | . 65 | . 26 | . 35 | . 23 | . 10 | . 09 | . 10 | . 27 | . 05 | . 03 |  | ( ${ }^{2}$ |  |  |  | (2) | (2) |  | 1. 50 |
| Stamped and enameled ware- | . 45 | . 10 | . 23 |  |  | . 14 | . 12 | . 31 | . 23 |  | . 09 |  | . 04 |  |  | . 03 |  | . 05 | 1:34 |
| Steam fittings, apparatus, and sup | . 29 | . 10 | . 14 |  | . 17 | . 35 | . 04 | . 17 | . 11 |  |  |  |  | . 09 |  | . 02 | ${ }^{(2)}$ | . 08 | 1. 18 |
| Stoves | . 47 |  | . 24 |  | . 09 | . 35 | . 02 | . 13 | . 09 | . 14 | . 07 |  |  | . 09 |  | . 04 |  | . 04 | 1. 30 |
| Woolen goods....-- | 6.06 .11 | . 35 | . 26 |  | . 42 | . 24 | . 26 | . 38 | . 30 |  |  |  |  |  |  | . 03 |  | . 02 | 2. 26 |
|  |  |  |  | . 15 |  |  | . 02 | . 08 | . 05 |  | . 03 |  |  |  |  | (2) | . 01 | . 04 | . 66 |
| Total | . 76 | . 12 | . 25 | . 07 | . 08 | . 18 | . 07 | . 20 | . 09 | . 04 | . 03 | . 01 | . 01 | ${ }^{(2)}$ | $\left.{ }^{2}\right)$ | . 01 | ${ }^{(2)}$ | . 04 | 1. 20 |

[^14]| Industry | Permanent total disability ${ }^{1}$ |  |  |  |  |  |  | Grandtotal,perma-nentdisa-bility | Temporary disability terminating in- |  |  |  |  |  |  |  | Total, temporary disability |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Loss } \\ & \text { of } \\ & \text { both } \\ & \text { arms } \end{aligned}$ | $\begin{aligned} & \text { Loss } \\ & \text { of } \\ & \text { both } \\ & \text { legs } \end{aligned}$ | Loss of both hands | $\begin{array}{\|c} \text { Loss } \\ \text { of } \\ \text { both } \\ \text { feet } \end{array}$ | Loss of both eyes | Other | Total |  | First week ${ }^{3}$ | Second week ${ }^{4}$ | Third week | Fourth week | Fifth week | Sixth to thirteenth week | Fourteenth week or later | Duration of disability not known |  |
| Agricuitural implements |  |  |  |  |  | 0.25 |  | 1.99 | 0.02 | 0.05 | 0.06 |  |  |  | 0.11 |  | 0.50 |
| Automobiles.......-.... |  |  | 0.02 |  |  | 0.25 | . 02 | 1.15 | . 01 | . 03 | . 03 | .02 .02 | . 02 | .16 .07 | ${ }^{0 .} 05$ | . 01 | 0. . |
| Automobile tires. |  |  | . 07 |  |  |  | . 07 | . 67 | . 07 | . 09 | . 10 | . 10 | . 08 | . 12 | . 09 | ${ }^{(2)}$ | . 65 |
| Boots and shoes.. |  |  |  |  |  |  |  | . 37 | . 01 | . 02 | . 01 | . 01 | . 01 | . 03 | . 04 | . 01 | . 14 |
| Brick <br> Carpets |  |  |  |  |  | . 11 | . 11 | 1. 50 | (2) 04 | . 06 | . 07 | . 05 | . 05 | . 18 | . 16 | . 02 | . 63 |
| Carpets.-.-.-.-.-....- |  |  |  |  |  |  |  | 6. 534 | ${ }^{(2)} 03$ | . 01 | . 01 | . 01 | . 01 | . 02 | . 03 | . 02 | . 11 |
| Chemicals |  | 0.12 |  |  |  |  | . 12 | 6.94 1.57 | ${ }_{(2)}{ }^{03}$ | . 07 | . 07 | . 11 | . 05 | . 39 | . 06 | . 01 | .79 .29 |
| Cotton goods. |  |  |  |  |  |  |  | . 29 | . 01 | . 01 | . 02 | . 01 | . 01 | . 05 | . 03 | (2) | . 29 |
| Electrical machinery |  |  |  |  |  |  |  | 1.04 | . 01 | . 03 | . 03 | . 03 | . 02 | . 08 | . 17 | ${ }^{\text {. }} 01$ | . 38 |
| Fertilizers.-.-.---- |  |  |  |  |  |  |  | 1.02 | 01 | . 09 | . 08 | . 06 | . 05 | . 20 | . 18 | . 03 | . 70 |
| Oo Flour-1........................ |  |  |  | -- | 0.32 |  | . 32 | 1.94 | . 02 | . 06 | . 04 | . 03 | . 05 | . 16 | . 15 | . 02 | . 53 |
| Foundries and machine shops |  |  |  |  |  | . 04 | . 04 | 1.80 | . 02 | . 05 | . 06 | . 05 | . 05 | . 15 | . 15 | . 03 | . 57 |
| Furniture |  |  |  |  |  |  |  | 1.48 | . 01 | . 04 | . 03 | . 03 | . 02 | . 08 | . 08 | . 01 | . 30 |
| Glass...-- |  |  |  |  |  |  |  | 1. 00 | . 07 | . 07 | . 06 | . 05 | . 02 | . 15 | . 06 | . 02 | . 50 |
| Leather.- |  |  |  |  |  |  |  | 1. 1.22 | $(2)$ $(2)$ | . 04 | . 04 | . 03 | . 03 | . 10 | . 07 | . 01 | . 32 |
| Lumber--Planing mills |  |  |  |  |  | . 11 | . 11 | 1. 2.96 | ${ }^{(2)} 02$ | . 04 | . 03 | . 03 | . 03 | . 10 | .09 .20 | . 01 | . 33 |
| Lumber-Sawmills... |  |  |  |  |  | . 06 | . 06 | 2. 27 | . 04 | . 09 | . 10 | . 11 | . 11 | . 41 | . 27 | . 02 | 1. 15 |
| Machine tools. |  |  |  |  |  |  |  | 1. 26 | . 03 | . 03 | . 04 | . 03 | . 02 | . 09 | . 05 | . 01 | . 30 |
| Paper and pulp. |  |  |  |  |  | . 11 | , 11 | 1.75 | . 02 | . 07 | . 07 | . 05 | . 05 | . 15 | . 19 | . 03 | . 63 |
| Petroleum refining |  |  |  |  |  |  |  | 1.84 | $\left({ }^{2}\right)$ | . 02 | . 02 | . 01 | . 01 | . 03 | . 06 | . 01 | . 16 |
| Pottery..... |  |  |  |  |  |  |  | . 48 | . 01 | . 03 | . 03 | . 03 | . 02 | . 10 | . 03 | . 01 | . 26 |
| Shipbuilding, steel |  |  |  |  |  |  |  | 1. 06 | ${ }^{(2)}$ | . 02 | . 02 | . 03 | . 02 | . 06 | . 05 | . 01 | . 21 |
| Slaughtering and meat packing |  |  | . 04 |  |  | . 04 | . 08 | 1. 58 | . 03 | . 09 | . 08 | . 05 | . 04 | . 15 | . 07 | . 01 | . 52 |
| Stamped and enameled ware |  |  |  |  |  |  |  | 1.34 | . 01 | . 02 | . 02 | . 02 | . 01 | . 03 | . 05 | . 01 | . 17 |
| Steam fittings, apparatus, and sup |  |  | . 14 |  |  |  | . 14 | 1. 32 | . 06 | . 07 | . 07 | . 05 | . 05 | . 17 | . 16 | . 02 | . 65 |
| Structural-iron work |  |  |  |  |  | . 24 |  | 2. 26 | . 05 | . 08 | . 09 | . 10 | . 09 | . 33 | . 33 | . 03 | 1. 10 |
| Woolen goods... |  |  |  |  |  |  |  | . 66 | . 01 | . 02 | . 02 | . 02 | . 01 | . 07 | . 08 | . 01 | . 24 |
| Total. |  | ${ }^{(2)}$ | . 01 |  | ${ }^{(2)}$ | . 02 | . 03 | 1. 23 | . 02 | . 04 | . 04 | . 03 | . 03 | . 10 | . 09 | . 01 | . 36 |


${ }_{2}^{2}$ Less than 0.005.
${ }^{4}$ All States except Virginia and Alabama.
tized for FRASER
s://fraser.stlouisfed.org
eral Reserve Bank of St. Louis

## No-Accident Campaign Among Manufacturers of Erie, Pa.

ANO-ACCIDENT campaign conducted during the month of August, 1927, in the city of Erie, Pa., among 26 manufacturing plants, resulted in a reduction of 20 lost-time accidents as compared with August, 1926, which was the peak month for that year. A report submitted to this bureau by the Manufacturers' Association of Erie states that in August, 1926, the average number of employees in the plants keeping records of accidents was 6,135. On this basis the annual accident frequency rate was 10.9 per 100 employees for the 56 accidents recorded during the month. In August, 1927, in 26 plants with an average working force of 7,905 persons, there were 36 accidents, giving an annual frequency rate of 5.5. A chart showing the accident trend from January, 1926, continues the curve to include September, 1927, during which month the frequency rate was even less than in August, being 4.8. In September, 1926 , the rate was 7.

The no-accident campaign was sponsored by the Manufacturers' Association of Erie, which carried on considerable publicity by correspondence and through the press. Among the more than a hundred cooperating plants (all of which, however, did not keep records of accidents) were 14 plants having machine-shop departments, 3 boiler factories, 3 brass goods and brass foundries, 8 iron foundries or plants with iron-foundry departments, 1 electric motor manufacturing plant, 1 mechanical rubber goods plant, 1 roofing paper, packing, and insulating material plant, 2 open-hearth steel foundries, 1 stove plant, 2 metal toy plants, 1 bolt and nut plant, 1 hand tool plant, 1 plumbers' supplies, 1 builders' hardware plant, 1 forging plant, 5 heavy machinery plants, and 4 plants operating punch presses largely.

One outstanding result noted is the case of a plant which had 20 accidents in August, 1926, and only 6 in August, 1927. "This was brought about by education of the workmen through foremen and the holding of the foreman responsible for every accident in his department." Whenever an accident occurred the foreman was called before the superintendent, who emphasized his responsibility for the safety of his men. This particular plant, it is added, has materially reduced its total accidents thus far in 1927 as compared with 1926.

## Industrial Accidents in New York State in 1926-27

THE increasing seriousness of some causes of industrial accidents in New York State is brought out in the recent report of the industrial commissioner for the year ending June 30, 1927, covering 98,984 workers who were awarded compensation amounting to $\$ 28,186,003$, or an average of $\$ 284.75$ per case, and representing a time loss of $2,298,492$ weeks, or an average of 23.2 weeks per case. This report is summarized in the Industrial Bulletin for October, 1927. The following table shows, by percentages, the relative importance of the various causes of accidents during each of the years ending June 30, 1923 to 1927, and by index numbers the increase or decrease from year to year as compared with 1923.

TABLE 1.-RELATIVE IMPORTANCE OF CAUSES, AND INDEX NUMBERS OF ACCIDENTS IN NEW YORK STATE FOR YEARS ENDING JUNE 30, 1923 TO 1927

| Cause | 1923 |  | 1924 |  | 1925 |  | 1926 |  | 1927 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { In- } \\ \text { dex } \\ \text { num- } \\ \text { ber } \end{gathered}$ | Percent of total | $\begin{gathered} \text { In- } \\ \text { dex } \\ \text { num } \\ \text { ber } \end{gathered}$ | Percent of total | $\begin{gathered} \text { In- } \\ \text { dex } \\ \text { num- } \\ \text { ber } \end{gathered}$ | Percent of total | $\begin{gathered} \text { In- } \\ \text { dex } \\ \text { num } \\ \text { ber } \end{gathered}$ | Percent of total | $\begin{gathered} \text { In- } \\ \text { dex } \\ \text { num- } \\ \text { ber } \end{gathered}$ | Percent of total |
| Handling objects | 100 | 25.7 | 130 | 26.6 | 134 | 26.2 | 185 | 27.7 | 186 | 28.0 |
| Falls. | 100 | 15.9 | 127 | 16.0 | 148 | 17.9 | 198 | 18.3 | 196 | 18.3 |
| Machinery | 100 | 15.8 | 118 | 14.8 | 113 | 13.6 | 148 | 13.6 | 142 | 13.2 |
| Vehicles | 100 | 8.0 | 133 | 8.5 | 145 | 8.9 | 192 | 9.0 | 191 | 9.0 |
| Hand tools. | 100 | 6. 6 | 123 | 6.5 | 145 | 7.3 | 196 | 7.6 | 194 | 7.6 |
| Falling objects | 100 | 6.7 | 121 | 6.5 | 139 | 7.1 | 165 | 6. 5 | 160 | 6.3 |
| Stepping on or striking against objects. | 100 | 4.9 | 116 | 4. 5 | 108 | 4.1 | 149 | 4.3 | 172 | 5.0 |
| Explosions, electricity, heat, etc......-- | 100 | 4. 6 | 123 | 4. 5 | 125 | 4.4 | 152 | 4.0 | 143 | 3.8 |
| Hoisting and conveying apparatus | 100 | 3.7 | 129 | 3. 7 | 103 | 2. 9 | 131 | 2.8 | 139 | 3.0 |
| Miscellaneous..---.-............... | 100 | 2.7 | 140 | 3.0 | 150 | 3.1 | 179 | 2.8 | 165 | 2.6 |
| Harmful substances | 100 | 1. 2 | 144 | 1.4 | 160 | 1.5 | 202 | 1.4 | 189 | 1.3 |
| Indefinite history of accident | 100 | 3. 2 | 121 | 3.1 | 87 | 2.1 | 64 | 1.2 | 68 | 1.2 |
| Animals_..---------------- | 100 | 1.0 | 115 | . 9 | 124 | . 9 | 142 | 8 | 119 | . 7 |
| Total, all causes | 100 | 100.0 | 125 | 100.0 | 131 | 100.0 | 172 | 100.0 | 170 | 100.0 |

It will be noted that, taking the number of accidents in 1923 as the base, or 100 , the accidents due to the handling of objects increased steadily each year up to 1927, when they reached a point 86 per cent over the level of 1923 ; accidents due to falls increased 96 per cent in the same time. This is considerably in excess of the increase in accidents from all causes combined, the number of which in 1926 was only 70 per cent above the 1923 level. Accidents due to handling objects have also formed an increasingly large proportion of the total number of accidents each year. The same is true of accidents due to falls.

The seriousness and importance of this latter cause-falls-as a source of accidents is emphasized in the Industrial Bulletin for October, 1927. In this report it is stated that there has been an average annual increase of 2,219 cases. It is also stated that falls from elevations, on a level, into openings, and others not classified, while second in numerical importance ( 18,092 as compared with 27,692 accidents due to handling objects other than hand tools'), resulted in the payment to injured workers of $\$ 6,515,137$, covering 535,411 weeks of disability, which amount is $\$ 1,871,877$, or 40.3 per cent greater than the total paid to those injured in lifting, carrying, and handling objects, the number of weeks of disability for which amounted to 322,648 , or 39.7 per cent less than for falls. From the standpoint of average compensation awarded, however, falls as a cause stands fourth, with an average of $\$ 360.11$ per case, being exceeded by explosions, electricity, and heat with an average of $\$ 380.13$ per case, by vehicles with an average of $\$ 428.20$ per case, and by hoisting and conveying apparatus with an average of $\$ 614.12$ per case.

Two hundred and forty-one workers were killed by falls and 11 were so severely injured as to be totally disabled for life; in handling objects the number killed was 82 , and those totally disabled numbered only 4. About 18 per cent of all accidents were due to falls. Most of the falls were from elevations, involving 8,279 cases with a time loss of 358,111 weeks, or 66.9 per cent of the number charged
to all falls. Of these falls from elevations, 2,203 were due to falls on stairs the causes for which, the report states, might have been eliminated by "a little more care on the part of the employee or better plant housekeeping." Falls from ladders, scaffoldings, and stagings caused injury to 3,266 workers.

The following table shows by cause the number of accidents for which compensation was paid during the year, the amount so paid, and the extent of the time loss covered by these payments. The average amount paid in each case and the average number of weeks of disability are also included.

TABLE 2.-NUMBER OF COMPENSATED ACCIDENTS, COMPENSATION PAID, AND TIME LOST, IN NEW YORK STATE, YEAR ENDING JUNE 30, 1927, BY CAUSE


Of the total number of accidents, 1,042 were death claims, 41 were permanent total disability claims, 18,518 were permanent partial disability claims, and 79,383 were claims because of temporary injuries.

## INDUSTRIAL HYGIENE

## Study of Hazards of Spray Coating ${ }^{1}$

ASTUDY of the health hazard of spray coating was undertaken by a committee appointed by the Chemical Section of the National Safety Council in 1926. The committee which had general direction of the investigation was made up of representatives appointed by interested Federal and State bureaus, universities, insurance bureaus, labor organizations, associations of manufacturers of materials and equipment used in spray coating, and users of the spray-coating process. The actual conduct of the investigation was under the direction of Dr. H. F. Smyth and his associates, who had just completed a similar study in Pennsylvania. The United States Bureau of Mines was, at the same time, requested to make a special study of the efficiency of respirators to be used in the spray-coating process. The final report of the committee was adopted at a meeting of the whole committee in June, 1927, and was approved by the executive committee of the National Safety Council in September. A minority report was filed by two members of the committee who believed that some of the conclusions, particularly those relating to the air velocity required for satisfactory ventilation, were not justified by the data submitted.

As the value and importance of spray coating is generally recognized, the study was made with the hope that, if serious hazards were revealed, methods of eliminating the danger without unnecessary interference with the industry would be developed.

The spraying of paint and lacquer by the use of compressed air was introduced in this country about 1890, but it was not until 1917 that it came into general use, and the recognition of the several hazards of the process dates from about that time. Great improvements in the equipment and materials used have been made and at the present time the method is in general use for finishing and refinishing all kinds of painted surfaces. The process is adapted to the finishing of interiors and exteriors of buildings and other structures and to painting industrial products such as automobile bodies, furniture, leather, and many small articles.
It is pointed out in the report that the introduction of a new process which is widespread in its application is always subject to a period of readjustment during which defects and dangers not recognized at first will become apparent, and that there is a danger in seeking a remedy for the situation that correction will be sought through prohibitive legislation rather than through voluntary efforts to find out and improve conditions. This is particularly true in connection with spray painting, since there was no question from the first that its use involved both accident and health hazards. While these hazards were understood in a measure, there has been a good deal of controversy regarding their extent, especially the danger of

[^15]poisoning from benzol. The report ${ }^{2}$ of the special committee on benzol poisoning appointed by the National Safety Council established the seriousness of this hazard, and as a result of its findings the paint and varnish manufacturers carried on an educational campaign to discourage its use.

Regulations were adopted by the Wisconsin Industrial Commission in 1924 and revised in 1925 to control the hazards of the occupation in that State. The regulations fixed a maximum distance between the spray gun and the object being treated in the painting of buildings, ships, and other structures, and provided that respirators or other devices of an approved design must be worn and a nondrying oil, grease, or cream used on exposed parts of the body. Booths provided with exhaust ventilation are required in the spray coating of other objects, although the exact velocity of the air current is not fixed by the regulations. Another attempt to meet the problem presented by this process was the study made prior to the present one by the Pennsylvania Department of Labor and Industry. ${ }^{3}$

## Scope of the. Investigation

OWING to limitations of time and money, it was felt at the outset of the study that it must be restricted to investigation of the chief hazards-benzol, lead, and silica. Benzol is a constituent of the lacquers used in automobile finishing, while lead is present in the undercoats used on automobile bodies. The enamel used in the manufacture of such products as sanitary ware, refrigerator linings, stove parts, etc., contains both lead and silica. These two industries were studied, therefore, as they presented a maximum degree of exposure to these hazards. Statistical information as to the extent of poisoning from these substances in spray painting was entirely lacking, and it was felt that it was impossible to secure information which would allow any comparison between this and other industries as to the relative severity of these hazards. The study, therefore, was concerned mainly with the examination of exposed workers and study of working conditions, including tests to determine the degree of atmospheric pollution in the air breathed by the operators.

The study was carried out mainly in Detroit and Toledo. In Detroit employees in four automobile-body plants, two automobile factories, and three vitreous-enameling plants were examined and in Toledo employees in a large automobile plant, a vitreous-enamel plant, and a plant making spray-painting equipment. Examinations were also made of employees of a number of contracting painters in the two cities and of workers in enameling plants in Mansfield and Cleveland. In the air tests the findings as to air pollution were correlated, as far as possible, with the condition of the employees as shown by the clinical examination and the blood tests. The study included 354 physical examinations and 349 blood tests of workers in 29 plants, and 86 air tests were made for benzol, 27 for lead, and 33 for silica.

[^16]
## Constituents of Spray Paints

INTHE spray painting of the interior of buildings, lead-free prepared paints are in quite general use. The solid ingredients of these paints are lithopone, zinc oxide, titanium oxide pigments, calcium carbonate, barium sulphate, china clay, and other siliceous earth pigments; the liquid constituents are chiefly vegetable drying oils such as linseed oil and chinawood oils; and the thinners are mineral spirits (a high boiling point distillate from petroleum) and, to a very limited extent, turpentine.

The pigments used for exterior painting where white and light colors are desired include, ordinarily, basic carbonate white lead, basic sulphate white lead, zine oxide, leaded zinc oxide, titanium oxide, lithopone, china clay, and other siliceous earth pigments. Colors used in tinting these white paints include Prussian blue, chrome green, carbon black, chrome yellow, iron oxides, ocher, sienna, etc., but these colors are usually in very minor proportions. These paints are mainly solid pigments and liquid drying oils, and there is usually not over 10 per cent by weight of volatile materials. The thinners are in many cases entirely mineral spirits, although in some cases there may be from 2 to 7 per cent of turpentine. In painting freight cars, coal carriers, structural steel, etc., the paints are usually made with carbon black or mineral earth pigments ground in raw linseed oil or other oils. Lead is also used as a primer on structural steel. The volatile part of these paints, consisting of straight mineral spirits, averages from 10 to 20 per cent. No benzol or other aromatic hydrocarbons are used.

Benzol was formerly in general use in nitrocellulose lacquers, but its use has been given up by practically every manufacturer, and toluol has been substituted for it. The solvents used in these lacquers are amyl acetate, butyl acetate, ethyl acetate, butyl propionate, acetone, and ethyl and butyl alcohol. If ethyl alcohol is used, it is denatured and may contain up to 5 per cent wood aicohol or 0.5 per cent of benzol, although the finished lacquers probably never contain as much as 1 per cent of wood alcohol. The amount of volatile material ranges from 40 to 70 per cent. A great variety of pigments is used in the nitrocellulose lacquers, and for some colors it is necessary to use lead compounds, of which there may be as much as 10 per cent by weight. Materials such as tricresyl phosphate and dibutyl, diamyl, and diethyl phthalate are used as so-called plasticising mediums. These substances have a very high boiling point and therefore do not evaporate readily.

## Benzol Poisoning

ONE hundred and sixty men employed in spraying lacquer in seven different automobile or automobile-body plants were examined for evidences of benzol poisoning. In two of the plants there was little or no benzol in the lacquer, in one the men had been on strike and therefore were not subjected to recent exposure, in another the composition of the lacquer varied, and in the three remaining there was $1.5,5$, and 9 per cent of benzol present, respectively. The booths or tunnels where the spraying was done were fitted with local exhaust systems, but the average air velocities were
low in all but one plant, the average for the six being 45 to 73 linear feet per minute, while in the seventh plant the average was 147 feet per minute. The amount of benzol in the air from tests made in five plants ranged from 375 to 1,880 parts of benzol per million parts of air. In the four high-exposure plants the number of subjective complaints among the men (especially constipation, dizziness, and dyspnea) were more than twice as many as in the plants in which there was slight or no exposure to benzol, and the proportions of these complaints showed a general increase with length of service. A low white blood cell count is the earliest index of chronic benzol poisoning, and 19 of the 91 men examined in the high-exposure plants showed a disturbed blood picture, while only 1 in the low-exposure plants was below the standard. Combining the blood picture with the subjective symptoms of the individual workers, it appears that only 1 of the 69 examined in the low-exposure plants had symptoms suggestive of benzol poisoning, while 7 of the 91 men in the high-exposure plants were affected, indicating, the committee considered, that the spraying of benzol lacquers presents a real health hazard.

## Lead Poisoning

EXAMINATIONS were made of 170 men for evidence of lead poisoning. Those examined included 97 working in six automobile or automobile-body plants spraying paints and undercoats, 38 house painters using the spray gun on inside or outside work, and 35 men spraying vitreous enamel on castings. The amount of lead in paints ranged from 10 to 19 per cent in spraying undercoats, less than 1 per cent on inside work, 19 per cent on outside work, and from 0.4 to 20 per cent in the vitreous enamel plants. With only one or two exceptions the air velocities were low in the booths used for spraying these paints. In several of the plants the amount of lead in the air was high, ranging in these places from 32 to 164 mg . per cubic meter of air. Chemical examination of feces for lead showed that 17 per cent of the group of 65 painters were eliminating more than 0.03 mg . of lead per gram of feces. Medical examination of the 170 workers exposed more or less to the lead hazard showed that there was a large percentage of suggestive symptoms such as digestive disturbances, loss of weight, constipation, loss of appetite, and gastric pain, and 5 per cent showed a lead line on the gums. Of the 170 men examined, 25 , or 14 per cent, showed a much lowered red blood cell count and 5, or 3 per cent, had a total white count below the normal. Analysis of these findings by length of service showed that the percentage of men affected increased with an increase in the period of employment. Examination of the blood of a group of 16 men working with vitreous enamels containing a large amount of lead showed that 7 of the 16 had a count of over 100 stippled cells per 100,000 total cells. As a result of the examinations and tests it was concluded that there was a distinct lead-poisoning hazard in spray coating as at present conducted in the industrial plants studied.

## Silicosis as a Spray-Coating Hazard

THE group studied for this hazard included 35 workers spraying vitreous enamel on castings and 26 workers spraying enamel on sheet metal. There were 2 women in the first group and 19 in the
second. The enamel used on the castings contained from 0.4 to 20 per cent soluble lead and from 21 to 37 per cent silica, while that used on sheet metal contained practically no lead but had from 43 to 47 per cent of silica.

Dust counts at the working face of these spray booths gave average counts ranging from $5,000,000$ to $24,000,000$ particles per cubic foot when exhaust velocity was between 123 and 130 linear feet per minute, while in a plant with an air velocity of 212 linear feet per minute there was an average dust count of only 400,000 particles per cubic foot. The physical complaints were more numerous among both the men and women spraying vitreous enamels than among the other groups, and included dizziness, loss of weight, and difficult breathing. Radiographs were taken of a number of these workers, and of nine who had been employed for more than three years two were diagnosed as cases of silicosis and one as probable silicosis.

## Measures of Protection

THE measures advocated in the report for the protection of workers employed in spray coatinginclude exhaust ventilation of sufficient velocity to remove the dangerous fumes or dust, the use of masks or respirators for indoor spraying without a booth or equivalent ventilation, and systematic medical examination for the detection of early symptoms of poisoning or silicosis.
Although no study was made of fire and possible explosion hazards, it is pointed out that these hazards can be eliminated by proper storage and handling of materials, properly designed and located noncombustible spray booths, safeguarding of electrical hazards and the elimination of open fires, and, most important of all, adequate ventilation and good housekeeping.

The following conclusions were reached as a result of the study:
It is safe in indoor work to spray materials containing appreciable amounts of lead (over 2 per cent), benzol (over 1 per cent), or of free silica when the worker is protected in one of the two following ways:
(a) By local ventilation preducing an exhaust of 200 linear feet per minute in the breathing zone of the worker. This standard is not based on sufficient evidence to warrant its formulation as a legal requirement and subsequent study may show that a lower velocity may suffice with improved operating conditions.
(b) By an efficient mask or respirator of the positive-pressure type.

In the case of all the three hazards considered there may often be a far simpler way out of the difficulty-to eliminate the substances in question from the materials used for spray coating.

Free sitica.-The possibility of controlling the hazard of silicosis in vitreous enameling by the use of a properly balanced and completely fritted mixture free from all soluble lead or free silica in substantial proportion should be given careful study.

Benzol.-In the case of benzol the conclusion seems clear that the presence of this substance in spray paints is entirely unnecessary. We have ourselves noted two plants using lacquer materials containing little or no benzol and entirely avoiding any suspicion of benzol poisoning. That relatively pure materials can be obtained is indicated by the fact that two samples of pure toluol obtained on the open market actually proved to be practically free from benzol. As a matter of fact, we have been informed that many lacquer manufacturers have seen the wisdom of discontinuing the use of benzol and of replacing it with nonpoisonous toluol as the hydrocarbon thinner for nitrocellulose lacquers.

Lead in interior spray paints.-In so far as the spraying of interior surfaces with paints is concerned, it would appear that there is no necessity for using
lead-base spray paints for such purposes, as other materials are available which are entirely satisfactory in white and many light tints. In booth spraying of automobiles and similar fabricated articles, lead-base paints could be eliminated in many instances but not entirely in automobile primers containing a moderate pereentage of lead, or of certain automobile chromate colors for which satisfactory substitutes are not yet available. It is suggested that manufacturers experiment to find suitable colors to replace the lead pigments used in automobile undercoats.

Final conclusion.-We would then urge as our most important and fundamental recommendation that manufacturers of paints, lacquers, shellacs, varnishes, and vitreous enamels to be used in spray coating should so far as possible eliminate benzol, lead, and free silica from their products and where this has been done should clearly label such products as containing less than a certain maximum amount of lead or benzol or free silica as the case may be, and that employers using the spray gun for indoor and booth work should so far as possible insist on obtaining and using only materials so labeled.

## Carbon-Monoxide Hazard in Commercial Garages and Automobile Repair Shops ${ }^{1}$

THE Bureau of Industrial Hygiene of the New York Department of Labor has recently completed tests in 71 commercial garages and repair shops to determine the extent of the carbonmonoxide hazard in these work places. The study was made because of the fact that the danger of carbon-monoxide poisoning in any inclosed, ill-ventilated space into which the exhaust gases from internal-combustion engines are being discharged demands attention both in the designing of new buildings and in the correction of ventilation defects in old buildings.
Although there is fairly general recognition among persons in charge of such shops or workrooms that many deaths occur each year through inhaling high concentrations of carbon monoxide in motor exhaust gases and that lower concentrations of the gas are the cause of much ill health, the extent of the exposure is not so well known.

Experiments on the physiological effects of carbon monoxide have shown the concentrations which can ordinarily be tolerated. For a duration of exposure of one hour or less it is believed that as much as four parts of carbon monoxide per 10,000 parts of air will not have any ill effect, while in case of exposure to the gas during a whole working day it is recommended that the amount of carbon monoxide should not exceed one part per 10,000 parts of air, and if there is any special susceptibility to the gas on the part of the persons exposed it should be limited to one-half part per 10,000 .

The Sayers-Yant method of determining the degrees of concentration of carbon monoxide was selected for the tests, as it was considered to offer the best combination of sensitivity, portability, and time economy. The test depends upon the persistence of the red color of carbon-monoxide hemoglobin in the presence of a bleaching reagent which destroys the normal color of blood. In making the test the carbon monoxide in a known quantity of air is absorbed in a measured amount of blood. The excess hemoglobin is bleached by a mixture of tannic acid and pyrogallic acid, the bright red color of the carbon-monoxide hemoglobin remaining unchanged by the acid.

[^17][89]

The percentage saturation of the blood can then be determined by comparison with a set of standard blood colors and from that the concentration of carbon monoxide in the original air sample is calculated. The samples of air were obtained in bottles which were first completely filled with water and then emptied at the point where the air sample was wanted, the bottle filling with air as the water flowed out.

In the study 121 carbon-monoxide tests were made in 71 storage rooms and workrooms in which there was thought to be more or less carbon-monoxide contamination. An average of 0.9 parts per 10,000 , or less than 1 part per 10,000 , was shown for all the tests combined, while the average for repair shops was 1.1 parts per 10,000 ; for rooms in which small repairs were made incidental to the storage of automobiles, 0.6 part; and in commercial garages storing five or more cars the average was 0.9 part per 10,000 .

In spite of the fact that the average for all the tests was about the maximum that should be tolerated in a room in which there is an 8 -hour exposure to the gas, the amounts in several places were considerably in excess of the maximum, being as high in some cases as 3 or 4 parts of carbon monoxide per 10,000 parts of air. Twentyseven, or 38 per cent, of the 71 workrooms had an average concentration of the gas of 1.5 parts per 10,000 . The amount of exhaust smoke visible and the odor on entering the room gave a rough idea of the presence of the gas, as in nearly every case where there was an excess of the carbon monoxide the smoke and a strong odor were distinctly noticeable.
Sixty-five of the shops had no mechanical ventilation, 5 had small propeller fans installed in windows, and only 1 had an exhaust system. A few shops were equipped with flexible pipes which were slipped over the end of the exhaust pipe when a motor was running to carry the noxious gases outside the building. This system is effective in repair shops, but would not be effective in commercial garages where most of the gas comes from cars in motion.

In the 24 automobile repair shops all but 7 reported that the men suffered from gas headaches; 4 reported that much time was lost by the men owing to the effect of the gas, while the same number stated that some time was lost from this cause.

## Hygienic Conditions in Peruvian Mines ${ }^{1}$

THE Peruvian Director of Public Health received a report relative to the working conditions in the Cerro de Pasco Mines in Peru from its medical officer, Dr. E. Portal.
The report states that due to the underground work in mines the workers' health suffers to such an extent that after a certain time death frequently results. The workers who are most affected are those using boring apparatus for eight hours a day, because they absorb dust impregnated with mineral substances and particles of machine oil. Poisonous gases emitted from dynamite blastings also cause chronic poisoning. Pneumonoconiosis affects the respiratory organs, the kidneys, the liver, causing it to become seriously

[^18]congested, and the arterial system, causing cardiac, valvular, and myocardiac disorders. In addition, symptoms of general infection and chronic poisoning have also been observed.

These conditions persist in spite of the efforts of the mining authorities to combat the harmful effects of the work by installing modern ventilating machinery in the shafts and providing the miners with masks against poisonous gases.

The medical officer in his report suggests the following measures to be adopted by the mining authorities in their fight against this health hazard: The selection of only those in perfect health and possessing the necessary physical fitness for mining work; the introduction of a system of alternation of surface and underground work; the adoption of strict measures to isolate sick workers; the renewal of employment contracts for not over eight years; and the renewal of employment contracts for workers using boring apparatus only after an official medical examination.

# WORKMEN'S COMPENSATION AND SOCIAL INSURANCE 

Recent Workmen's Compensation Reports

## Hawaii

THE Industrial Accident Board of the City and County of Honolulu in its twelfth annual report, for the year ending June 30, 1927, reports 5,348 accidents for the calendar year 1926. This is an increase of 837 over the preceding year. Twenty-nine nationalities were represented, 1,590 of the injured being Japanese, 1,094 Filipinos, 862 Portuguese, 446 Hawaiians, and 407 Americans, the others following in smaller groups. Of the persons involved, 5,279 were males and 69 females; 2,871 were married and 2,477 were single.

Accidents causing total disability for work (not succeeded by a permanent partial disability) of less than one day numbered 3,381 , those lasting from one day to one week 768, and those for more than one week 1,074 . Total disability was succeeded by permanent partial disability in 103 cases, and 22 cases were fatal. Payments for total disability in the 103 cases that were succeeded by permanent partial disability aggregated $\$ 64,951$, while the medical and hospital expense of $\$ 15,641$ brought the total benefits for these cases up to $\$ 80,592$. The 22 fatal cases called for $\$ 36,265$ in compensation, $\$ 1,480$ funeral expenses, and $\$ 366$ medical and hospital expense, a total of $\$ 38,111$. Compensation in the sum of $\$ 38,655$ was paid on account of the 5,223 other cases, and medical and hospital expenses for this group amounted to $\$ 71,558$, making the total benefits paid for this class $\$ 110,213$. The total benefits under the law for the year were $\$ 228,916$.

The figures here given showing the cost of medical, surgical, and hospital aid do not include the amounts expended for these items by a majority of the sugar and pineapple plantations, and canneries, for the reason that they maintain their own medical staff and hospitals for the care of their employees and do not report to the board the cost of such service.

## Nevada

THE Industrial Commission of Nevada presents in its biennial report for the period July 1, 1924, to June 30, 1926, current data as well as a summary of the experience for the 13 years covered by the compensation act.

The number of contributors to the State fund for the fiscal year ending June 30, 1926, was 1,233 , as against 1,027 for the preceding fiscal year. The number of full-time workers in the later period was 12,431 , and in the earlier period 12,852. In 1924-25 the pay-roll exposure was $\$ 22,351,451$, as against $\$ 21,810,967$ in $1925-26$. Premium payments totaled $\$ 354,368$ in 1924-25 and $\$ 335,832$ in 1925-26. The total amount of compensation cost in 1924-25 was $\$ 317,475$, as against $\$ 312,999$ in 1925-26. The average cost of compensated
cases was $\$ 265.45$ for 1,196 cases in $1924-25$, amounting to $\$ 1.42$ per $\$ 100$ of pay roll; in $1925-26,2,523$ cases cost an average of $\$ 124.05$ per case, or $\$ 1.43$ per $\$ 100$ of pay roll.

Contributors are grouped into seven classes, one being made up of a single corporation. The data for 1925-26 show mining, with 338 contributors and 3,123 full-time workers; ore reduction, with 67 contributors and 493 full-time workers; Nevada Consolidated Copper Co., with two branches, copper mining and milling and smelting, and 2,534 employees; railroads, eight in number, with 328 employees; utilities numbering 24, with 360 employees; State and municipal undertakings, as to which the law is compulsory, 95 in number, with 2,580 employees; and a miscellaneous class with 699 contributors and 3,013 employees. The largest number of compensated cases $(1,186)$ was in class 1 (mining), the miscellaneous group coming next with 604 compensated cases, and the Nevada Consolidated Copper Co. following with 442 . The highest average cost per case was in railroad operation, $\$ 209.95$ in 17 cases, ore reduction following with an average of $\$ 201.84$ in 34 cases.

A table showing the frequency of accidents by classes and extent of disability discloses the fact that mining had the greatest number of accidents in 1925-26, 373 per 1,000 full-time workers, or 19.47 accidents per $\$ 100,000$ of pay roll. Of the 1,166 accidents in this class during the year, 16 were fatal or resulted in permanent total disability, 51 caused permanent partial disability, and 634 caused temporary total disability in excess of 7 days; 465 were reported showing disability of less than 7 days. The Nevada Consolidated Copper Co. reported 170 accidents per 1,000 full-time workers, or 9.90 per $\$ 100,000$ of pay roll, while ore reduction had 98 accidents per 1,000 full-time workers, or 5.32 per $\$ 100,000$ of pay roll. The other classes had from 37 to 94 accidents per 1,000 full-time workers in 1925-26.

Of the 34 persons killed in industrial accidents in 1924-25, 29 left dependents, the compensation cost being $\$ 138,557$; and of the 27 killed in 1925-26, 22 left dependents, the cost in these cases being $\$ 118,178$.

## Tennessee

T'HE Tennessee workmen's compensation law, being administered through the courts of the State, limits the authority of the State division of workmen's compensation to an advisory capacity to interested parties. The division is authorized to receive reports of all accidents and copies of all final settlements. These accident reports, when received, are studied, and injured employees are advised in a form letter of their compensation rate and other essential features of the law in order to aid them in making an adjustment of their claim. Settlements made with injured employees must be approved by the courts before being legal, but it is said that a check of the records of the division will show that less than 5 per cent of them are so approved, thus indicating that over 95 per cent of the settlements are made directly by the insurance adjuster.

The current report of the division of workmen's compensation, included in the fourth annual report of the Tennessee Department of Labor, covers the calendar year 1926, during which 31 different claims in which final settlements had been made were reopened and additional payment secured ranging from $\$ 27$ to $\$ 1,231$, or $\$ 8,146$ in
all. This compares with 51 cases reopened and the payment of $\$ 10,224$ additional compensation in 1925.

During the calendar year certificates were issued to 5,542 employers showing compliance with the law as to taking out insurance. Of this number, 180 , employing approximately 50,000 persons, were operating as self-insurers, as against 132 self-insurers in 1925.

A total of 23,812 original accident reports were received during the year; 7,874 called for compensation, 169 of which were fatal cases. Of this last class, settlements and memoranda of agreements were received in 113 cases, with total awards amounting to $\$ 385,009$, or an average of $\$ 3,407$ per case. In the 113 cases there were 325 dependents, or an average of 2.9 per case. An explosion in the coal mines of the Roane Iron Co., at Rockwood, Tenn., resulted in 27 of the fatal cases, leaving 21 widows and 67 actual dependents.

Tables showing the number of cases and the amount of compensation paid therefor during the calendar year, and others giving the number of accidents classed by industry and cause, and by industry and nature of injury, conclude the very interesting tabular presentation.

## Texas

THE biennial report of the Industrial Accident Board of Texas for the period September 1, 1924, to August 31, 1926, has one table giving total figures for the period. The number of subscribers to the act for the first of the two fiscal years was 14,785, and for the second, 16,141 . The number of employees under the act the first year was 548,130 , and for the second, 639,999 . Accidents reported for the first year numbered 91,422 , and for the second year, 98,321 . There was a decrease in the number of fatal accidents shown from 357 the first year to 343 the second, while compensation claims increased from 24,261 to 26,732 . The total sum paid for all purposes the first year was $\$ 3,444,757$ and the second year, $\$ 5,215,469$.

Some comparative data for 1917 are shown to illustrate the growth of the work of this department. During that year there were 6,481 reported subscribers to the act; the claims filed totaled 10,863 and the total expenditures were $\$ 606,848$.
The board stated that its experience with the subject matter of the law and the knowledge gained in "actually handling the multitudinous claims coming before it which involve seemingly every angle of construction that could be placed upon the act" has convinced it that some changes could be made in the law that would operate to the best interests of the general public. It did not, however, go into a general discussion of such changes, because it was deemed "inappropriate at this time," but pointed out that in the 13 years during which the law has actually been in operation there have been so many changes in the degree of hazards that "the law should be so amended as to keep abreast with the march of our present-day civilization."

## Vermont

THE Commissioner of Industries of the State of Vermont has charge of the administration of a number of the labor laws of the State, among them that relating to workmen's compensation. His biennial report covers the two years ending June 30, 1926.

Injuries for the year ending June 30, 1925, numbered 9,414 nonfatal and 30 fatal, of which 3,017 were lost-time accidents with a total of 60,204 days lost. For the year ending June 30, 1926, there were 9,581 nonfatal and 37 fatal accidents, an increase over the preceding year. Of these, 3,939 were lost-time accidents with a total of 331,984 days lost.

The amount expended for medical aid during the biennium was $\$ 222,205$, and compensation payments amounted to $\$ 633,936$.

Settlements approved by the commission disposed of the great majority of cases. In only 78 cases was a formal hearing necessary, while approval of agreements was given in 4,646 cases; settlements were approved or passed and filed in 4,684 , and 19,145 cases, including those which were noncompensable and involved only the payment of medical fees, were closed. Appeals were taken to the county courts in 12 cases and to the supreme court of the State in 4. Several of the county court cases and at least one of the supreme court cases were not tried but were settled after appeal was perfected on the basis of the decision rendered.
The commissioner points out that the number of accidents, both fatal and nonfatal, increased during the past year over that of the preceding year, and states that in his opinion the State could make no better investment than a separate appropriation of from $\$ 5,000$ to $\$ 10,000$ for the promotion of industrial safety under the direction of a trained safety engineer.

## Pension Fund for Port Workers in Brazil ${ }^{1}$

THE July 3, 1927, issue of the Diario Oficial of Brazil contains the text of a decree (No. 5109) which became effective October 1, 1927, requiring companies operating ports, whether privately or for the Federal, State, or city governments, to establish pension funds for all their workers who have served continuously for more than 150 days and who are considered as permanent employees.
The fund is to be formed by contributions from workers and employers, amounting in the former case to 3 per cent of their wages and in the latter case to $11 / 2$ per cent of the gross receipts. The following members of an employee's family may be beneficiaries under the law: Invalid husband, wife, legitimate, legally recognized, or adopted children under 16 years of age, unmarried daughters, invalid parents, unmarried and minor sisters, and brothers under 16 years of age.

## Position of Social Insurance in Germany ${ }^{2}$

$R$ECENT reports of the German Central Insurance Office ${ }^{3}$ give information as to the general situation of German social insurance.

[^19]
## Sickness Insurance

Insured Persons
THE total number of persons insured under the Social Insurance Code was about $20,000,000$ in 1925, composed exclusively of economically dependent persons. Since 1914 the number insured had increased by more than $3,000,000$, in consequence of the growth of the working population and the reduction in the number of economically independent persons.

The proportion of the population insured rose from 25 per cent in 1914 to 32 per cent in 1925. As the great majority of the funds grant medical aid not only to the insured but also to members of their families, sickness insurance at present provides medical care for about half the whole population.

Sickness Funds

In addition to the local funds and rural funds working on a territorial basis, there are also trade funds, establishment funds, and guild funds. There were more than 5,000 trade funds, while there were only 2,600 territorial funds; the latter, however, had the largest number of members. The membership of the local funds increased from $9,700,000$ in 1914 to $12,300,000$ in 1925, the increase being partly due to the rule that unemployed wage earners must become members of their local fund. The mutual funds, which act as substitute funds, were 40 in number, as against 67 in 1914, but their membership, which is mainly drawn from commercial and industrial employees, had risen from 400,000 in 1914 to a million in 1925

## Morbidity

The morbidity, as recorded by the sickness funds, showed a tendency to increase. The average number of days' sickness per insured person was 10.8 in 1924 and 12.5 in 1925, as against 8.7 in 1913 and 6.8 in 1900. The morbidity figures are obviously influenced by economic conditions. There was a slight reduction in the average length of each case of sickness, from 25.1 days in 1924 to 24.3 days in 1925.

On an average, in industry, one worker in two becomes ill and incapable of earning once a year and for 24 days, while in agriculture only one worker in three becomes incapable of earning once a year and for 23 days.

In 1925 the funds paid maternity benefit in 825,000 cases, or twothirds of the total number of births during the year.

## Recipts

The net receipts of the sickness funds amounted to $1,260,000,000$ marks, ${ }^{4}$ or 30 per cent more than in 1924 and more than double the amount in 1914. Ninety-eight per cent of this sum consisted of contributions of insured persons and employers.

Adding to the net receipts the subsidy of the Reich to maternity insurance, amounting to $20,000,000$ marks, and taking account of the net receipts of $93,000,000$ marks of the miners' sickness funds and of $75,000,000$ of the mutual funds, we reach a grand total of $1,450,000,000$ marks for the receipts of sickness insurance in 1925.

[^20]
## Expenditure

In 1925 the total expenditure of the sickness funds showed an increase of 37 per cent on the preceding year. Benefits in kind were of increasing importance. In 1885, cash benefits were 116 per cent of benefits in kind; in 1914 the proportion was only 76 per cent and in 1924 it was 66 per cent. In 1925, however, there was a perceptible increase in cash benefits, which amounted to 77 per cent of benefits in kind.

Complete reconstitution of the contingencies funds of the sickness funds had not yet been possible. These amounted to $105,000,000$ marks at the end of 1925, as against $63,600,000$ at the end of 1924 and $306,000,000$ at the end of 1914 .
In 1925, administrative expenses were 6.8 per cent of the total expenditure, as against 9.4 per cent in 1914.

## Accident Insurance

THE system of cost-of-living bonuses was dropped in 1925, and pensions are again determined by the wage at the date of the accident.

## Insured Persons

The number of wage earners in industry and commerce insured against industrial accidents was $10,800,000$, distributed over 840,000 undertakings, or an increase of about 2 per cent since 1913, in spite of the reduction of German territory. The number of insured workers in the $4,600,000$ agricultural undertakings was $14,200,000$. If account is taken of persons employed by the State and the communes, who are also compulsorily insured, the total number of insured persons amounts to $26,000,000$; about $3,000,000$ of these, however, are counted twice over, as they are employed part of the time in industry and part of the time in agriculture.

The sum total of wages covered by insurance amounted to $11,500,000,000$ marks in 1913 and $16,700,000,000$ in 1925 , or an increase of 45 per cent. The average wage per insured person working 300 days a year was 1,719 marks, as against 1,215 marks in 1913 .

## Insurance Institutions

Accident insurance was undertaken by 66 industrial and 45 agricultural associations; State and communal undertakings which act as their own insurer were 500 in number.

## Accidents

The number of accidents for which compensation was paid for the first time was 107,000 in 1925, or 27 per cent more than in 1924.

The total number of accidents compensated in 1925 was about 800,000 , including 420,000 in industrial and 329,000 in agricultural insurance. Compared with 1913, there was a reduction of about one-fifth, which was largely due to the reduction of German territory.

## Resources

The resources of accident insurance are almost solely composed of employers' contributions. The premiums fixed for 1925 amounted to $260,000,000$ marks, including $205,000,000$ for the industrial asso-
ciations. The contributions are used solely for covering benefits and administrative expenses.

In 1925 the contingencies funds amounted to $24,000,000$ marks, $22,600,000$ of which belonged to the trade associations. The increase in the reserves as compared with the preceding year was only $8,000,000$.

## Expenditure

The expenditure on pensions to victims of accidents and their surviving relatives was $179,000,000$ in 1925, or almost the same as in 1913. It should, however, be pointed out that while pensions were increased during 1925, the full effect of the increase was not felt during that year.

According to a provisional estimate, the total expendifure on benefits in cash and in kind amounted to $260,000,000$ marks in 1926. To this must be added the expenditure on the prevention of accidents, which brings the total expenditure up to $306,000,000$ marks.

Workers' Insurance Against Invalidity, Old Age, and Death

> Insured Persons

THE number of persons insured during 1925 and 1926 was $17,500,000 ; 16,500,000$ of these were compulsorily insured; This is merely an estimate based on the weekly contributions paidreckoned at 40 weekly contributions per head per year-and does not allow sufficiently for the changing situation of the labor market.

## Insurance Institutions

Invalidity insurance for workers is undertaken by 29 territorial institutions. There are also 6 insurance institutions for special occupations-namely, 4 funds for railway staff, 1 for miners, and 1 for seamen.

## Current Pensions

The number of persons in receipt of a pension has tripled since 1913. During the war there was a great increase in the number of widows' and orphans' pensions, and after the war a not less marked increase in the number of invalidity pensions. The following figures show the number of disabled workers in receipt of pensions: $1913,1,100,000 ; 1918,1,234,000 ; 1923,1,409,000 ; 1926,1,762,000$.
The increase in the last few years in the number of persons in receipt of a pension seems to be primarily due to the increase in the real value of the pensions.

The period of stability is still far from being reached. In 1925 the excess of new pensions was 190,000 , including 142,000 invalidity pensions.

## Receipts

Contributions amounted to $550,000,000$ marks in 1925, as against $363,000,000$ in 1924 and $290,000,000$ in 1913. The average weekly contribution was 35.6 pfennigs in 1913, 57.9 in 1924, and 65.7 in 1925. Allowing for the increase in contributions since 1925, it may be estimated that the average weekly contribution is now about 90 pfennigs.

The other receipts of the insurance institutions, apart from the subsidies of the Reich, are insignificant. The inflation all but wiped out their actuarial reserves, especially what was invested in securities and loans. At the end of 1913 the accumulated funds of the insurance institutions amounted to about $2,000,000,000$ marks. According to the valuation made at the beginning of 1924, which took account of the various laws on revalorization, the accumulated funds were then estimated at $125,000,000$ marks, or 6.3 per cent of the prewar figure. In 1913 the insurance institutions had at their disposal interest on capital amounting to $65,000,000$ marks; now, on the contrary, they are obliged to cover all their expenditure by current receipts.

At the end of 1925 there was an effective surplus of $101,000,000$ marks. The liquid assets of the funds amounted to $130,000,000$ marks in 1925 (as against $31,000,000$ in 1913), investments in securities and loans to $222,000,000(1,970,000,000$ in 1913), value of premises to $111,000,000(97,000,000$ in 1913), and furniture and equipment to $12,000,000(8,000,000$ in 1913).

## Pensions

Since the period of stability was not yet reached, and since, further, pensions had been considerably improved in the last few years, the total expenditure on pensions increased from $188,000,000$ marks in 1913 to $348,000,000$ in 1924 and to $711,000,000$ in 1926.

The basic invalidity pension was 168 marks; to this was added the Reich subsidy of 73 marks, a supplement of 90 marks for each child under 18, and an increase of 20 per cent for contributions paid later than January 1, 1924.

The widow's pension was six-tenths and the orphan's five-tenths of the basic pension plus the 20 per cent increase; the Reich subsidy was 72 marks for a widow's and 36 marks for an orphan's pension.

If the pension for a disabled worker who has paid 1,500 weekly contributions is calculated it is found that for 1925 the maximum pension was 390 and the minimum 240 marks, as against 330 and 155 marks in 1913; the reduction of purchasing power in 1925, as compared with the pre-war period, must, however, be taken into account.

The cost of pensions, apart from the Reich subsidy, has to be distributed over all the insurance institutions in proportion to the contributions received by them during the year; it follows that the cost to any particular institution is independent of the value of the pensions granted by it during the year.

## Benefits in Kind

In their early days the insurance institutions stopped short at the granting of pensions, but even before the war they had begun to organize preventive measures so as to reduce the burden of pensions. At the end of 1925 they had 98 hospitals, convalescent homes, etc., with 13,000 beds, including 51 sanatoriums for the tuberculous. Over 81,000 insured persons were treated in these institutions during 1925. The total expenditure on medical treatment was $39,000,000$ marks.

On general preventive measures and the campaign for the improvement of the general health, the insurance institutions spent 7,000,000 marks, or twice as much as in 1924.

## Salaried Employees' Insurance

## Insured Persons

THIS branch of insurance covered $2,800,000$ persons in 1926, as against $1,500,000$ in 1913. The increase was apparently due to the removal of the minimum age limit and the extension of compulsory insurance to commercial apprentices and to clerks, and also to the fact that the total number of employed persons had increased by $3,500,000$ as compared with the pre-war period.

Insurance Institutions
Employees' insurance is undertaken by a central institution. The employees in mining undertakings are the only group which has a special trade fund.

## Pensions

The number of disabled employees in receipt of a pension rose from 1,400 in 1920 to about 50,000 at the end of 1926 ; the corresponding figures for survivors' pensions were 11,500 and 36,000 .

## Receipts

The total receipts of employees' insurance in 1926 were 287,000,000 marks, including $246,000,000$ from contributions and $37,000,000$ from interest on capital. Since September 1, 1925, the average contribution to employees' insurance has been 5.3 per cent of earnings. The Reich does not contribute to the cost of employees' insurance.

The assets at December 31, 1925, included investments amounting to $247,000,000$ marks $(137,000,000$ in mortgages, $80,000,000$ in loans, and $30,000,000$ in securities). The liabilities included the actuarial reserve of $255,000,000$ marks, a contingencies fund of $39,000,000$, and a special reserve of $29,000,000$.

## Pensions

In 1926 the expenditure on current pensions amounted to $4,700,000$ marks a month ( $3,000,000$ for invalidity pensions and $1,700,000$ for survivors' pensions). The average monthly invalidity pension was 60 marks, the survivors' pension 30 marks.

## Benefits in Kind

In 1926 the Central Employees' Insurance Institution dealt with 87,000 requests for medical treatment, about two-thirds of which were declared admissible. The expenditure in 1926 on medical treatment amounted to about $16,000,000$ marks, or nearly a third of the expenditure on pensions.

## Unemployment Insurance in Queensland

THE Queensland Government has recently issued a report made by the Unemployment Council, ${ }^{1}$ dealing with its operations under the unemployed workers' insurance act of 1922, covering the year ending June 30,1927 . The act established a fund to

[^21]which a payment of $9 \mathrm{~d} .{ }^{2}$ a week must be made for each employed worker, with the Government, the employer, and the worker each contributing 3d. A worker who has contributed to the fund for six months or more has a right, if unemployed, to a weekly payment known as a sustenance allowance, varying in amount according to locality, and as between married and unmarried workers. This allowance may not be drawn for more than 15 weeks in one year and is payable only after a waiting period of 14 days, except in the case of casual or intermittent work, in respect to which special arrangements are made.

From early in 1926 drought conditions prevailed throughout a large part of the State, leading, as its industries are largely agricultural and pastoral, to severe and widespread unemployment, and consequently to unusually heavy demands upon the unemployment fund. In December the sustenance payments reached $£ 29,790,{ }^{2}$ and in succeeding months the claims increased until the peak was reached in March, 1927, for which month the payments totaled $£ 45,714$.

These payments made it evident that the then rate of contributions to the fund-viz, 3d. per week each by workers, employers, and the State-would be insufficient to insure the stability of the fund. The council therefore recommended to the Government that the rate of contribution be increased to 4 d . per week, and effect was given to this recommendation as from July 1, 1927.

During the year the receipts and expenditures of the fund were as follows:

| Receipts |  |  |  |
| :---: | :---: | :---: | :---: |
|  | £ | $s$. | d. |
| Contributions from workers | 87, 474 | 7 | 7. 5 |
| Contributions from employers | 87, 474 | 7 | 7.5 |
| Contributions from the State | 88, 270 | 9 | 1. 0 |
| Sundry receipts... | 304 | 13 | 3. 0 |
| Total | 263, 523 | 17 | 7. 0 |
| Expenditures |  |  |  |
| Sustenance payments | 340,933 | 1 | 8. 0 |
| Administrative and general expenses_ | 20, 025 | 9 | 0.0 |
| Total | 360, 958 | 10 | 8. 0 |
| Deficit for year | 97, 434 | 13 | 1. 0 |

As compared with this deficit, the preceding year had shown a credit balance of $£ 8,676$. A reserve had been built up from the accumulated credit balances of former years, so that in spite of the bad showing of 1926-27, the fund ended the year with a balance on hand of $£ 80,204$, which it was hoped would soon be increased.

It is anticipated that the ensuing financial year will witness a less heavy call on the fund, and that the increase in the rate of contribution to 4 d . per week each for worker, employer, and the State will allow of at least a small credit balance on the year's operations.

The act provides that if a worker becomes unemployed solely through his own fault, he shall not be entitled to the sustenance allowance for such a period, not exceeding two months, as the council may decide. Under this provision the council has ruled that if a worker leaves his employment voluntarily, payment of the sustenance allowance shall be deferred for a period varying according

[^22]to the circumstances. In accordance with this decision, payments were deferred during the year in the cases of 561 males and 217 females, a total of 778 . The act also provides that if an unemployed worker refuses work which he might reasonably be expected to accept, payment of sustenance may be deferred for 30 days, and under this provision payments were deferred in the cases of 31 males and 6 females.

During the year, 45,594 males and 3,386 females, a total of 48,980 , applied for sustenance payments. Of these applicants, 10,040 did not draw any allowances, owing to the fact that their unemployment did not last for more than 14 days at any one time. Laborers and unskilled workers generally predominated among the applicants. It is explained that owing to the adverse weather conditions many small farmers, usually occupied with their own operations, were driven to seek employment in the railways, in seasonal industries, and with the local authorities, thus diminishing the amount of employment normally available to the unskilled worker.

Classification of the applicants by the industries followed shows that a limited number of industries is responsible for the greater part of the unemployment throughout the State.

Examination of the statement shows that there are 45 groups, and that 73.8 per cent of the total sustenance paid was drawn by 9 of these groups. Particulars of these and the average amount drawn per worker in each group are here quoted for easy reference:

|  | Percentage of total sustenance | Average amount drawn per worker |
| :---: | :---: | :---: |
| Sugar- | 23. 3 | £6. 9 |
| Railways: Construction and mainte- |  |  |
| nance | 9. 1 | 6. 4 |
| Waterside workers | 8. 7 | 7. 5 |
| Pastoral | 7. 7 | 5. 5 |
|  | 7. 6 | 9. 7 |
| Local authorities and main roads commission | 5. 7 | 6. 6 |
| Building | 4. 8 | 5. 7 |
| Shearing | 3. 8 | 6. 8 |
| Metaliferous mining | 3. 1 | 7. 2 |

It will be noted that workers in the sugar industry drew almost one-fourth of the total sustenance, while 56 per cent of the total was distributed in the first five groups. Nevertheless, the average amount drawn per worker in each groupis low, and shows conclusively that the average worker does not remain unemployed any longer than he can help.

## WORKERS' EDUCATION AND TRAINING

## Progress in Industrial Education, 1924-1926 ${ }^{1}$

FROM 1924 to 1926 greater activity was evidenced in the study of problems involved in manual-arts work and industrial forms of education than in any previous biennium. The conclusion is based upon a survey made by the United States Bureau of Education of various sources of information, including educational literature, study courses, both in public schools and teacher-training institutions, educational convention programs, conference reports, and special reports from numerous school systems.

The record of progress made along the lines of industrial education for the period 1924 to 1926 is given in brief below:

1. The number of shop courses in elementary and high schools increased.
2. There was a notable tendency to offer compulsory industrialarts courses in the seventh and eighth grades.
3. The tendency to discriminate more definitely between courses in manual arts and vocational courses increased and also the recognition of the former as a part of the program of general education and of the latter as a special form of education.
4. The number of schools offering some form of part-time and apprenticeship work showed a marked advance and also the number of such courses and the number of enrolled students.
5. The number of schools offering an occupational information course and establishing some sort of guidance machinery greatly increased.
6. The time of the school program devoted to manual-arts work was extended.
7. The enrollment in the various types of industrial and manualarts courses expanded.
8. Greater use was made of visual aids in instruction.
9. Shop work on the itinerant-teacher basis developed and there was an extension of shop courses to pupils in villages and rural communities.
10. General shop courses as a form of shop organization for industrial objectives showed a rapid growth; especially was this the case for the required courses in the grades of the junior high school.
11. Occasional efforts were made with a view to reorganizing teacher-training work in teacher-training institutions to meet the particular needs of instructors in manual arts with special reference to certain new kinds of work as that of the general shop teacher.
12. The emphasis of instruction in manual arts continued to shifit "from that of skill in the use of tools and machinery to that of industrial intelligence and developmental experiences and general elementary, fundamental, manipulative abilities for general education values, including guidance."

[^23]13. Those responsible for the organization of vocational industrial and manual-arts courses recognized more and more the desirability of treating vocational industrial courses as special educational forms strictly for purposes of employment and "enrolling in such courses those students who should have training preparatory for entering upon employment in some specific trade.'

## Apprenticeship in the English Printing Trades

DURING the years 1925 and 1926 the English Ministry of Labor carried on a series of inquiries into apprenticeship and methods of training for skilled occupations in Great Britain and northern Ireland, covering six groups of allied industries. The results of these studies are to be given in a series of reports of which the first, dealing with printing and its allied industries, has recently appeared. ${ }^{1}$ The reports are based on information obtained through questionnaires sent to employers and to the principal trade-unions, after consultation with the National Confederation of Employers' Organizations and with the General Council of the Trade-Union Congress. Unless otherwise stated, all data are for the year 1925.

In the study of the printing trades, replies were received from 4,043 employers, of whom 1,312 , or 32.5 per cent, had neither apprentices nor learners.

Of the remainder, 2,504 employed only male apprentices or learners, 216 employed both male and female apprentices or learners, and 11 employed only female apprentices or learners. The number of firms with male apprentices or learners was thus 2,720 and the number with female apprentices or learners, 227.

## General Conditions of Apprenticeship

FORMAL apprenticeship is the usual method of entering the printing trades. Of 11,594 entrants for whom information was obtained, 6,293 , or 54.3 per cent, were under indentures or written agreements, 3,916 , or 33.8 per cent, were under verbal agreements, and 1,385 , or 11.9 per cent, were learners; i. e., had been engaged for a definite period and provided with facilities for learning a branch or process of the trade, though not looked upon as apprentices.

In general, employers obtained their apprentices from the elementary schools, taking them as soon as they had finished the prescribed course. Only 253 employers made use of employment exchanges or juvenile employment committees, while 1,353 gave their source of recruitment as the elementary schools. Other sources were utilized.
Two hundred and ninety-three employers stated they recruited their apprentices and learners by advertisement, 283 by personal recommendation, 182 by personal application on the part of the boys, and 144 from the sons or relatives of employees. Only 116 stated that they recruited their apprentices from unskilled workers.

Relatively few of the employers required the apprentices to pay a premium on entering apprenticeship. Of the 10,209 male apprentices covered by the returns, only 2.7 per cent had been obliged to pay premiums, the amount varying from $£ 1$ to $£ 100 .{ }^{2}$ "All but 14

[^24][104]
of the premium apprentices paid sums which fell between $£ 10$ and $£ 30$. Of these, 108 paid £10, 60 paid £20, and 51 paid £30."

The age at beginning apprenticeship ranges from 14 years upward. About two-thirds begin at 14, but 16 years is the more usual age for apprentices to process work and journalism. "Only about 2 per cent of apprentices enter at ages over 16 years, and these are found mainly among stereotypers, electrotypers, journalists, and warehousemen."

The period of apprenticeship, including a probationary period which may be anywhere from 1 to 6 months, ranges from under 4 to 7 years. Information on this point was received concerning 10,209 male apprentices, grouped according to the length of the period for which they had been apprenticed, as follows: 3 years, 0.6 per cent; 4 years, 1.4 per cent; 5 years, 15.2 per cent; 5 to 7 years, 5.6 per cent; 6 years, 6.8 per cent; 7 years, 70.4 per cent.

For the 5 to 7 years group the period of apprenticeship varied according to whether the age at entrance was 16,15 , or 14 years.

The average weekly wage paid to these apprentices during their first year was $12 \mathrm{~s} .4 \mathrm{~d} .,^{2}$ the average range for the whole group being from 10 s . to 15 s ., and the range in different occupations varying widely. In the last year of apprenticeship the average weekly wage was 37 s .5 d ., the average range being from 25 s . to 45 s . In general, there is no intermediate stage between apprenticeship and journeyman status, the worker being looked upon as fully qualified as soon as the apprenticeship period is completed.

## Methods of Training

cNDITIONS in this respect are far from uniform. In the majority of cases training is personal, entrants being placed under some skilled worker or the foreman in charge of the job to which they are assigned. Here they receive training in the practical side of the work, advancing from easy to more intricate operations, but in general keeping to one line of work, such as composing, machine minding, bookbinding, etc. Beyond this, the kind of training given varies with the establishment.

> Where facilities are available, employers usually allow the attendance of apprentices and learners at technical or trade classes, but only a small number make attendance at such classes a compulsory term of the employment. In a few firms, special classes are arranged at the works. Many employers pay class fees and allow time off, with pay, for attendance at technical classes.
> Schools or classes for the technical instruction and training of printing workers are to be found in most of the principal towns. Some of these classes possess equipment forpractical as well as theoretical instructionin several departments of the trade. Many of the available classes are attached to schools of art and technical schools provided by the local education authorities.

## Proportion of Apprentices to Journeymen

$\mathrm{I}^{\mathrm{N}}$THE main occupations in the printing trades the number who may receive training is limited to a certain proportion of the journeymen employed, the proportion being specified by tradeunion rules, or established by agreements between employers' associations and trade-unions. The proportion usually varies according to the number of journeymen employed. Thus the London Society
of Compositors allows one apprentice for 1 to 7 journeymen, two apprentices for 8 journeymen, and so on up to ten apprentices for 40 journeymen, then one apprentice for each 8 additional journeymen. In some cases, especially in newspaper work, there is an additional restriction limiting the number of apprentices which may be employed in any one department. As to the actual ratio of apprentices to journeymen, the following table was compiled from information given by several large associations of employers, and is believed to be fairly indicative of conditions in the printing industry as a whole.

NUMBER OF JOURNEYMEN PER APPRENTICE

| Department | London | England and Wales (excluding London) | Scotland | Great Britain |
| :---: | :---: | :---: | :---: | :---: |
| Composing room | 7.5 | 4.9 | 5. 5 | 5. 5 |
| Stereotyping.-- | 8.8 | 4.5 | 3.9 | 5.6 |
| Miachine room | 5. 6 | 4.6 | 4.9 | 4.9 |
| Lithographic.- | 5. 4 | 4.8 | 5. 6 | 5. 0 |

## Women and Girls in the Industry

THE skilled work of the printing trades is almost entirely in the hands of men, and there is little opportunity for girls to learn the skilled occupations. Only 227 firms reported that they employed girls as beginners, the number so employed being 1,608 , of whom about 2 per cent were indentured apprentices, 15 per cent were apprentices under verbal agreements, and 83 per cent were learners.

Girl apprentices and learners are employed occasionally as compositors, letterpress and lithographic machine minders, and usually as bookbinders, folders, machine rulers, warehousewomen, copyholders, and layers-on. Approximately 86 per cent of the girl apprentices and learners employed in the firms covered by the inquiry were engaged in these occupations. The age of commencement is usually 14 years, and the period of training 4 years. In addition to the abovementioned occupations, girls are employed as colorers, embossers, ticket writers, map mounters, numberers, die stampers, tracers, and journalists, usually as learners, but also as apprentices in the two last-mentioned occupations.

## LABOR ORGANIZATIONS AND CON. GRESSES

## Chilean Decree Relative to Trade-Unionism ${ }^{1}$

THE Chilean law (No. 4057) passed September 29, 1924, which provided for compulsory membership in the trade-unions set up in each industry, provided also for a profit-sharing scheme.
In this regard the law required employers to grant to the workers as a share in their profits an annual sum equal to 6 per cent of the annual wages, provided this amount could be paid out of the net profits and not exceed 10 per cent thereof.

The law met with considerable opposition from the employers, who in many instances dismissed trade-union leaders. As a means of safeguarding the interests of the organized workers and of bringing the law into operation, the Chilean Government issued a decree prohibiting the dismissal of leaders of legally constituted tradeunions by industrial or commercial establishments, except for reasons shown to be lawful before the court of conciliation and arbitration.

## Chilean Trade-Union Congress ${ }^{2}$

THE eighth congress of Chilean trade-unions, which was held recently, was attended by about 200 delegates representing mutual benefit associations and trade-unions organized under the trade-union law.

The following resolutions were approved, favoring the introduction of legislation giving the court of conciliation and arbitration the power to make final decisions; the appointment of a workers' diplomatic representative to be attached to legations in American countries; the promulgation of a minimum wage law; the construction of garden cities by the State at the expense of the public; the opening of branches of the Popular Credit Fund by the Government; and equal representation by employers and workers on the organizations administering the sickness insurance fund.

## National Congress of French General Confederation of Labor ${ }^{3}$

## THE Nineteenth National Congress of the Confédération Générale

 du Travail was held in Paris July 26-29, 1927. The congress was attended by more than 900 delegates, representing about 2,100 trade-unions, as well as by guests from trade-union organizations in various countries. The more important questions dealt with[^25]by the congress were production and the working-class (rationalization); educational reform; vacations with pay; and social insurance.

The congress devoted much of its time to the discussion of the general report and the question of trade-union unity. This has been a disturbing question before each congress since the formation of the Confédération Générale du Travail Unitaire in 1921 by extremist members of the federation. It was decided, as in the preceding congress, that no basis yet existed for taking back the seceding unions but that workers desirous of achieving unity should join their confederated unions and the occupational groups in their industrial federations. The congress stated that it condemned all interference by political parties or external groups in trade-union activities and that the return to unity is conditioned upon the rules fixed by the decisions of the congress and the statutes of the Confédération Générale du Travail and its federations and unions.

The report of the committee on production and the working class was adopted practically unanimously. The resolution stated that, in the face of an economic situation which necessitated a complete change in the methods of production and exchange, the members of the congress were against the attempts to solve the problem by the method which has improperly been called "rationalization," 4 since progress can not consist simply in perfecting working processes and tools but must also take into account the improvement of working and living conditions of the working class, who comprise the major part of the population. Rationalization, therefore, in order to be necessary or acceptable should fulfill the following conditions: Its advantages should not be restricted to certain individuals, but should be equally extended to the workers in the form of increased wages and reduction in the hours of work. It also should contribute to raising: the standard of living of the working people as a whole. During the transition period effective measures should be taken to safeguard the interests of workers, especially as regards unemployment. Thus defined, rationalization, it was considered, could be applied only with the help and under the control of the working classes organized in trade-unions, federations of trade-unions, and the General Confederation of Labor. Also, rationalization, thus applied, would require a total reorganization of the national economy and it was considered most important that study of a plan of reorganization should be undertaken by the National Economic Council.

The congress adopted the resolution on the reform of education unanimously. This resolution reaffirmed one passed by the preceding congress as to the necessity of an entire reorganization of the educational system so that the children of working people should have an opportunity to secure a higher education, and adults should be able to receive the educational and cultural advantages which would enable them to serve their class to the best advantage. For this purpose the formation of a central educational committee and local and departmental committees was recommended.

In regard to social insurance, the congress stated that the law passed by the French Senate, while too long delayed and not entirely acceptable, represented a distinct advance over present conditions and therefore demanded that the Chamber of Deputies take favorable

[^26]action upon this bill without delay. As unemployment insurance is not included in the social insurance law, it was considered essential that a law covering this risk should be enacted.

On the question of vacations with pay, the congress decided that the provisions of the bill which had been presented to Parliament were not satisfactory and that the bill should be amended to provide for an annual vacation of at least 12 -working days for every worker, with a minimum payment of one twenty-fifth of their annual earnings.

The congress adopted a resolution advocating that the labor members of the Superior Labor Council should be elected by the federations concerned and that these members should be under the direction of the administrative committee of the Confédération Générale du Travail.

Other resolutions passed by the congress included one indorsing the admission of the Federation of Civil Servants to membership in the confederation and one providing for the development of the juridical service of the Confédération Gênérale du Travail for the purpose of studying and promoting the enactment of social laws.

## Membership of English Trade-Unions

THE Ministry of Labor Gazette (London), in its issue for November, 1927, gives data concerning the membership of tradeunions in Great Britain and Northern Ireland, as of the end of 1926, based on information secured from the chief registrars of friendly societies, from trade-unions registered under the tradeunion acts, and by the Ministry of Labor from unregistered unions. All unions are covered, whether composed of skilled, unskilled, professional, or clerical workers, the only common requirement being that they should include among their functions that of "negotiating with employers with the object of regulating the conditions of employment of their members."

The statistics given cover trade-union membership from 1892 to 1926, the figures for the last year being tentative and subject to correction. Considering the present century only, the total membership shows the following variations:

MEMBERSHIP OF TRADE-UNIONS IN GREAT BRITAIN AND NORTHERN IRELAND, AT END OF EACH YEAR 1901 TO 1926

| Year | $\begin{aligned} & \text { Member- } \\ & \text { ship } \end{aligned}$ | Year | $\begin{aligned} & \text { Member- } \\ & \text { ship } \end{aligned}$ | Year | $\begin{aligned} & \text { Member- } \\ & \text { ship } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1901 | 2, 025, 000 | 1910. | 2, 565, 000 | 1919 | 7,926,000 |
| 1902 | 2,013,000 | 1911 | 3, 139, 000 | 1920. | 8,337, 000 |
| 1903 | 1,994,000 | 1912 | 3,416, 000 | 1921 | 6, 621, 000 |
| 1904. | 1,967, 000 | 1913. | 4, 135, 000 | 1922 | 5, 616, 000 |
| 1905 | 1,997,000 | 1914 | 4, 145, 000 | 1923 | 5, 413, 000 |
| 1906 | 2, 210,000 | 1915 | 4,359, 000 | 1924 | 5, 534, 000 |
| 1907 | 2, 513, 000 | 1916 | 4, 644, 000 | 1925 | 5, 497, 000 |
| 1908. | 2, 485, 000 | 1917 | 5, 499, 000 | 1926 | 5, 208, 000 |
| 1909 | 2, 477, 000 | 1918 | 6,533, 000 |  |  |

During the earlier part of the century, though occasional years showed a loss, the general trend of the membership was upward, especially in 1906, 1907, 1911, and 1913. During the first year of
the war, membership was practically stationary, then it rose rapidly until it reached its highest point in 1920, and since then there has been a decline, broken only in 1924 . Nevertheless at the close of 1926 the total membership stood at $5,208,000$, a figure larger by 25.9 per cent than had been attained in 1913, the year of highest pre-war enrollment.

The decrease in membership does not appear equally in all trades and industries.

Of the 33 groups under which the unions have been classified, there was a decrease in the total membership in 24 groups and an increase in 9 groups. The largest numerical decreases were 126,000 in mining and quarrying (some of the coal-mining unions showing heavy decreases while others returned little change), over 40,000 in road transport, dock labor, etc., nearly 40,000 in railway service, and about 20,000 in the metal groups and the paper, printing, etc., group. The most important percentage decreases were in agriculture (17), mining and quarrying (14), building laborers (13), furnishing (12), road transport, dock labor, etc. (10), and paper, printing, etc. (10). Of increases, the most notable was that in the water transport group, which gained 11,000 members, or 13 per cent of its 1925 membership.
The decrease in male membership of all groups was 5.7 per cent, while in female membership it was only 2.8 per cent. This is easily accounted for by the fact that the unions which were hardest hit by the labor troubles of 1926 , such as the mining and quarrying groups, railroad and transport unions, and the like, are predominantly or exclusively masculine in membership.

## INDUSTRIAL DISPUTES

## Strikes and Lockouts in the United States in November, 1927

THE figures for industrial disputes contained in this issue of the Labor Review form the third monthly report to be given in more detail than was feasible in the past. These reports are made possible through the cooperation of the Conciliation Service of the Department of Labor and other agencies.

Under the present method of presentation data are given not only regarding the number of disputes beginning each month, but also regarding the number in effect at the end of the month and the number of workdays lost by reason of disputes during each month. The number of workdays lost is computed by multiplying the number of workers affected in each dispute by the length of the dispute measured in working-days as normally worked by the industry or trade in question.

Disputes involving fewer than six workers and those lasting less than one day have been omitted. Data for October and November are subject to revision because of the fact that reports for these months are more or less incomplete.

The bureau is largely dependent upon newspapers and trade journals for its initial information regarding disputes. These are followed by questionnaires addressed to such sources as may further supplement the bureau's reports with reliable information. The bureau wishes to assure all those cooperating in this work of its appreciation as well as to solicit future assistance from others concerned.

Table 1 is a summary table showing for each of the months, June to November, inclusive, the number of disputes which began in these months, the number in effect at the end of each month, and the number of workers involved. It also shows, in the last column, the economic loss (in man-days) involved. It is to be noted that the figures given include only those disputes which have been verified by the bureau.

TABLE 1.-INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OT EAOH MONTH, JUNE TO NOVEMBER, 1927

| Month and year | Number of disputes |  | Number of workers involved in disputes |  | Number of mandays lost during |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning in month | In effect at end of month | Beginning in month | In effect at end of month |  |
| June, 1927 |  |  | 18,585 | 196, 047 | 4, 859, 468 |
| July, 1927. | 62 | 62 | 33, 763 | 199, 087 | 5, 307, 089 |
| August, 1927 | 53 | 50 | 8,066 | 198, 367 | 4, 998, 596 |
| September, 1927 | 46 | 49 | 12, 514 | 197, 588 | 4, 960, 249 |
| November, 1927 1- | 16 |  | 11,556 | 83, 8174 | 2, 770,990 2, 099,991 |
|  |  |  |  | 83,913 | 2,099, 991 |

[^27]
## Occurrence of Industrial Disputes, by Industries

TABLE 2 gives, by industry, the number of strikes beginning in September, October, and November, and the number of workers directly involved.

TABLE 2.-INDUSTRIAL DISPUTES BEGINNING IN SEPTEMBER, OCTOBER, AND NOVEMBER, BY INDUSTRIES

${ }^{1}$ Figures given are preliminary figures.

## Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in November, classified by number of workers and by industries:

TABLE 3.-NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN NOVEMBER, 1927, BY CLASSIFIED NUMBER OF WORKERS AND BY INDUSTRIES

| Industry | Number of disputes beginning in November in-volving- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 6 \text { and } \\ \text { under } \\ 20 \text { work- } \\ \text { ers } \end{gathered}$ | $\begin{gathered} 20 \text { and } \\ \text { under } \\ 100 \\ \text { workers } \end{gathered}$ | $\begin{gathered} 100 \text { and } \\ \text { under } \\ 500 \\ \text { workers } \end{gathered}$ | $\begin{aligned} & 500 \text { and } \\ & \text { under } \\ & 1,000 \\ & \text { workers } \end{aligned}$ | $\begin{gathered} 1,000 \text { and } \\ \text { under } \\ 5,000 \\ \text { workers } \end{gathered}$ |
| Building trades... | 1 | 1 | 131 | 1 |  |
| Clothing-...-...- |  |  |  |  |  |
| Mining-.................-- |  | 1 | 1 |  | 1 |
| Printing and publishing |  | 1 |  |  |  |
| Miscellaneous...--- |  | 2 |  |  |  |
|  |  |  |  |  |  |
| Total | 3 | 5 | 6 | 1 | 1 |

INTable 4 are shown the number of industrial disputes ending in November, by industries and classified duration:

TABLE 4.-NUMBER OF INDUSTRIAL DISPUTES ENDING IN NOVEMBER, 1927, BY INDUSTRIES AND CLASSIFIED DURATION

| Industry | Classified duration of strikes ending in November, 1927 |  |  |
| :---: | :---: | :---: | :---: |
|  | One-half month or less | Over one-half and less than 1 month | 1 month and less than 2 months |
| Brewery and soft-drink workers |  |  | 1 |
| Building trades...-.-.-...- | 1 |  | 1 |
| Clothing-...-....--- |  | 1 |  |
| Furniture. | 1 | 1 | 1 |
| Leather-- |  | 1 |  |
| Mining ${ }_{\text {Motion-picture and theatrical work }}$ | 1 | 2 |  |
| Motion-picture and theatrical worke Printing and publishing |  |  | 3 |
| Printing and publishing_-....... | 1 |  | 3 |
| Stationary engineers and firemen | 1 |  |  |
| Steamboat men <br> Textile. | 1 |  |  |
| Total | 1 | 2 |  |
|  | 11 | 9 | 5 |

Principal Strikes Beginning in November, 1927
COAL miners, Kentucky.-Three mines of the Gibraltar Coal Mining Co., Central City, Ky., were affected by a strike of 1,000 unorganized miners beginning November 1 because of the "removal of 20 per cent bonus, which had been paid for 90 days." This suspension ended November 10. The men returned to work on the terms that prevailed before the bonus was given.

## Principal Strikes and Lockouts Continuing Into November, 1927

$B^{i}$TUMINO US coal miners.-The strike of April 1 continues only in part. Settlements have not been reported for Ohio, Pennsylvania, or northern West Virginia. As to West Virginia, however, it is understood that production has been above normal for some time.
The recent convention of the American Federation of Labor at Los Angeles deliberated on this strike and decided to call a conference of national and international officers and representatives of the city central bodies and the State Federation of Labor of Pennsylvania to meet at Pittsburgh on November 14 to consider ways and means by which the American Federation of Labor and its affiliated bodies can be helpful to the United Mine Workers in the strike situation where it now prevails. This conference was held as indicated.

After a conference on November 16 with a delegation of labor representatives, headed by the president of the American Federation of Labor, the Governor of Pennsylvania announced that he would order a special investigation into formal charges of abuses against striking miners in western and central Pennsylvania. The charges were chiefly against alleged abuse of power by coal and iron police and discrimination in favor of the operators.

On November 21 a delegation of labor leaders, headed by William Green, president of the American Federation of Labor, and John L. Lewis, president of the United Mine W orkers, saw President Coolidge and urged him to call a conference of operators and miners with a
view to effecting a settlement of the strike. They also asked the President to recommend to Congress an investigation of an alleged conspiracy of railroads to depress coal prices and into the issuance of court injunctions against the striking miners.

The President referred the matter to the Secretary of Labor, who, on December 9 requested the bituminous operators of western and central Pennsylvania, northern West Virginia and Ohio, and representatives of the United Mine Workers to meet him in conference at the Department of Labor, Washington, on December 13. The text of his telegram follows:

You are requested to attend a conference in my office in the Department of Labor, Washington, Tuesday morning, December 13, at 10 o'clock. The attendance will consist only of bituminous operators of western and central Pennsylvania, northern West Virginia and Ohio, and representatives of the United Mine Workers. The meeting will be for frank discussion of problems affecting the mining industry, with the object of bringing about, if possible, a satisfactory and peaceful situation. The conference is called with the knowledge of the President. Very important your company be represented.

Preliminary correspondence between the Secretary of Labor and the Governor of Pennsylvania regarding the question of calling a conference of the operators and the miners' representatives was also made public on December 9 and is as follows:

## Secretary Davis's letter to Governor Fisher

My Dear Governor: You are of course familiar with the request to the President made on November 17, by the committee from the Pittsburgh meeting of American Federation of Labor officials for the calling of a conference of operators and miners concerned in the present strike in the bituminous coal fields of western and central Pennsylvania, Ohio, and West Virginia.

On the day prior to their meeting with the President a committee selected by the same conference of labor officials, called upon you and took up with you the situation in the affected Pennsylvania districts. It thus seems to me important, in order to avoid duplication of effort and danger of further complicating an already-involved situation, that we should be apprised of each other's views.

The request made to the President for the calling of the conference I mention was referred to me as Secretary of Labor. Later, Mr. John L. Lewis, President of the United Mine Workers, made a personal request of me to convene such conference.
On Friday last, Messrs. Fagan and Mark, executives of the western and central. mining districts, Mr. Hall representing the Ohio miners, and Mr. Van Bitner of Northern West Virginia, again discussed the situation with me and submitted statements from business and professional men, clergymen, and people not directly connected with the coal mining business, all pleading for action by the State or Federal officials in the matter of calling a conference in endeavor to end the strike.
I have devoted several days to gathering all possible information that might be helpful in such an endeavor. Having in view the seriousness of the situation and the increasing hardship and suffering which the winter season will aggravate, I am desirous of opening some way of restoring peace and harmony.
If you yourself have under contemplation a move to call a conference, or are working along any other line toward a restoration of peace such as I know would be welcomed by you and the people of your State, I am most anxious to be of service in any possible way.

As this problem is in many respects one that is within the province of the States affected, the Federal officials, while glad to cooperate in every helpful way, prefer to leave the initiative in the matter to State authorities. As, however, the Federal authorities stand ready to assist, if so desired, and in view of my earnest desire to see the difficulty adjusted, I should be glad to learn if you have in mind convening a conference for that purpose.

You will understand, my dear Governor, that my sole purpose is to serve in such way as will conduce to a settlement of this difficulty to the satisfaction of the country and all parties concerned.

## Governor Fisher's letter to Secretary Davis

My Dear Mr. Davis: Copy of your letter of the 5th instant was handed me last evening, informing me you have in mind the calling of a conference of the bituminous coal operators and labor representatives for the purpose of bringing about a settlement of the labor dispute in that industry.

In reply, I beg to advise I do not have any plans formulated that would in any way interfere with such a project on your part. I earnestly hope some speedy adjustment may be effected. If I can advise or assist in any way, please feel free to call upon me.

I find I can not stay over in Washington or I would do myself the honor of calling upon you.

Coal miners, Colorado.-On November 21 there was a demonstration of striking miners or alleged miners against the Columbine mine, in Weld County, accompanied by fatal consequences, as the adrancing crowd was fired upon by mine guards and State police, killing 6 and wounding about 27. Following this outbreak the Governor sent State troops to the scene, and the situation quieted down.

The Columbine mine, operated by the Rocky Mountain Fuel Co., ceased operations after this clash, but resumed on November 29, On this date the Colorado Fuel \& Iron Co. announced that its force was within 300 of normal.

At a meeting of employees' representatives and company officials called in Pueblo on September 24, the basic wage scale for underground coal miners was advanced from $\$ 5.32$ per day to $\$ 6.20$ per day, effective October 1.

Some disturbances also occurred on November 21 in the southern field. The appearance of pickets in the Aguilar district of Las Animas County was followed by fighting between strikers, State police, and deputy sheriffs. Twenty of the strikers were arrested and placed in jail at Trinidad.

At a meeting at Aguilar on September 4 the I. W. W.'s demand was for a six-hour day and a five-day week, with the Jacksonville scale. As to this the Industrial Commission of Colorado reported as follows:

## Report of the Industrial Commission of Colorado

The Industrial Commission of Colorado received a letter dated September 6, 1927, signed by the secretary of the so-called strike committee of the Aguilar conference of the Walsenburg Branch of the I. W. W., inclosing a demand for increased wages and change in working conditions in all the coal mines in the State of Colorado, and stating that "if these demands are not met by the coal operators a strike will be called."

The commission held a meeting at the courthouse at Walsenburg and visited quite a number of the mines in the district, examined witnesses under oath regarding the Aguilar conference, and secured testimony from men who took part in the conference or knew of the conference.

The secretary was questioned under oath. He testified he had no records of the meeting and did not know how many had voted on any question, or whether they voted by ballot or raising of hands.

The chairman of the conference was not available, as he resided in another city and had returned home.

The commission was unable to find a single delegate to the conference who was elected by his fellow workers in a meeting assembled for that purpose. Many delegates were found who had volunteered to represent the mine in which they were employed, but in no instance had there been a meeting of mine employees held for the purpose of electing delegates to this conference.

The industrial law provides that notice to the commission "by said employees shall be signed by said employees or members of a committee of said employees authorized for such purpose."

In the present case the demand for increase in wages and change in working conditions is not signed by the employees or by any members of a committee elected by said employees and authorized to act for them.

Under date of September 17 a letter was received, signed by the secretary of the so-called strike committee, notifying the commission that the date for the strike had been extended to October 18, 1927.

Therefore, it is the opinion of the Industrial Commission of Colorado that the Aguilar conference failed to comply with the provisions of the industrial law and that no legal demand has been made for an increase in wages or change in working conditions by any of the men employed in the coal mines or by any committee duly elected and authorized by the employees to act for them in matters of this kind.

A press report of November 21 stated that the I. W. W. had carried the fight to the operators of the Pike's Peak region, "the general strike committee" having sent the following ultimatum to owners in that city:

We, the general strike committee of the Colorado miners, hereby notify you that there will be no coal hoisted at your mine. Also that you shall hire only four men for your maintenance and their wages shall be pending the settlement of this strike.
Under the protection of troops six northern mines resumed operations on December 1, after being closed since October 18.

## Conciliation Work of the Department of Labor in November, 1927

## By Hugh L. Kerwin, Director of Conciliation

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 40 labor disputes during November, 1927. These disputes affected a known total of 21,243 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly affected.
On December 1, 1927, there were 49 strikes before the department for settlement, and, in addition, 12 controversies which had not reached the strike stage. The total number of cases pending was 61 .

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, NOVEMBER, 1927


LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, NOVEMBER, 1927-Continued


| Federal Knitting Mills, Philadelphia, Pa. | Strike. | Hosiery workers.......- | Hours increased from 48 to 54 hour week. | Pending | Nov. 30 |  | 65 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| phia, Pa. <br> Shelton Looms, Shelton, Conn | Controversy | Textile workers | Proposed change in work conditions | Adjusted. No changes made at this time. | Nov. 1 | Nov. 25 | 2, 300 |  |
| Park Silk Co., Paterson, N. J...--- | Strike | Silk weave | Refusal to work on Columbus Day. | Unable to adjust. Other weavers employed. | Oct. 31 | Nov. 28 | 50 | 20 |
| Pilgrim Plush Co., Providence, R. I. | ----do.------- | Plush weavers | Change from daywork to piecework. | Unclassified. Returned in part, and others employed before commissioner's arrival. | Nov. 17 | Nov. 21 | 10 |  |
| Hartman Theater, Columbus, Ohio- | Controversy | Musicians | Asked increase and additional musicians in orchestra. | Adjusted. Allowed increase of 5 per cent, $\$ 81.90$ per week; same number of players in orchestra. | Sept. 28 | Nov. 8 | 7 |  |
| Painters and paper hangers, Anderson, Ind. | Threatened strike. | Painters and paper hangers. | Asked increase to $\$ 1.35$ per hour. | Adjusted. Referred to headquarters; decision not to affect present work. | Nov. 30 | Dec. 1 | 65 | 70 |
| Total |  |  |  |  |  |  | 12, 633 | 8,610 |

1 Not reported.

## Establishment of Federal Conciliation and Arbitration Board in Mexico ${ }^{1}$

BY A presidential decree of September 17, 1927, the Mexican Government established a Federal Board of Conciliation and Arbitration for the settlement of labor disputes in which the Government is involved, or which extend through two or more States. When disputes arise in such enterprises as mining, petroleum, textiles, and communications, the board will function; also, in case the majority of the representatives of the industry and the workers request its intervention.
The board is composed of an equal number of representatives of employers and workers and a nonpartisan member appointed by the Ministry of Industry, Commerce, and Labor.
The more important sections of the text of the decree are as follows:
Article 1.-The Federal Board of Conciliation and Arbitration is hereby established, with headquarters in this city, together with such regional conciliation boards as may be necessary for its effective operation.

Art. 2. The object of the Federal Board of Conciliation and Arbitration shall be to prevent and settle the collective and individual conflicts arising between employers and laborers, and it shall have the power to enforce its decisions.
Art. 3. The intervention of the Federal Board of Conciliation and Arbitration shall be effective:
(a) In the Federal zones.
(b) In the problems and conficts arising in industries and enterprises, the establishment or exploitation of which was or is effected under Federal contract or concession.
(c) In conflicts or problems affecting two or more States or a State and the Federal zones.
(d) In conflicts and problems arising in connection with labor contracts for continual services of the same nature in two or more States at the same time.
(e) In cases where, by written agreement of a majority of the representatives of an industry and the workers, the specific jurisdiction of the Federal Government is accepted.

Art. 4. In accordance with the provision of Section XX of article 123, the Federal Board of Conciliation and Arbitration shall be composed of an equal number of representatives of the laborers and of the employers and one member to be appointed by the Ministry of Industry, Commerce, and Labor.

Art. 5. The Ministry of Industry, Commerce, and Labor is hereby authorized to issue in the shortest time possible the regulations to govern the operation of the Federal Board of Conciliation and Arbitration.
${ }^{1}$ Law and Labor, New York, November, 1927, pp. 302, 312; and report from Consul Charles W. Lewis, jr. at Mexico (city), dated Oct. 11-18, 1927.

## WAGES AND HOURS OF LABOR

Reporting-Time and Minimum Pay in Building-Trades Agreements

TTRAVEL from home to a place of employment only to find no work, or employment for an hour or so, is not only an annoyance but an actual loss to a wage earner. Had he known in advance that work was not available he might have worked somewhere else and at least he might have saved transportation cost by staying at home. That there is no work ready when a man reports for duty may be no fault of the employer, however. Material expected may not arrive, or some other unforeseen condition may arise. The inconvenience and loss may fall quite as hard on the employer as on the employee.

This loss is a question of such importance that many trade-union agreements now contain provision for payment when an employee reports for work and does not get it, or is provided with but a small fraction of a day's work. The worker claims that the employer should furnish work unless notice was given the day before that there would be no work. This claim appears not to be made, however, when bad weather makes work impossible.

The Bureau of Labor Statistics has made an examination of the wage agreements and working rules, so far as printed copies are available, for 544 local building-trades unions located in many of the principal industrial cities. It was found that sometimes the statements are ambiguous and that different agreements may have different ways of stating the same thing The bureau in this compilation has held to the wording of the agreement as closely as brevity would permit. Frequently it is not clear whether a provision applies to men newly hired and told to report, or to old employees, or both. There is also doubt in some cases as to whether the agreement applies when no work is afforded or to employees given only a fractional part of a day's work. Any cloudiness in the following compilation, therefore, lies in the agreement itself. In some instances there is a provision applying to a second or third shift in the day, no provision being made as to the first shift. In a few cases the provision seems to apply to a discharged man rather than to a man not given work for the day.

That the employer has reciprocal rights is evidenced in five agreements which provide for a fine in cases where a man who is ordered to report for work fails to do so. In four of the agreements this fine appears to be a matter of union discipline rather than of compensation to the employer, as nothing is said of turning over any of this fine to him. In one case it is specified that the full amount of the fine shall be turned over to the employer to reimburse him for any loss incurred by failure of the employee to report.

There seems to be a quite general provision that two hours shall be paid for when a workman reports for duty but no work is furnished. The minimum pay for any work done on a day is usually for either two or four hours.

Table 1 shows the number of locals having and those not having provisions relating to the minimum and reporting pay, by trades:

TABLE 1.-NUMBER OF LOCAL BUILDING-TRADES UNIONS HAVING UNION AGREEMENT AS TO REPORTING-TIME AND MINIMUM PAY

| Trade | Of agreementsexamined forprovisions asto reportingtime andminimum pay,number hav-ing- |  | Trado | Of agreements examined for provisions as to reporting time and minimum pay, number hav- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Some } \\ & \text { pro- } \\ & \text { vision } \end{aligned}$ | No provision |  | Some provision | No provision |
| Asbestos workers |  | 15 | Marble setters. | 1 | 2 |
| Bricklayers....... | 23 | 11 | Mosaic and terrazzo workers | 1 | 1 |
| Building laborers. | 12 | 7 | Painters_............-. | 20 | 28 |
| Carpenters | 22 | 24 | Painters, sign. | 4 | 13 |
| Parquetry-floor layers | 1 | 1 | Plasterers,---.-.-- | 19 | 8 |
| Wharf and bridge carpenters | 4 |  | Plumbers and gas fitters. | 29 | 6 |
| Cement finishers...- | 17 | 3 | Plumbers' laborers...... | 2 | 1 |
| Composition roofers | 4 | 5 | Sheet-metal workers. | 6 | 14 |
| Elevator constructors. |  | 11 | Slate and tile roofers. | ${ }_{3}$ | 14 |
| Engineers, portable and hoisting-- | 32 | 4 | Steam and sprinkler fitters.--------- | 25 | 9 |
| Glaziers |  | 2 | Stone and marble masons.--------- | 18 | 7 |
| Hod carriers.. | 10 | 8 | Structural-iron workers.--.---------- | 29 | 12 |
| Inside wiremen_ | 21 | 12 | Tile layers. | 11 | 4 |
| Lathers........... | 5 | 10 | Total | 322 | 222 |

From the above table it will be seen that 322 local trade-unions had some provision in their agreements or rules for payment for reporting, or for minimum hours worked, while 222 did not. It is thought that the number of agreements examined is large enough to constitute a satisfactory representative group. It is possible that in some other cases the local unions have a verbal agreement on the points in question. The detailed compilation follows:

TARLE 2.-PROVISIONS IN LOCAL BUILDING-TRADES UNION AGREEMENTS FOR REPORTING-TIME AND MINIMUM PAY

| Trade and city | Time paid for where men report and are not given work | Minimum time paid for in any one day |
| :---: | :---: | :---: |
| Bricklayers: |  | 4 hours for second and third shifts. <br> 8 hours for relay gangs. <br> 2 hours. |
| Atlanta, Ga |  |  |
| Boston, Mass |  |  |
| Chicago, Ill |  |  |
| Cleveland, Ohio |  |  |
| Denver, Colo | 2 hours; discharged before 10 a. m., 2 hours additional to time worked. |  |
|  |  |  |
| Des Moines, Iowa | 2 hours $\qquad$ <br> 1 hour (old employee) |  |
| Detroit, Mich |  |  |
| Houston, Tex | 2 hours |  |
| Los Angeles, Cavif | 4 hours (old employee) <br> Discherged before 9 a. m., 4 hours additional to time worked. <br> 2 hours |  |
| Louisville, Ky . |  |  |
| Milwaukee, Wis |  |  |
| New Orleans, La | 1 hour <br> Discharged 8 a. m., 1 hour; before $9 \mathrm{a} . \mathrm{m} ., 2$ hours. 1 hour |  |
| New York, N. Y |  |  |
| Norfolk, Ve_ |  |  |

TABLE 2.-PROVISIONS IN LOCAL BUILDING-TRADES UNION AGREEMENTS FOR REPORTING-TIME AND MINIMUM PAY-Continued


## itized for FRASER

TARLE 2.-PROVISIONS IN"LOOAL BUILDING-TRADES UNION AGREEMENTS FOR REPORTING-TLME AND MINIMUM PAY-Continued

| Trade and city | Time paid for where men report and are not given work | Minimum time paid for in any one day |
| :---: | :---: | :---: |
| Cement finishers-Continued. Pittsburgh, Pa Portland, Oreg St. Louis, Mo |  |  |
|  | 2 hours and car fare new employee). <br> 4 hours <br> 2 hours | 4 hours. |
| San Francisco, Calif Seattle, Wash |  | Do. 2 hours. |
|  |  |  |
| Cleveland, Ohio |  | Second and third shift less than 4 hours, time and one-half. |
| Daston, Ohio -- | 2 hours <br> 1 hour $\qquad$ |  |
| Los Angeles, Calif. <br> Engineers, portable and hoisting Baltimore, Md. |  |  |
|  | 1 hour, gas or electric; 2 hours, steam; 2 hours, second shift; 4 hours, third. | 8 hours for second and third shifts. |
| Boston, Mass |  | 4 hours. |
| Cincinnati, | hours; pay for all time held waiting. <br> 2 hours; third shift, 4 hours, second time in day, 8 hours. <br> 2 hours |  |
| Cleveland, Ohio |  | Do. |
| Columbus, Ohio |  |  |
| Dallas, Tex- | 2 hours, if steam raised <br> 2 hours | ```Do. \\ 4 hours, if more than 1 hour worked. \\ 4 hours. \\ Do.``` |
| Dayton, Ohio |  |  |
| Denver, Colo | -do- |  |
| Des Moines, Lowa | 2 hours; second time in day,8 hours.2 hours, Sunday and holidays_- |  |
| Detroit, Mich_ |  |  |
| Erie, Pa <br> Houston, Tex |  | Do. <br> Do. <br> Second and third shift less |
| Indianapolis, Ind | 1 hour (gas or electric); 2 hours (steam). |  |
|  |  | Second and third shift less than 4 hours, double time. <br> 4 hours. <br> 2 hours. |
| Jacksonville, Fla | 2 hours |  |
| Los Angeles, C | 2 hoursdo. |  |
| Louisville, Ky - |  |  |
| Memphis, Tenn | -...-do | 8 hours; shifts, 8 hours or time and one-half for hours worked. <br> 4 hours if more than 1 hour worked. |
| Milwaukee, | do |  |
| Newark, N. J | 2 days if Sunday <br> 2 hours. |  |
| New Orleans, L |  |  |
| Omaha, Nebr | 4 hours; 8 hours second and third shift. <br> 2 hours | 5 hours, midnight shift. 8 hours. |
|  |  |  |
| Pittsburgh, Pa Portland, Oreg |  | $\begin{aligned} & \text { Do. } \\ & 4 \text { hours. } \\ & \text { Do. } \end{aligned}$ |
| Providence, R. I | 2 hours <br> 2 hours; 5 hours if not notifled in 10 minutes. |  |
| St. Louis, Mo |  |  |
| Salt Lake City, Ut |  |  |
| Seattle, Wash | 2 hours | 2 hours. <br> 4 hours. <br> Do. <br> 4 hours, day; 8 hours, night. |
| Spokane, Wash | 1 hour, day; 2 hours, night <br> 2 hours; 8 hours second time in 1 day. <br> 2 hours |  |
| Toledo, Ohio..- |  |  |
| Youngstown, Ohio |  | 4 hours. |
| Hod carriers: |  |  |
| Chicago, Mont...- | 4 hours - -...................................2 hours | Do. |
| Cleveland, Ohio |  |  |
| Des Moines, Iowa |  |  |
| Kansas City, Mo- | do |  |
| Los Angeles, Calif |  |  |
| Pittsburgh, Pa | 2 hours (old employee) -..... |  |
| St. Louis, Mo. |  | Do. 2 hours. |
| Youngstown, Ohio |  |  |
| Inside wiremen: <br> Baltimore, M <br> Time to and from job, car |  |  |
| Boston, Mass | Time to and from job, car fare, and waiting time. 2 hours if asked to wait. <br> 4 hours $\qquad$ <br> 1 hour $\qquad$ <br> For all time lost, minimum 2 hours. | 1 day if working on islands 4 hours. |
| Buffialo, N. |  |  |
| Chicago, III. |  |  |
| Cincinnati, Ohio |  |  |

TARLE 2.-PROVISIONS IN LOCAL BUILDING-TRADES UNION AGREEMENTS FOR REPORTING-TIME AND MINIMUM PAY-Continued


TARLE 2.-PROVISIONS IN LOCAL BUILDING-TRADES UNION AGREEMENTS FOR REPORTING-TIME AND MINIMUM PAY-Continued


TARLE 2.-PROVISIONS IN LOCAL BUILDING-TRADES UNION AGREEMENTS FOR REPORTING-TIME AND MINIMUM PAY-Continued


## Office Workers' Earnings in New York State

THE following table, adapted from a table in the November issue of the Industrial Bulletin, issued by the New York State Industrial Commission, shows the general trend of office workers' earnings, by industries, in the month of October of each of the past five years and in June, 1914. The employees represented include those who appear on the factory office pay rolls as clerks, stenographers, bookkeepers, accountants, cashiers, stock clerks, office managers, superintendents, etc.

NUMBER OF OFFICE EMPLOYEES AND AVERAGE WEEKLY EARNINGS IN OCTOBER, 1923 TO 1927, COMPARED WITH JUNE, 1914, BY INDUSTRY


It will be noted that there has been an increase each year in each industry except in furs, leather, and rubber goods, in textiles, in food and tobacco, and in water, light, and power. It also appears that the earnings of office workers in the chemical-industry group advanced in greater amount during the last year than those in any other group.

In the next table the relative earnings of men and women employed in offices in October, 1927, as compared with October, 1925, and October, 1926, are shown:

AVERAGE WEEKLY EARNINGS OF OFFICE EMPLOYEES IN OCTOBER, 1925, 1926, AND 1927, BY SEX AND BY INDUSTRY


This table indicates that the earnings of men advanced more rapidly than those of women, the former showing a total of $\$ 1.19$ more in October, 1927, than in October, 1926, while the average
earnings of woman employees advanced only 24 cents in that period. In textiles the average earnings for men were reduced from $\$ 39.59$ to $\$ 39.35$, while in two industry groups - furs, leather, and rubber goods and in textiles-the earnings of women were reduced, from $\$ 24.50$ to $\$ 23.69$ in the former group and from $\$ 23.04$ to $\$ 22.66$ in the latter group.

## Hours of Work in Buenos Aires ${ }^{1}$

THE Argentine Department of Labor conducted a special investigation to ascertain the average length of the working-day in the Federal capital during the year 1926. The findings showed that less than eight hours constituted the average workingday for the 109,432 individuals investigated, of whom 80,467 were wage earners and 28,965 salaried employees.
The table below shows the average daily hours of labor of the wage earners and the salaried employees in Buenos Aires in 1926, by sex and industry group.

AVERAGE DAILY HOURS OF WORK OF WAGE EARNERS AND SALARIED EMPLOYEES IN BUENOS AIRES IN 1926, BY INDUSTRY


## Eight-Hour Day for Commercial Workers in Mexico ${ }^{2}$

ON AUGUST 15, 1927, President Calles, of Mexico, approved the regulations concerning working hours in commercial establishments in the Federal District, which became effective September 1, 1927.

From that date all persons engaged in such undertakings, whether as salaried employees or skilled or unskilled workers, are to have the 8 -hour day. The sale of merchandise is absolutely prohibited during closing hours.

[^28]A committee is to be organized, consisting of an employer, a commercial employee, and a Government representative, to superintend the enforcement of the regulations.

## Eight-Hour Day in Spanish Mines ${ }^{1}$

ASPANISH decree issued on September 28, 1927, provides that eight hours shall constitute a working-day for both underground and surface mine workers in Spain from October 1, 1927.

For underground workers the workday is to begin when the first workers enter the pits and will end when the first workers leave the pits. Time consumed in walking from the pit to the working face and back will be included in the working-day.
On account of the disputes which arose from the fact that eight hours of work for underground workers involved a prolongation of the day for surface workers, a decree of October 10, 1919, reduced the hours of underground workers to seven a day.
At present, however, the Spanish coal industry is in such a serious state of depression as compared with the same industry in other countries that the Government felt justified in enacting a decree providing for a return to the 8 -hour day for underground workers.

[^29]
## TREND OF EMPLOYMENT

## Employment in Selected Manufacturing Industries in November, 1927

EMPLOYMENT in manufacturing industries decreased 1.9 per cent in November, 1927, as compared with October, and payroll totals decreased 3.7 per cent.
The decrease in pay-roll totals is in part accounted for by the closing down of many establishments on election day and a more general observance of armistice day.

The level of employment in November, 1927, was 6 per cent below the level of employment in November, 1926, and pay-roll totals were 8 per cent lower in November, 1927, than in November, 1926.

The Bureau of Labor Statistics' weighted index of employment for November, 1927, is 85.9 as compared with 87.6 for October, 1927, 88 for September, 1927, and 91.4 for November, 1926; the weighted index of pay-roll totals for November, 1927, is 87.8 as compared with 91.2 for October, 1927, 90.1 for September, 1927, and 95.4 for November, 1926.

The report for November, 1927, is based on returns from 10,819 establishments in 54 of the principal manufacturing industries of the United States. These establishments in November had $2,953,560$ employees whose combined earnings in one week were $\$ 76,722,522$.

Comparison of Employment and Pay-roll Totals in November and October, 1927

NINETEEN of the 54 separate industries had more employees in November, 1927, than in October, while 9 of these 19 industries and 1 additional industry reported increased pay-roll totals. The increases in employment in 5 of the 19 industries-shirts, book and job printing, pottery, glass, and rubber boots and shoes-were from 2 to 2.6 per cent each; the increases in 5 other industries-slaughtering, hosiery, woolen goods, carpets, and agricultural implementswere from 1.1 to 1.5 per cent each; the remaining 9 increases were each less than 1 per cent. The greatest increase in pay-roll totals was 4.2 per cent in rubber boots and shoes.

The decreases in employment were most marked in automobiles ( 8.4 per cent), boots and shoes ( 7.1 per cent), ice cream ( 6.3 per cent), sugar refining ( 6.1 per cent), steam fittings ( 5.7 per cent), automobile tires ( 4.7 per cent), confectionery ( 4.6 per cent), men's clothing ( 4.3 per cent), cement ( 3.7 per cent), women's clothing (3.3 per cent), foundry and machine-shop products and petroleum refining (each 3 per cent), and brick ( 2.9 per cent). The majority of these industries are particulary sensitive to the changing seasons, but the decreases in 9 of the 13 were greater than has been customary in November. The greatest decrease in pay-roll totals in November ( 16.6 per cent) was in the leather boot and shoe industry, followed by automobiles and steam fittings, with decreases of about 12 per cent each, and men's and women's clothing, automobile tires, and
cast-iron pipe, the decrease in the last named being 8.8 per cent. The iron and steel industry lost 1.8 per cent of its employees in November and pay-roll totals fell off 2.5 per cent; cotton goods with a loss of less than one-tenth of 1 per cent in employment reported a drop of 2.6 per cent in pay-roll totals.
The paper group alone of the 12 groups of industries showed a gain in November, the increases in the two items being 0.9 per cent each. The leather and the vehicle groups were most affected by losses in employment-over 5 per cent in each case-and the iron and steel group's loss was less than one-half as great; the smallest losses were sustained by the stone, clay, and glass group and the textile group, the percentage decreases being about one-half of 1 per cent in each group.

The Mountain division alone of the 9 geographic divisions reported more employees in November, 1927, than in October, the increase being 1 per cent only, while the falling-off in employment in the remaining 8 divisions ranged from 3.4 per cent in each of the two North Central divisions to 0.7 per cent in the South Atlantic States.
TABLE 1.-COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL
ESTABLISHMENTS DURING ONE WEEK EACH IN OCTOBER AND NOVEMBER ESTABLISHMENTS DURING ONE WEEK EACH IN OCTOBER AND NOVEMBER,
1927


TABLE 1.-COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMEN'TS DURING ONE WEEK EACH IN OCTOBER AND NOVEMBER, 1927-Continued

| Industry | Estab-lishments | Number on pay roll |  | Per cent of change | Amount of pay roll |  | Per cent of change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { October, } \\ & 1927 \end{aligned}$ | November, 1927 |  | $\begin{aligned} & \text { October, } \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { November, } \\ 1927 \end{gathered}$ |  |
| Leather and its products. | 352 | 125, 765 | 118,756 | $\left.{ }^{1}\right)$ | \$2, 852, 914 | \$2,487, 683 | ${ }^{(1)}$ |
| Leather | 122 | 26,871 | 26,914 | +0.2 | 666, 560 | 664, 283 | $-0.3$ |
| Boots and shoes | 230 | 98,894 | 91, 842 | -7.1 | 2, 186, 354 | 1, 823, 400 | -16.6 |
| Paper and printing | 906 | 177,173 | 178, 554 | (1) | 5, 264,508 | 5,814, 924 | (1) , |
| Paper and pulp. | 214 | 58,826 | 58, 713 | -0.2 | 1, 562, 272 | 1, 554, 529 | -0.5 |
| Paper boxes | 179 | 20, 660 | 20,836 | +0.8 | -470, 593 | 470, 055 | -0.1 |
| Printing, book and job | 304 | 48, 506 | 49, 695 | +2.5 | 1, 713, 333 | 1, 749, 782 | +2.1 |
| Printing, newspapers. | 209 | 49, 181 | 49,310 | +0.3 | 2, 018, 304 | 2, 040, 558 | $+1.1$ |
| Chemicals and allied products. | 355 | 89,613 | 88, 275 | (1) | 2, 602,415 | 2,535,951 | (1) |
|  | 127 | 32, 751 | 33, 062 | +0.9 | 905, 092 | 902, 053 | -0.3 |
| Fertilizers | 173 | 11, 332 | 11,041 | $-2.6$ | 212, 762 | 207, 875 | -2.3 |
| Petroleum refining | 55 | 45,530 | 44, 172 | $-3.0$ | 1,484, 561 | 1, 445, 023 | $-2.7$ |
| Stone, clay, and glass products- | 666 | 110, 094 | 109, 209 | (1) | 2, 929, 901 | 2,855, 708 | ${ }^{(1)}$ |
|  | 99 | 26, 286 | 25, 303 | $-3.7$ | 786, 129 | 744, 581 | $-5.3$ |
| Brick, tile, and terra | 397 | 33, 359 | 32, 378 | -2.9 | 849, 979 | 817, 297 | -3.9 |
| Pottery | 60 | 12, 713 | 13, 020 | $+2.4$ | 341,949 | 343, 993 | +0.6 |
| Glass | 110 | 37, 736 | 38, 508 | $+2.0$ | 951,844 | 949, 837 | -0.2 |
| Metal products, other than iron and steel | 216 | 49, 824 | 49,120 | $\left.{ }^{1}\right)$ | 1,320,974 | 1,300,499 | $\left.{ }^{1}\right)$ |
| Stamped and enameled ware - | 68 | 18, 523 | 18, 540 | +0.1 | 465, 395 | 465,926 | +0.1 |
| Brass, bronze, and copper products. | 148 | 31, 301 | 30, 580 | $-2.3$ | 855, 579 | 834, 483 | $-2.5$ |
| Tobacco produe | 185 | 47,801 | 47,437 | $\left.{ }^{1}\right)$ | 837,239 | 825,686 | (1) |
| Chewing and smoking tobacco and snuff_........... | 30 | 8,518 | 8,450 | -0.8 | 139, 063 | 128,607 | -7.5 |
| Cigars and cigarettes | 155 | 39, 283 | 38, 987 | -0.8 | 698, 176 | 697, 079 | -0.2 |
| Vehicles for land transportation. | 1,200 | 468, 730 | 439,211 | (1) | 14, 873, 629 | 13, 332,446 | $\left.{ }^{1}\right)$ |
| Automobiles | 197 | 301, 060 | 275, 653 | $-8.4$ | 9, 873, 251 | 8,690, 878 | $-12.0$ |
| Carriages and wagons | 54 | 1,457 | 1,432 | -1.7 | 32, 042 | 29,620 | -7.6 |
| Car building and repairing, electric-railroad | 382 | 26,485 | 26, 170 | $-1.2$ | 804, 954 | 813,141 | +1.0 |
| Car building and repairing, steam-railroad | 567 | 139, 728 | 135, 956 | -2.7 | 4, 163, 382 | 4, 098,807 | $-1.6$ |
| Miscellaneous industries. | 405 | 249, 438 | 246, 686 | (1) | 7, 270, 234 | 6,957, 543 |  |
| Agricultural implements | 95 | 24, 202 | 24, 465 | +1.1 | 681, 093 | 690, 162 | +1.3 |
| Electrical machinery, apparatus, and supplies |  | 122, 074 | 121, 255 | $-0.7$ |  |  | $-4.4$ |
| Pianos and organs | 38 | 7,386 | 7, 435 | $+0.7$ | 233, 797 | 229,306 | $-1.9$ |
| Rubber boots and shoe | 10 | 18, 714 | 19, 197 | +2.6 | 471,611 | 491,557 | $+4.2$ |
| Automobile tires | 55 | 51, 167 | 48,757 | -4.7 | 1, 554, 828 | 1,401, 895 | -9.8 |
| Shipbuilding, steel | 36 | 25,895 | 25,577 | -1.2 | 767, 805 | 738,748 | -3.8 |
| All industries | 10,819 | 3, 018, 729 | 2, 953, 560 | (1) | 80, 081, 298 | 76,722, 522 | $\left.{ }^{1}\right)$ |

Recapitulation by Geographic Divisions

| GEOGRAPHIC DIVISION |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New England | 1,394 | 415, 771 | 409, 796 | $-1.4$ | 10, 094, 948 | 9, 731, 140 | $-3.6$ |
| Middle Atlantic | 2, 536 | 843, 641 | 830, 382 | $-1.6$ | 23, 732, 555 | 23, 016, 326 | $-3.0$ |
| East North Central | 2, 883 | 968, 703 | 935, 797 | -3. 4 | 28, 709,878 | 26, 993, 974 | $-6.0$ |
| West North Central | 1,050 | 162, 282 | 156, 845 | $-3.4$ | 4, 106, 333 | 3, 896, 141 | -5.1 |
| South Atlantic. | 1, 127 | 281, 451 | 279, 525 | $-0.7$ | 5, 257, 572 | 5, 165, 350 | -1.8 |
| East South Central | 1, 519 | 114, 255 | 112, 682 | -1.4 | 2, 188, 917 | 2, 110, 443 | -3.6 |
| West South Central | 458 | 86, 156 | 84, 837 | $-1.5$ | 1, 860, 146 | 1,796, 843 | -3.4 |
| Mountain. | 185 | 27, 072 | 27,356 | +1.0 | 744, 209 | 753, 215 | +1.2 |
| Pacific. | 667 | 119, 398 | 116,340 | -2. 6 | 3, 386, 740 | 3, 259, 090 | $-3.8$ |
| All divisions | 10,819 | 3, 018, 729 | 2,953, 560 | (1) | 80, 081,298 | 76, 722, 522 | (1) |

[^30][133]

TABLE 2.-PER CENTS OF CHANGE, OCTOBER TO NOVEMBER, 1927-12 GROUPS OF IINDUSTRIES AND TOTAL OF ALL INDUSTRIES
[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group, by the number of employees, or wages paid, in the industries]

| Group | Per cent of change, October, 1927, to November, 1927 |  | Group | Per cent of change October, 1927, toNovember, 1927 November, 1927 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { on pay } \\ & \text { roll } \end{aligned}$ | $\begin{gathered} \text { Amount } \\ \text { of pay } \\ \text { roll } \end{gathered}$ |  | Number on pay roll | $\underset{\substack{\text { Amount pay } \\ \text { of pall }}}{\text { Amoun }}$ |
| Food and kindred products..- | -1.8 -0.6 | -1.6 -4.3 |  |  |  |
| Textiles and their products-- Iron and steel and their prod- | -0.6 | -4.3 | iron and steel. <br> Tobacco products | -1.6 -0.8 | -1.8 -1.1 |
| ucts.....-................-- | -2.4 | -3.3 | Vehicles for land transpor- |  |  |
| Lumber and its products.-.-. | -1.8 | -2.5 | tation .....-.-.............- | -5.1 | -6.2 |
| Leather and its products.....- | -5.4 | -11.8 +0.9 | Miscellaneous industries | -1.2 | -4.2 |
| Chemicals and allied products | $-1.0$ | -1.4 | All industries | -1.9 | -3.7 |
| Stone, clay, and glass prod- ucts | -0.4 | -2.0 |  |  |  |

Comparison of Employment and Pay Roll Totals in November, 1927, and November, 1926

EMPLOYMENT in manufacturing industries in November, 1927, was 6 per cent lower than in November, 1926, and pay-roll totals were 8 per cent smaller than in November, 1926. As previously stated there was in 1927 a more general observance of Armistice Day as indicated by reports to that effect, and apparently more establishments than has been usual were closed on election day. Both of these closings had an appreciable effect upon pay-roll totals.

The textile group of industries alone of the 12 groups shows gains both in employment and in pay-roll totals over the 12 -month period, while the tobacco group shows an increase in employment coupled with a small decrease in pay-roll totals; as in October, 1927, the outstanding decreases in employment were in the iron and steel group of industries and in the vehicle group.

The pronounced increases in separate industries over this 12-month period were in women's clothing, rubber boots and shoes, cotton goods, dyeing and finishing textiles, cigars, chewing tobacco, baking, and sugar refining; the pronounced decreases were in petroleum refining, in the eight industries comprising the iron and steel group, and in lumber, boots and shoes, fertilizers, brick, shipbuilding, and steam-car building and repairing.

Each of the nine geographic divisions shows a falling off in employment in this comparison from November, 1926, to November, 1927, the most pronounced decreases being in the Middle Atlantic, New England, and the four central divisions; the South Atlantic division shows a small decrease, and the Pacific States a moderate decrease.

TABLE 3.-COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS, NOVEMBER, 1927, WITH NOVEMBER, 1926
[The per cents of change for each of the 12 groups of industries and for the total of all industries are weighted in the same manner as are the per cents of change in Table 2]

| Industry | Per cent of change, November, 1927, compared with November, 1926 |  | Industry | Per cent of change, November, 1927, compared with November, 1926 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number on pay roll | $\begin{aligned} & \text { A mount } \\ & \text { of pay } \\ & \text { roll } \end{aligned}$ |  | $\begin{array}{\|l\|} \text { Number } \\ \text { on pay } \\ \text { roll } \end{array}$ | Amount of pay roll |
| Food and kindred products | -1.6 | $-1.0$ | Chemicals and allied produets | -7.6+0.4 | -6.5+0.9 |
| Slaughtering and meat |  |  |  |  |  |
| pancking | -3.0 -4.9 |  |  | -11.3-16.2 | -8.0 |
| Ice cream | -3.9 | -5.0 -2.7 | Petroleum refining |  | -14.9 |
| Flour | -2.8+1.7+1.3 | -0.7+2.6+3.4 |  | -16.2 |  |
| Baking |  |  | Stone, clay, and glass prod- | -7.8-6.7 | -9.5-7.7 |
| Sugar refining, cane |  |  | ucts |  |  |
| Textiles and their products..- | +1.2 | +1.8+4.9 | Brick, tile, and terra cotta. | -9.0 | -11.7 |
| Cotton goods....-.-... | +4.4+0.7 |  | Pottery | $\begin{array}{r} -7.1 \\ -7.2 \end{array}$ | -4.9-9.8 |
| Hosiery and knit goods Silk goods |  | +2.1 |  |  |  |
| Wilk goods Woolen and worsted goods.-- | $\begin{aligned} & -4.1 \\ & -6.3 \\ & -1.2 \end{aligned}$ | $\begin{aligned} & -5.0 \\ & -6.7 \\ & -7.3 \end{aligned}$ | Metal products, other than |  |  |
| Woolen and worsted goods.-- Carpets and rugs |  |  |  | -9.3 | -11.1 |
| Carpets and rugs Dyeing and finishing tex- |  |  | iron and steel |  |  |
| Dyeing and finishing textiles | +2.2-2.7 | $+2.0$ | Stamped and enameled ware. | -8.6 | -4.3 |
| Clothing, men's |  | -5. 4 | Brass, bronze, and copper products. | -9.6 |  |
| Shirts and collars.- | $\begin{aligned} & (1) \\ & +9.9 \\ & (1) \end{aligned}$ | $\begin{array}{r} -0.2 \\ +17.7 \\ +0.6 \end{array}$ |  |  | $-13.2$ |
| Clothing, women's Millinery and lace goods |  |  |  |  |  |
| Millinery and lace goods |  |  | Tobaceo products .----.-.-. | +2.6 | -0.7 |
| Iron and steel and their products. | -10.9 | -15.0 | Chewing and smoking tobacco and snuff | $+1.8$ | +3.6 |
| products <br> Iron and steel |  |  |  | +2.7 | $-1.2$ |
| Cast-iron pipe | $-11.3$ | -16.4 |  |  |  |
| Structural ironwork | $\begin{array}{r} -15.8 \\ -8.7 \end{array}$ | $\begin{array}{r} -24.5 \\ -9.3 \end{array}$ | Vehicles for land transportation | -9.8 | -10.1 |
| Foundry and machine-shop | $-10.7$ | -14.1 | Automobiles Carriages and wagons | -8.7+0.4 | $\begin{array}{r} -10.5 \\ -3.3 \end{array}$ |
| products |  |  |  |  |  |
| Hardware.. | -8.0-13.3 | $\begin{aligned} & -12.8 \\ & -14.8 \end{aligned}$ | Car building and repairing, electric-railroad | +1.1 | +1.8 |
| Machine tools |  |  |  |  |  |
| Steam fittings and steam | $\begin{array}{r} -7.5 \\ -12.4 \end{array}$ | -12.0-17.7 | Car building and repairing, steam-railroad | -11.6 | $-10.7$ |
| apparatus .-...-.........- |  |  |  |  |  |
| Stoves..- |  |  | Miscellaneous industries | $-9.0$ | -10.2-3.1 |
|  | $\begin{array}{r} -8.0 \\ -8.7 \end{array}$ | -7.9 | Electrical machinery, apparatus and supplies | $-5.5$ |  |
| Lumber and its products.---- |  |  |  | -6. 8 | -9.1 |
| Lumber, sawmills | $\begin{array}{r} -8.7 \\ -12.2 \\ -3.9 \end{array}$ | $-7.4$ | Pianos and organs <br> Rubber boots and shoes <br> Automobile tires <br> Shipbuilding, steel |  |  |
| Furniture... |  | -6.1 |  | +8.8 | -15.9 |
|  | -8,0 | -13.8 |  | $-6.0$ | -9.8 |
| Leather and its products Leather |  |  |  | $-13.7$ | $-12.8$ |
| Boots and shoes | $-9.6$ | $-17.7$ |  | -6.0 | $-8.0$ |
| Paper and printing | -1.4 | -0.3 |  |  |  |
| Paper and pulp. | -2.8 | -4.3 |  |  |  |
| Paper boxes. | -3.2 | -0.3 |  |  |  |
| Printing, book and job |  | $\begin{aligned} & +0.1 \\ & +2.7 \end{aligned}$ |  |  |  |
| Printing, newspapers. | +0.8 |  |  |  |  |

Recapitulation by Geographic Divisions

| GEOGRAPHIC DIVISION |  |  | GEOGRAPHIC DIVISION-con. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| New England | $-6.7$ | -8. 4 | West South Central | $-7.9$ | $-7.1$ |
| Middle Atlantic. | -7.9 | -10.2 | Mountain | -4.6 | $-3.7$ |
| East North Central | -5. 9 | -8. 0 | Pacific. | $-2.9$ | $-2.8$ |
| West North Central | -5.5 -0.7 | -7.0 -2.6 | All divisions | -6.0 | -8.0 |
| East South Central | -5.5. | -7.2 |  |  |  |

${ }^{1}$ No change.

## Per Capita Earnings

PER CAPITA earnings in November, 1927, for the 54 industries combined were 1.8 per cent lower than in October, 1927, and 2.1 per cent lower than in November, 1926.

Increases in per capita earnings in November, 1927, over October, 1927, appeared in 13 industries, and in 1 industry there was no change. The increases were less than 1 per cent except in car building and repairing and rubber boots and shoes. The outstanding decrease was in leather boots and shoes.

Employees in 24 industries were averaging greater earnings in November, 1927, than in November, 1926, the greatest increase having been in the women's clothing industry. The outstanding decrease in per capita earnings in this period was in the cast-iron pipe industry.
TABLE 4.-COMPARIONS OF PER CAPITA EARNINGS NOVEMBER, 1927, WITH OCTOBER, 1927, AND NOVEMBER, 1926


[^31]
## Wage Changes

THIRTEEN establishments in 8 industries reported increases in wage rates during the month ended November 15, 1927. These increases averaged 4.4 per cent and affected 1,426 employees, or onequarter of the total employees in the establishments concerned.

Thirty-three establishments in 10 industries reported decreases in wage rates during the same period. The decreases averaged 8.3 per cent and affected 4,608 employees or nearly one-half of the total employees in the establishments concerned.

These separate wage changes in themselves are of no especial significance. However, it may be noted that there were more decreases than increases reported and that more than three times as many employees were affected by the decreases as by the increases.

TABLE 5.-WAGE ADJUSTMENTS OCCURRING BETWEEN OCTOBER 15 AND NOVEMBER 15, 1927

${ }^{1}$ Less than one-half of 1 per cent.

## Indexes of Employment and Pay-roll Totals in Manufacturing Industries

INDEX numbers for November, 1927, and for September and
October, 1927, and November, 1926, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 industries suryeyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 6.

The general index of employment for November, 1927, is 85.9, this number being 1.9 per cent lower than the index for October, 1927, 2.4 per cent lower than the index for September, 1927, and 6 per cent lower than the index for November, 1926. The general index of pay-roll totals for November, 1927, is 87.8 , this number being 3.7 per cent lower than the index for October, 1927, 2.6 per cent lower than the index for September, 1927, and 8 per cent lower than the index for November, 1926.

TAble 6.-INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES-NOVEMBER, 1926, AND SEPTEMBER, OCTOBER, AND NOVEMBER,
[Monthly average, $1923=100$ ]

| Industry | Employment |  |  |  | Pay-roll totals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1926 | 1927 |  |  | 1926 | 1927 |  |  |
|  | No-vember | September | October | No-vember | $\begin{aligned} & \text { No- } \\ & \text { vem- } \\ & \text { ber } \end{aligned}$ | September | October | No-vember |
| General index | 91. 2 | 88,0 | 87.6 | 85.9 | 95.4 | 90.1 | 91.2 | 87.8 |
|  | 92.4 | 92.1 | 92.6 | 90.9 | 95.8 | 95.9 | 96.3 | 94.8 |
|  | 83.0 | 80.1 | 79.6 | 80.5 | 87.2 | 83.8 | 82.9 | 84.2 |
|  | 97.8 | 93.1 | 97.5 | 93.0 | 105. 4 | 101. 1 | 104.5 | 100. 1 |
|  | 84.5 | 95.7 | 86.7 | 81.2 | 90.1 | 104.4 | 94.0 | 87.7 |
|  | 91.9 | 90.9 | 91. 2 | 89.3 | 94.2 | 92.5 | 97.7 | 93.5 |
|  | 101. 9 | 104.7 | 105.6 | 103.6 | 106.3 | 110.1 | 110.8 | 109.1 |
|  | 88.9 | 95.1 | 95.9 | 90.1 | 87.9 | 95.2 | 97.3 | 90.9 |
| Textiles and their products. <br> Cotton goods <br> Hosiery and knit goods <br> Silk goods. <br> Woolen and worsted goods <br> Carpets and rugs. <br> Dying and finishing textiles <br> Clothing, men's <br> Shirts and collars <br> Clothing, women's <br> Millinery and lace goods | 86.1 | 86.9 | 87.6 | 87.1 | 84.8 | 88.6 | 90.2 | 86.3 |
|  | 84.2 | 87.5 | 87.9 | 87.9 | 82.9 | 88.1 | 89.3 | 87.0 |
|  | 98.8 | 96.5 | 98.1 | 99.5 | 113.9 | 108.3 | 117.0 | 116.3 |
|  | 100.2 | 98. 1 | 97.2 | 96.1 | 106.2 | 104.5 | 105.3 | 100.9 |
|  | 86.1 | 78.9 | 79.8 | 80.7 | 85.3 | 78.6 | 80.4 | 79.6 |
|  | 96.6 | 94.2 | 94.0 | 95.4 | 99.4 | 90.8 | 90.5 | 92.1 |
|  | 98.8 | 98.3 | 100. 1 | 101. 0 | 102.3 | 103.3 | 106. 3 | 104.3 |
|  | 81.7 | 83.9 | 83.1 | 79.5 | 70.8 | 78.6 | 75.4 | 67.0 |
|  | 83.3 | 79.0 | 81.2 | 83.3 | 86.0 | 80.4 | 85.8 | 85.8 |
|  | 74.0 | 80.8 | 84.1 | 81.3 | 69.5 | 87.3 | 90.3 | 81.8 |
|  | 67.0 | 70.0 | 67.0 | 67.0 | 67.7 | 75.2 | 73.1 | 68.1 |
| Iron and steel and their products <br> Iron and steel <br> Cast-iron pipe. <br> Structural ironwork <br> Foundry and machine-shop products. <br> Hardware <br> Machine tools <br> Steam fittings and steam and hot-water heating apparatus. <br> Stoves. | 90.5 | 84.0 | 82.6 | 80.6 | 96.0 | 84. 7 | 84.4 | 81.6 |
|  | 97.0 | 88.7 | 87.6 | 86.0 | 103.0 | 88.2 | 88.3 | 86.1 |
|  | 103.1 | 91.5 | 88.8 | 86.8 | 105. 3 | 92. 5 | 87.2 | 79.5 |
|  | 100.1 | 96.0 | 93.1 | 91.4 | 107.1 | 100.7 | 101.7 | 97.1 |
|  | 84.1 | 79.0 | 77.4 | 75.1 | 87.0 | 78.5 | 77.6 | 74.7 |
|  | 85.8 | 80.3 | 79.7 | 78.9 | 97.1 | 85.5 | 86.7 | 84.7 |
|  | 104.2 | 92.1 | 91.9 | 90.3 | 117. 2 | 101.3 | 101.0 | 99.8 |
|  | 92.4 | 93.0 | 90.7 | 85.5 | 95.0 | 96. 7 | 95.4 | 83.6 |
|  | 91.6 | 80.6 | 82.1 | 80.2 | 97.4 | 80.9 | 84.1 | 80.2 |
| Lumber and its products <br> Lumber, sawmills <br> Lumber, millwork <br> Furniture | 90.2 | 85.1 | 84.5 | 85.0 | 100.0 | 93.7 | 94.5 | 92.1 |
|  | 85.4 | 81.2 | 79.8 | 78.0 | 94. 7 | 90.3 | 90.0 | 87.7 |
|  | 95.7 103.7 | 87.7 | 86.1 | 84.0 | 103. 1 | 93.3 | 93.1 | 88.9 |
|  | 103.7 | 97.1 | 99.7 | 99.7 | 116.6 | 105. 7 | 111.1 | 109.5 |
| Leather and its products $\qquad$ Leather <br> Boots and shoes | 92.0 | 91.3 | 89.4 | 84.6 | 87.4 | 91.0 | 85.4 | 75.3 |
|  | 92.2 | 89.2 | 88.8 | 88.9 | 93.3 | 88.8 | 89.0 | 88.7 |
|  | 92.0 | 92.0 | 89.6 | 83.2 | 85.1 | 91.9 | 83.9 | 70.0 |
|  | 106.6 | 103.4 | 104. 2 | 105.1 | 115.0 | 111.7 | 113.7 | 114.7 |
| Paper and pulp | 95. 8 | 93.3 | 93.3 | 93.1 | 103. 5 | 96.7 | 99. 5 | 99.0 |
| Paper boxes..... | 107. 2 | 99.6 | 102.9 | 103. 8 | 117.9 | 110.8 | 117.6 | 117.5 |
| Printing, book and jo | 107. 1 | 104. 0 | 102.9 | 105. 5 | 116. 6 | 114.9 | 114.3 | 116.7 |
| Printing, newspapers .-...-...---- | 115.9 | 114.0 | 116.4 | 116.8 | 123.4 | 122.9 | 125.3 | 126.7 |
| Chemicals and allied products.... | 99.2 | 93.8 | 92.6 | 91. 7 | 103.6 | 98.5 | 98.3 | 96.9 |
| Chemicals . .-...-...- | 96.8 | 95.3 | 96.3 | 97.2 | 107. 6 | 104.6 | 108.9 | 108.6 |
| Pertilizers | 100.8 | 95.2 | 91.8 | 89.4 | 105. 2 | 110.7 | 109.0 | 96.8 |
| Petroleur | 101. 7 | 91.1 | 87.9 | 85.2 | 98.9 | 88.5 | 86.6 | 84.2 |
| Stone, clay, and glass products ..- | 100.9 | 95.0 | 93.4 | 93.0 | 108.9 | 99.4 | 100.6 | 98.6 |
| Cement | 92.9 | 92.4 | 90.0 | 86.7 | 98.7 | 97.5 | 96.1 | 91. 0 |
| Brick, tile, and terra co | 99.0 | 97.8 | 92.8 | 90.1 | 104.7 | 100.6 | 96.3 | 92.5 |
| Pottery | 108. 7 | 96.7 | 98.6 | 101.0 | 117. 6 | 104.4 | 111. 1 | 111.8 |
| Glass. | 102. 6 | 92.5 | 93.3 | 95.2 | 113.4 | 97.3 | 102.5 | 102.3 |
| Metal products, other than iron and steel |  |  |  |  |  |  |  |  |
|  | 95.4 | 88.9 | 87.9 | 86.5 | 95.7 | 86.9 | 86.7 | 85.1 |
| Stamped and enameled ware Brass, bronze, and copper products. | 91.4 | 82.9 | 83.4 | 83.5 | 86.5 | 78.8 | 82.7 | 82.8 |
|  | 97.2 | 91.6 | 89.9 | 87.9 | 99.1 | 88.7 | 88.2 | 86.0 |
| Tobacco products | 86.8 | 87.8 | 89.8 | 89.1 | 91.9 | 91.4 | 92.3 | 91.3 |
| Chewing and smoking tobacco and snuff | 93.2 | 91.3 | 95.7 | 94.9 | 91.2 | 93.1 | 102. 2 |  |
| Cigars and cigarettes | 86.0 | 87.4 | 89.0 | 88.3 | 92.0 | 91.2 | 91.1 | 90.9 |

TABLE 6. -INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES-NOVEMBER, 1926, AND SEPTEMBER, OCTOBER, AND NOVEMBER, 1927-Continued

| Industry | Employment |  |  |  | Pay-roll totals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1926 | 1927 |  |  | 1926 | 1927 |  |  |
|  | $\begin{aligned} & \text { No- } \\ & \text { Nem- } \\ & \text { ber } \end{aligned}$ | Sep- tember | October | $\begin{aligned} & \text { No- } \\ & \text { vem- } \\ & \text { ber } \end{aligned}$ | $\begin{aligned} & \text { No- } \\ & \text { vem- } \\ & \text { ber } \end{aligned}$ | September | October | $\begin{aligned} & \text { No- } \\ & \text { vem- } \\ & \text { ber } \end{aligned}$ |
| Vehicles for land transportation. Automobiles. <br> Carriages and wagons...................... <br> Car building and repairing, elec-tric-railroad | $\begin{aligned} & 85.1 \\ & 95.5 \\ & 73.5 \end{aligned}$ | $\begin{aligned} & 81.7 \\ & 96.2 \end{aligned}$ | 80.992.57.8 | 76.887.2 | 87.996.4 | 81.694.5 | 84.298.1 | 79.086.375.3 |
|  |  |  |  |  |  |  |  |  |
|  |  |  | 74.8 |  | 77.9 | 81.2 |  |  |
|  | 87.9 | 90.8 | 90.0 | 88.9 | 90.5 | 91.5 | 91.2 | 92.1 |
| Car building and repairing, steam-railroad................... | 78.6 | 72.0 | 71.4 | 69.5 | 82.5 | 72.8 | 74.9 | 73.7 |
| Miscellaneous industries Agricultural implements Electrical machinery, apparatus, and supplies | 98.693.8 | $\begin{aligned} & 91.4 \\ & 84.0 \end{aligned}$ | $\begin{aligned} & 90.8 \\ & 87.6 \end{aligned}$ | $\begin{aligned} & 89.7 \\ & 88.6 \end{aligned}$ | $\begin{aligned} & 102.9 \\ & 102.9 \end{aligned}$ | $\begin{aligned} & 93.2 \\ & 90.7 \end{aligned}$ | $\begin{aligned} & 96.5 \\ & 98.4 \end{aligned}$ | 92.4 |
|  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{r} 101.3 \\ 97.7 \\ 86.8 \\ 103.5 \\ 97.2 \end{array}$ | $\begin{array}{r} 93.9 \\ 85.5 \\ 89.4 \\ 10.7 \\ 86.3 \end{array}$ | $\begin{array}{r} 95.1 \\ 87.8 \\ 92.0 \\ 102.1 \\ 84.9 \end{array}$ | $\begin{aligned} & 94.4 \\ & 88.4 \\ & 94.4 \\ & 97.3 \\ & 83.9 \end{aligned}$ | $\begin{array}{r} 105.6 \\ 116.6 \\ 95.0 \\ 104.3 \\ 101.0 \end{array}$ | 94.396.0902.3109.787.5 | $\begin{array}{r} 100.4 \\ 100.0 \\ 105.1 \\ 104.3 \\ 91.6 \end{array}$ | $\begin{array}{r}96.0 \\ 98.1 \\ \text { 109.6 } \\ \text { 94. } \\ 88.1 \\ \hline 8.1\end{array}$ |
| Pianos and organs Rubber boots and sh |  |  |  |  |  |  |  |  |
| Automobile tires....... |  |  |  |  |  |  |  |  |
| Shipbuilding, steel |  |  |  |  |  |  |  |  |

Table 7 shows the general index of employment in manufacturing industries and the general index of pay-roll totals from January, 1923, to November, 1927.

Following Table 7 is a graph made from index numbers, showing clearly the course of employment for each month of 1926 and for each completed month of 1927. This chart makes possible a comparison between corresponding months of the two years and represents the 54 separate industries combined and shows the course of pay-roll totals as well as the course of employment.

TABLE 7. -GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES JANUARY, 1923, TO NOVEMBER, 1927
[Monthly average, 1923=100]

| Month | Employment |  |  |  |  | Pay-roll totals |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1923 | 1924 | 1925 | 1926 | 1927 | 1923 | 1924 | 1925 | 1926 | 1927 |
| January | 98.0 | 95.4 | 90.0 | 92.3 | 89.4 | 91.8 | 94.5 | 90.0 | 93.9 | 90.9 |
| February | 99.6 | 96. 6 | 91.6 | 93.3 | 91.0 | 95.2 | 99.4 | 95.1 | 97.9 | 96.4 |
| March | 101.8 | 96. 4 | 92.3 | 93.7 | 91.4 | 100.3 | 99.0 | 96.6 | 99.1 | 97.7 |
| April | 101.8 | 94.5 | 92.1 | 92.8 | 90.6 | 101. 3 | 96.9 | 94.2 | 97.2 | 96.6 |
| May | 101.8 | 90.8 | 90.9 | 91.7 | 89.7 | 104.8 | 92.4 | 94.4 | 95.6 | 95.6 |
| June | 101.9 | 87.9 | 90.1 | 91.3 | 89.1 | 104.7 | 87.0 | 91.7 | 95.5 | 93.3 |
| July | 100.4 | 84.8 | 89.3 | 89.8 | 87.3 | 99.9 | 80.8 | 89.6 | 91.2 | 89.1 |
| August | 99.7 | 85.0 | 89.9 | 90.7 | 87.4 | 99.3 | 83.5 | 91.4 | 94.6 | 91.0 |
| September | 99.8 | 86.7 | 90.9 | 92.2 | 88.0 | 100.0 | 86. 0 | 90.4 | 95.1 | 90.1 |
| October- | 99.3 | 87.9 | 92.3 | 92.5 | 87.6 | 102.3 | 88.5 | 96.2 | 98.6 | 91.2 |
| November | 98.7 | 87.8 | 92.5 | 91.4 | 85.9 | 101.0 | 87.6 | 96.2 | 95.4 | 87.8 |
| December- | 96.9 | 89.4 | 92.6 | 90.9 |  | 98.9 | 91.7 | 97.3 | 95.6 |  |
| Average | 100.0 | 90.3 | 91.2 | 91.9 | 188.9 | 100.0 | 90.6 | 93.6 | 95.8 | 192.7 |

[^32]
## Proportion of Time Worked and Force Employed in Manufacturing Industries in November, 1927

REPORTS from 8,904 establishments in November, 1927, show that 1 per cent of these establishments were idle, 78 per cent were operating on a full-time schedule, and 22 per cent on a parttime schedule; 38 per cent had a normal full force of employees, and 62 per cent were operating with reduced forces.

The establishments in operation were employing an average of 85 per cent of a normal full force of employees and were operating an average of 96 per cent of full time. These percentages indicate a drop of over 3 per cent in average force employed and a decrease of 1 per cent in operating time since the October report.

TABLE 8.-ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN NOVEMBER, 1927

${ }^{1}$ Less than one-half of 1 per cent.

TABLE 8.-ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN NOVEMBER, 1927-Continued

| Industry | Establishments reporting |  | Per cent of establishments op-erating- |  | Average per cent of full time operated by es-tablishments operating | Per cent of establishments operating with- |  | A verage per cent of normal full force employed by es-tablishments operating |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total number | Per cent idle | Full time | Part time |  | $\begin{gathered} \text { Full } \\ \text { normal } \\ \text { force } \end{gathered}$ | Part normal force |  |
| Chemicals and allied products. | 300 | ${ }^{(1)}$ | 85 | 15 | 97 | 25 | 75 | 79 |
| Chemicals | 97 |  | 91 | 9 | 99 | 49 | 51 | 95 |
| Fertilizers | 164 | 1 | 78 | 21 | 96 | 13 | 87 | 55 |
| Petroleum refining | 39 |  | 100 |  | 100 | 13 | 87 | 79 |
| Stone, clay, and glass products | 535 86 | 2 | 81 95 | 16 5 | 97 98 | 28 | 70 80 | 86 83 |
| Cement | 86 316 |  | 95 75 | $\begin{array}{r}5 \\ 22 \\ \hline\end{array}$ | 98 | 20 25 | 80 71 | 83 81 |
| Brick, tile, and terra-cotta | 316 51 | 4 | 75 <br> 84 | 22 | 96 97 | 25 | 71 53 | 81 95 |
| Glass.-- | 82 |  | 90 | 10 | 98 | 37 | 63 | 91 |
| Metal products, other than iron and steel | 174 |  | 68 | 32 | 95 | 27 | 73 | 82 |
| Stamped and enameled ware ---.---- | 49 |  | 82 | 18 | 97 | 39 | 61 | 77 |
| Brass, bronze, and copper products.-- | 125 |  | 62 | 38 | 94 | 22 | 78 | 84 |
| Tobaceo products. | 126 | 2 | 79 | 20 | 97 | 53 | 45 | 97 |
| Chewing and smoking tobacco and snuff. | 26 | 4 | 69 | 27 | 95 | 54 | 42 | 94 |
|  | 100 | 1 | 81 | 18 | 97 | 53 | 46 | 97 |
| Vehicles for land transportation....-- | 1, 009 | (1) | 84 | 16 | 98 | 41 | 59 | 77 |
| Automobiles | 170 |  | 71 | 29 | 94 | 31 | 69 | 73 |
| Carriages and wagons | 53 |  | 72 | 28 | 96 | 28 | 72 | 78 |
| Car building and repairing, electricrailroad | 346 | (1) | 91 | 9 | 99 | 62 | 38 | 96 |
| Car building and repairing, steamrailroad. | 440 |  | 84 | 16 | 98 | 31 | 69 | 81 |
| Miscellaneous industries | 346 | (1) | 71 | 29 | 95 | 29 | 71 | 84 |
| Agricultural implements .-...-..........- | 92 |  | 65 | 35 | 94 | 21 | 79 | 79 |
| Electrical machinery, apparatus, and supplies | 137 |  | 73 | 27 | - 95 | - 35 | 65 | 88 |
|  | 29 |  | 69 | 31 | 95 | 38 | 62 | 83 |
| Rubber boots and shoes. | 10 |  | 80 | 20 | 99 | 90 | 10 | 99 |
| Automobile tires... | 50 | 2 | 60 | 38 | 90 | 12 | 86 | 80 |
| Shipbuilding, steel | 28 |  | 93 | 7 | 100 | 29 | 71 | 71 |
| All industries | 8,904 | 1 | 78 | 22 | 96 | 38 | 62 | 85 |

${ }^{1}$ Less than one-half of 1 per cent.

## Employment and Pay-Roll Totals on Class I Railroads, October, 1926, and September and October, 1927

THE number of employees on the 15th of October, 1927, and the total earnings of employees in the entire month of October, 1927, on Class I railroads of the United States are shown in the table following, together with similar information for September, 1927, and October, 1926. The data are presented for all occupations combined, excluding executives and officials, and also for the six general groups of occupations; under each group data are shown separately for a few of the more important occupations.

Class I railroads are roads having operating revenues of $\$ 1,000,000$ a year and over.

EMPLOYMENT AND TOTAL MONTHLY EARNINGS OF RAILROAD EMPLOYEESOCTOBER, 1926, AND SEPTEMBER AND OCTOBER, 1927
[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

| Occupation | Number of employees at middle of month |  |  | Total earnings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1926$ <br> October | 1927 |  | $\begin{gathered} 1926 \\ \text { October } \end{gathered}$ | 1927 |  |
|  |  | $\begin{aligned} & \text { Septem- } \\ & \text { ber } \end{aligned}$ | October |  | September | October |
| Professional, clerical, and general. | $\begin{array}{r} 287,916 \\ 169,370 \\ 25,609 \end{array}$ | $\begin{gathered} 279,745 \\ 162,016 \\ 25,083 \end{gathered}$ | $\begin{array}{r} 279,337 \\ 162,102 \\ 25,026 \end{array}$ | $\begin{array}{r} \$ 39,932,132 \\ 22,293,481 \\ 3,174,180 \end{array}$ | $\begin{array}{r} \mathbf{\$ 3 9}, \mathbf{5 8 5}, \mathbf{0 0 9} \\ 21,714,252 \\ 3,170,307 \end{array}$ | $\begin{array}{r} \$ 40,103,740 \\ 22,114,927 \\ 3,202,968 \end{array}$ |
| Sterks.............. |  |  |  |  |  |  |
| Maintenance of way and structures | 457,808 | 454,129 | 444, 943 | 42,889, 169 | 41,487, 966 | 41, 668,794 |
| Laborers, extra gang and work train. | 79, 127 | 80,626 | 76,682 | 6, 354, 437 | 6, 260, 893 | 6, 044,881 |
| Laborers, track and roadway section. | 233, 988 | 233, 990 | 230, 553 | 17, 561, 102 | 16, 859,456 | 17, 141, 946 |
| Maintenance of equipment and stores. | $\begin{array}{r} 519,506 \\ 114,151 \\ 60,747 \\ 114,872 \end{array}$ | $\begin{array}{r} 480,999 \\ 103,790 \\ 57,836 \\ 105,944 \end{array}$ | $\begin{array}{r} 482,368 \\ 104,052 \\ 58,207 \\ 106,583 \end{array}$ | 69, 807, 555 | 62, 816, 643 | 65,374, 505 |
| Carmen. |  |  |  | 17, 386, 108 | 15, 358,527 | 16, 052,270 |
| Machinists....-1. |  |  |  | 19,922, 807 | 9, ${ }^{\text {9, }}$, 684,6895 | 9, ${ }^{\text {, } 2,2642,834}$ |
| Laborers (shops, engine houses, power plants, and stores) | 42,829 | 40, 369 | 40,409 | 4, 128, 725 | 3, 799, 321 | 3, 958, 285 |
| Common laborers (shops, engine houses, power plants, and stores) | 60, 267 | 54, 472 | 54, 579 | 5,045, 035 | 4,360, 541 | 4, 575, 148 |
| Transportation, other than train, engine, and yard <br> Station agents | $\begin{array}{r} \mathbf{2 1 4 , 1 3 6} \\ 30,597 \end{array}$ | $\begin{gathered} \mathbf{2 0 7 , 1 9 1} \\ 30,327 \end{gathered}$ | $\begin{gathered} 206,841 \\ 30,271 \end{gathered}$ | $\begin{array}{r} 26,624,931 \\ 4,791,560 \end{array}$ | $\begin{array}{r} 25,7 \theta 3,568 \\ 4,757,548 \end{array}$ | $\begin{array}{r} 26,134,844 \\ 4,810,645 \end{array}$ |
| Telegraphers, telephoners, and towermen | 30,597 25,714 | 24, 464 | 24, 420 | 3, 952, 260 | 3, 712, 754 |  |
| Truckers (stations, warehouses, and platforms) | $\begin{aligned} & 41,526 \\ & 22,256 \end{aligned}$ | $37,821$ | 38,455 | $\begin{aligned} & 3,990,135 \\ & 1,672,01 \end{aligned}$ | $\begin{aligned} & 3,635,708 \\ & 1,689,082 \end{aligned}$ | $\begin{aligned} & 3,753,790 \\ & 1,677,708 \end{aligned}$ |
| Crossing and bridge flagmen and gatemen. |  | 21, 921 |  |  |  |  |
| Transportation (yard masters, switch tenders, and hostlers).... | 24,347 | 23,146 | 23,089 | 4,572,569 | 4,451,053 | 4, 529, 309 |
| Transportation, train and engine. | $\begin{array}{r} 345,496 \\ 38,920 \\ 79,215 \\ 57,742 \\ 46,402 \\ 47,507 \end{array}$ | $\begin{array}{r} 325,550 \\ 37,080 \\ 74,141 \\ 53,545 \\ 44,402 \\ 45,386 \end{array}$ | $\begin{array}{r} \mathbf{3 2 9 , 9 5 1} \\ 37,531 \\ 75,551 \\ 54,481 \\ 44,654 \\ 45,552 \end{array}$ | $\begin{array}{r} 71,697,759 \\ 9,558,669 \\ 14,380,951 \\ 10,315,078 \\ 12,977,002 \\ 9,648,695 \end{array}$ | 67,050,110 <br> 9, 076, 401 <br> 13, 436, 554 <br> 12, 062, 898 <br> 9, 048, 616 | 70,035, 165 <br> $9,342,127$ $13,955,596$ <br> $10,306,206$ <br> $12,516,603$ $9,392,012$ <br> 9, 392, 012 |
| Road conductors.-..............- |  |  |  |  |  |  |
| Road brakemen and flagmen-..-- |  |  |  |  |  |  |
| Yard brakemen and yard helpers |  |  |  |  |  |  |
| Road engineers and motormen .-. Road firemen and helpers |  |  |  |  |  |  |
| All occupations | 1, 849, 209 | 1,770,760 | 1,613,529 | 255, 524, 115 | 241, 094, 349 | 247, 846,357 |

## Unemployment of Organized Building-Trades Workers in Massachusetts

THE following data on unemployment of organized buildingtrades workers in Massachusetts on the first day of the month in April, June, August, October, and November, 1927, have been taken from statements furnished by the Massachusetts Department of Labor and Industries. The tabulations from which these figures are taken represent one of the few attempts being made in the United States to gather and publish data on unemployment. The figures are therefore of particular interest.

TABLE 1.-NUMBER AND PER CENT OF UNION MEMBERSHIP REPORTED AS UNEMPLOYED ON DATE SPECIFIED, BY CAUSE OF UNEMPLOYMENT

| Classification | Date of report |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{1927}{\operatorname{Apr}, 1}$ | $\begin{aligned} & \text { June } 1, \\ & 1927 \end{aligned}$ | $\underset{1927}{ }{ }_{1}$ | $\begin{aligned} & \text { Oct. 1, } \\ & { }_{1927}, \end{aligned}$ | Nov. 1, 1927 |
| Number of unions reporting.... Membership of unions reporting | $\begin{array}{r} 273 \\ 47,565 \end{array}$ | $\begin{array}{r} 271 \\ 48,947 \end{array}$ | $\begin{array}{r} 267 \\ 49,671 \end{array}$ | $\begin{array}{r} 289 \\ 51,529 \end{array}$ | 286 51,484 |
| Number of members reported as unemployed because of - |  |  |  |  |  |
| Lack of work or materials........................... | 11,745 | 7, 631 | 6,145 | 5, 896 | 6, 195 |
| Sickness, accident, or old | 826 | 849 | 947 | 871 | 780 |
| Unfavorable weather. | 139 | 161 | 120 | 26 | 27 |
| Other reasons... | 262 | 3 | 20 |  |  |
| Total, all causes | 13, 038 | 9,104 | 7,287 | 6,944 | 7,052 |
| Per cent of members unemployed because of - |  |  |  |  |  |
| Strike or lockout........... | 24.1 | 15.6 | 12.4 | 11.4 | 12.0 |
| Sickness, accident, or old age | 1. 7 | 1.7 | 1.9 | 1.7 | 1.5 |
| Unfavorable weather. Other reasons........... | . 3 |  |  |  | ${ }_{(1)} .1$ |
| Total, all causes | 27.4 | 18.4 | 14.7 | 13.5 | 13.7 |

${ }^{1}$ Less than one-tenth of 1 per cent.
It will be noted that the percentage of unemployment of organized workers in the building trades of Massachusetts from all causes was practically the same on November 1 (13.7 per cent) as on October 1 (13.5 per cent) but that it represented an improvement over the preceding months listed. Lack of work or materials accounted for the largest amount of unemployment ( 12 per cent), as it did in the previous months. There was a slight increase from this cause over October but a decrease from the figures for the earlier months24.7 per cent on April 1, 15.6 per cent on June 1, and 12.4 per cent on August 1. The percentage unemployed on account of sickness, accident, or old age was practically the same on the five dates specified, the highest figure being 1.9 on August 1 as against 1.5 on November 1. Those unemployed on account of strikes or lockouts constituted only 0.1 per cent on November 1, the same as on April 1 and August 1, as compared with 0.9 on June 1 and 0.3 on October 1. Unemployment due to unfavorable weather and other reasons was almost negligible.

## Unemployment in the Principal Occupations

T
ABLE 2 shows the extent of unemployment of organized building tradesmen in the principal occupations on the first day of April, August, October, and November, 1927.

TABLE 2.-NUMBER AND PER CENT OF ORGANIZED BUILDING-TRADES WORKERS UNEMPLOYED IN MASSACHUSETTS ON NOVEMBER 1, 1927, IN THE PRINCIPAL OCCUPATIONS, AND PER CENT UNEMPLOYED ON APRLL 1, AUGUST 1, AND

| Occupation | Nov. 1, 1927 |  |  |  | Per cent unemployed, all causes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of umions reporting | Mem-bership | Unemployed, all causes |  |  |  |  |
|  |  |  | $\mathrm{Num}_{\text {ber }}$ | Per cent | $\text { Apr. }_{1927}$ | $\text { Aug. }_{1927}$ | $\begin{aligned} & \text { Oct. 1, } \\ & 1927 \end{aligned}$ |
| Bricklayers, masons, and plasterers | 39 | 5,968 | 566 | 9.5 | 30.2 | 10.8 | 10.0 |
| Carpenters.--......... | 96 | 20,520 | 2, 614 | 12. 7 | 27.7 | 15. 1 | 12.2 |
| Electrical workers | 15 | 2,401 | , 162 | 6.8 | 16.1 | 15.4 | 9.0 |
| Lathers...---.-....-..............- | 18 | 8, 984 | 1,876 | 20.9 7 | 30.5 | 16. 8 | 19.9 |
| Painters, decorators, and paper hangers | 46 | 5,659 | 1,237 | 21.9 | 22. 7 | 8. 6 | 6.3 20.9 |
| Plumbers, gas fitters, and steam fitters. | 36 | 4,026 | -238 | 5.9 | 31.5 | 15. 2 | 6. 0 |
| Sheet-metal workers | 11 | . 965 | 40 | 4.1 | 18.3 | 19.5 | 4. 2 |
| Other occupations. | 15 | 2,538 | 286 | 11.3 | 26.5 | 14.0 | 13.7 |
| All occupations | 286 | 51,484 | 7,052 | 13.7 | 27.4 | 14.7 | 13.5 |

## State Reports on Employment

## California

THE November, 1927, Labor Market Bulletin, issued by the Division of Labor Statistics and Law Enforcement of the Department of Industrial Relations of California, shows the following changes in volume of employment and pay roll from October, 1926, to October, 1927, in 793 establishments in that State:

PER CENT OF OHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 793 CALIFORNIA ESTABLISHMENTS, OCTOBER, 1927, COMPARED WITH OCTOBER, 1926


PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 793 CALIFORNIA ESTABLISHMENTS, OCTOBER, 1927, COMPARED WITH OCTOBER, 1926-Continued


## Illinois

THE following statistics showing the changes in employment and earnings in Illinois factories in Oc tober, 1927, as compared with September, 1927, are taken from the November, 1927, issue of the Labor Bulletin, published by the Illinois Department of Labor:

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM SEPTEMBER TO OCTOBER, 1927

| Industry | Per cent of change from September to October, 1927 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Employment |  |  | $\begin{aligned} & \text { Total } \\ & \text { earnings } \end{aligned}$ |
|  | Males | Females | Total employees |  |
| Stone, clay, and glass products: <br> Miscellaneous stone and mineral products. <br> Lime, cement, and plaster. <br> Brick, tile, and pottery $\qquad$ <br> Glass $\qquad$ <br> Total $\qquad$ |  |  |  |  |
|  | -3.7 | -8. 3 | -3.8 | -2.5 |
|  | $-1.4$ | -25.0 | -1.8 | -6.2 |
|  | -5.7 -.4 | -14.3 +21.4 | -5.8 | +11.9 |
|  | -3.6 | +12.6 | -3.6 | +1.6 |
| Metals, machinery, conveyances: |  |  |  |  |
| Iron and steel ---.-.-.-.-.-.- | -1.0 | $-1.2$ | $-4.0$ | $-2.8$ |
| Tools and cutlery.............- | - -2.1 | -8.4 +3.7 | -1.5 | +2.7 +12.5 |
| Cooking, heating, ventilating appa | -1.3 | +14.0 | -. 6 | +19.5 |
| Brass, copper, zinc, babbitt metal | +1.6 | -5.9 | +1.6 | +2.1 |
| Cars and locomotives... | -12.4 | -15. 3 | -12.4 | -11.3 |
| Automobiles and accessorie | +3.3 | +8.4 | +3.8 | +14.0 |
| Machinery .-...- | +1.3 | +6.4 | +2.8 | +7.2 |
| Electrical apparatus. | +3.0 | +4.9 | +2.8 | +15.2 |
| Agricultural implements. | +11.8 | +8.3 | +11.8 | +28.4 |
| Instruments and appliances. | +7.5 | +18.6 | +7.8 | +10.4 |
| Watches, watch cases, clocks, and jewelry | +. 6 | -. 1 | +.3 | -1.3 |
| Total | +. 8 | +1.7 | +1.0 | +4.8 |
| Wood products: |  |  |  |  |
| Sawmill and planing-mill products. | -5. 5 | +6.3 | -5. 3 | $-5.4$ |
| Pianos, organs, and other musical inst | +2.3 | +1. 7 | +5.4 |  |
| Miscellaneous wood products...... | $+1.4$ | +34.1 | +2.4 +3.8 | +12.6 |
| Household furnishings. | +. 4 | -3.2 | -. 8 | +5.6 |
| Total | +1.7 | +7.6 | +2.0 | +5.0 |
| Furs and leather goods: |  |  |  |  |
| Leather--....... | -1.8 | -. 3 |  | +4.5 |
| Furs and fur goods. | +10.4 | -14.0 | -1.1 |  |
| Boots and shoes..-.....- | -1.3 | $-1.2$ | -1.1 +3.6 | $-2.3$ |
| Miscellaneous leather goo | +3.4 | +3.8 | +3.6 | +9.5 |
| Total | -1.0 | -. 3 | -. 8 | -. 1 |
| Chemicals, oils, paints, etc.: <br> Dragg and chemicals |  |  |  |  |
|  |  |  |  |  |  |
| Mineral and vegetable oil | -4.0 | + +20.4 +20 | -2.6 | +8.0 +.9 |
| Miscellaneous chemical products. | -. 7 | -3.0 | -1.0 | +2.5 |
| Total. | -1.5 | +3.0 | -. 3 | $+3.8$ |
| Printing and paper goods:Paper boxes, bags, and tubes |  |  |  |  |
|  |  |  |  |  |  |
| Miscellaneous paper goods. <br> Job printing | +9 $+\quad 4$ | +2.0 -6.7 | +1.4 -1.4 | +4.0 +2.3 |
| Newspapers and periodicals | +4.4 +4.5 | -6. 0 | -1.4 | +2.3 +8.1 |
| Edition bookbinding......... | -2.7 | +3.9 | +.7 | +1.5 |
| Total. | +1.4 | -. 3 | +1.0 | +4.9 |

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FAOTORIES FROM SEPTEMBER TO OCTOBER, 1927-Continued

| Industry | Per cent of change from September to October, 1927 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Employment |  |  | Totalearnings |
|  | Males | Females | Total employees |  |
| Textiles: |  |  |  |  |
| Cotton and woolen goods.-.-.-......- | -1.9 -.8 | +2.8 +10.6 |  | +9.3 +12.3 |
|  | +2. 2 | +10.6 +8.0 | +2.9 +4.6 | +12.3 +8.9 |
| Total | -. 6 | +7.6 | +2.7 | +11.0 |
| Clothing, millinery, laundering: |  |  |  |  |
| Men's clothing Men's shirts and furnishings | -2.0 | -2. 5 | $-2.4$ | $-2.3$ |
| Overalls and work clothing. | +5.6 +11.5 | +8.1 +27.8 | +2.3 +25.5 | $+18.7$ |
| Men's hats and caps. - | -2.5 | +8.3 +4.3 | +25.0 | ${ }_{-7.5}$ |
| Women's clothing.- | +. 2 | -2.8 | -1.9 | -4.6 |
| Women's underwear- | +3.4 | -2.7 | -2.0 | +7.3 |
| Women's hats...-............-..- | -13.0 -2.5 | -7.0 -3.6 | -8.5 -3.3 | -6. 5 |
| Total. | -1.9 | -1.4 | -1.5 |  |
| Food, beverages, and tobacco: |  |  |  |  |
| Flour, feed, and other cereal products. | -2.5 | -24.5 | -5.8 |  |
| Fruit and vegetable canning and preser | -43.4 | -75.8 | -53. 5 | -50.6 |
| Slaughtering and meat packing | $-2.8$ | +10.7 | -. 2 | +9.8 |
| Dairy products................. | -1.6 +.2 | +2.9 -2.6 | $-1.1$ | -2.5 |
| Bread and other bakery products | +6.2 | +2.8 | +5.1 | +15.6 |
| Confectionery | +9.1 | -19.7 | $-6.6$ | -7.6 |
| Beverages.-.----.......-...- | -15.0 | +32.1 +6.6 | $-4.3$ | $-10.3$ |
| Manufactured ice....---.......- | -5.6 -35.6 | +6.6 | +1.8 -35.6 | +6.2 -18.4 |
| Ice cream....... | -12.8 | -35.6 | -14.9 -14 | -23.1 |
| Total. | -4.4 | -13.1 | -5.4 | -3.6 |
| Total, all manufacturing industries | -. 5 | -1.4 | -. 5 | +2.6 |
| Trade-Wholesale and retail: |  |  |  |  |
| Department stores | +1.9 | +4.5 | +3.5 |  |
| Wholesale drygoods | +10.2 +4.4 | +31.2 | +19.7 | +6.6 |
| Mail order houses. | -4.4 +4.9 | .0 +.5 | -3.1 +2.8 | +11.7 +5.6 |
| Total. | +4.0 | +2.4 | +3.1 | $+5.7$ |
| Public utilities: |  |  |  |  |
| Water, light, and power | -. 1 | -. 9 |  |  |
| Telephone | +.8 | -. 4 | . 0 | . 0 |
| Reilway car repair shops. | -2.4 +.5 | -3.7 +1.6 | -1.9 +.5 | -4.9 +5.7 |
| Total. |  |  |  |  |
|  | -. 8 | -. 4 | -. 6 | -. 9 |
| Coal mining | +360. 2 |  | +360.2 | $+303.7$ |
| Building and contracting: |  |  |  |  |
|  |  |  |  |  |  |
| Road construction |  |  |  |  |
|  |  |  |  |  |
| Total | -9.6 |  | -9.6 | $-5.7$ |
| Grand total, all industries | +2.7 | -. 7 | +1.8 | +3.7 |

## Iowa

THE November, 1927, issue of the Iowa Employment Survey, published by the State bureau of labor, contains the following statistics showing the changes in number of employees in specified industries in Iowa in November, 1927, as compared with the previous month:

OHANGES IN VOLUME OF EMPLOYMENT IN IOWA, OCTOBER TO NOVEMBER, 1927


[^33]
## Maryland

THE following employment statistics for specified industries in Maryland were furnished by the commissioner of labor and industries of that State. The pay-roll period is for one week in all cases except "rubber tires," which is for one-half month.

CHANGES IN EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND, OCTOBER TO NOVEMBER, 1927

| Industry | $\begin{gathered} \text { Estab- } \\ \text { lish- } \\ \text { ments } \\ \text { reporting } \\ \text { for both } \\ \text { months } \end{gathered}$ | Employment |  | Pay roll |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees, ber, 1927 | $\begin{array}{\|c\|} \hline \text { Per cent } \\ \text { of change } \\ \text { as com- } \\ \text { pared } \\ \text { with } \\ \text { October, } \\ \text { 1927 } \end{array}$ | $\begin{aligned} & \text { Amount, } \\ & \text { November, } \\ & 1927 \end{aligned}$ | Per cent of change as com- pared with October, 1927 |
| Beverages and soft drinks | $\begin{array}{r} 4 \\ 7 \\ 6 \\ 4 \\ 3 \\ 3 \\ 4 \\ 4 \\ 3 \\ 5 \\ 3 \\ 5 \\ 6 \\ 4 \\ 3 \\ 4 \\ 9 \\ 3 \\ 10 \\ 3 \\ 4 \\ 4 \\ 3 \\ 8 \\ 4 \\ 4 \\ 7 \\ 1 \\ 3 \\ 3 \\ 3 \\ 4 \\ 4 \\ 6 \\ 18 \end{array}$ | $\begin{array}{r} 151 \\ 1,238 \\ 383 \\ 160 \\ 1,188 \end{array}$ | $\begin{array}{r}-10.7 \\ -6.8 \\ \hline\end{array}$ | $\$ 3,970$17,631 | -20.3-19.6 |
| Boots and shoes |  |  |  |  |  |
| Boxes, paper and fancy |  |  | -2.3 -6.5 |  | -1.6 |
| Boxes, wooden.... |  |  | +3.6 | 52, 449 | -3. 1 |
| Brick, tile, etc.- |  |  | +3.0 |  |  |
| Brushes |  | 661 <br> 561 | $\bigcirc$ | 10, 510 | +1.2+1.6-3.9 |
| Car building and repairing |  | 276 | -5.5+8.0 | 9,68634,513 |  |
| Chemicals.- |  | 1,324 |  |  | - +2.0 |
| Clothing, men's outer garment |  | 1, 118 | -25.2 | 15,920 0 | -68.8+6.7+8.8 |
| Clothing, women's outer garı |  |  | -3.1 | 9,770 |  |
| Confectionery |  | 985 | -5.3-.9 | 13, 603 |  |
| Cotton goods |  | 1,408 |  | 21,0509,802 | -8.8 +4.0 |
| Fertilizer |  | ${ }_{139} 13$ | -5.7+6.1 |  | 12.7+.9 |
| Food preparation. |  |  |  | 3,346  <br> 30,212 +.9 <br> -1  |  |
| Foundry |  | 1,157 | -1.1 |  |  |  |  |
| Furnishing goods, men's |  | 653 | -5.0 | $\begin{array}{r}9,158 \\ 25,001\end{array} \quad+4.5$ |  |
| Furniture.- |  | $930+6$ |  |  |  |  |
| Glass manufacture |  | $847-1.8$ |  |  |  |
| Ice cream. |  | 248 -7.5 |  | 8,262 -4.5 |  |
| Leather goods. |  | 508510 | -7.7 | 9, 168 - ${ }^{\text {13.8 }}$ |  |
| Lithographing |  |  | -1.6-1.5 | 13, $517 \quad-13.4$ |  |
| Lumber and planing |  | 184 |  | $\begin{array}{r}11,573 \\ 5,013\end{array} \quad-2.4$ |  |
| Mattresses and sprin |  |  | +11.5 |  |  |  |
| Plumbers' supplies. |  | 1,084 | -4.1 | 25, 928 -13.0 |  |
| Printing |  | 2,412 | -7.0 | 28,503 $\quad-.2$ |  |
| Rubber tires |  |  |  | 136, 028 | -5.9 |
| Shipbuilding |  | 527 <br> 375 | $\begin{array}{r}-20.3 \\ -8.4 \\ \hline\end{array}$ | 14, $046 \quad-22.7$ |  |
| Silk goods |  |  |  | 5,304 | -12.5 |
| Shirt manufacture. |  | + 459 | +5.5-4.0 | 6,488 | +1.3+6.9 |
| Stamping and enameling w |  |  |  | 19,981 |  |
| Tinware |  | 2, 748 | $\begin{array}{r} -3.0 \\ -0 \end{array}$ | 87,691 | ++8+8.8 |
| Tobacco |  |  |  |  |  |
| Miscellaneous |  | 4, 313 | -1.4 | 97, 924 |  |

## Massachusetts

APRESS release from the Department of Labor and Industries of Massachusetts shows the following changes in volume of employment in various industries in that State from September, 1927, to October, 1927:

NUMBER OF EMPLOYEES IN 1,003 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO SEPTEMBER 15 AND OCTOBER 15, 1927

| Industry | $\begin{aligned} & \text { Number } \\ & \text { of ef es } \\ & \text { otish- } \\ & \text { ments } \end{aligned}$ | Number of wage earners employed |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | September, 1927 | October, 1927 |  |  |
|  |  |  | Full time | Part time | Total |
| Bookbinding | $\begin{aligned} & 15 \\ & 40 \\ & 76 \\ & 76 \\ & 12 \\ & 48 \\ & 48 \end{aligned}$ |  | $\begin{array}{r} 798 \\ 2,019 \end{array}$ | $\begin{array}{r} 128 \\ 389 \\ 8,921 \end{array}$ | $\begin{array}{r} 926 \\ 2,4,48 \\ 23,396 \end{array}$ |
| Boot and shoe cut |  |  |  |  |  |
| Boxes, paper-- |  |  | $\begin{array}{r} 14,475 \\ 2,033 \\ 037 \end{array}$ | 8, 182 | ${ }_{2}^{2,215}$ |
| Boxes, wooden, packing ---7-3 ${ }^{\text {Bread and other bakery }}$ |  |  | 4,276615 | 2,717 | ${ }_{3,332}^{4,443}$ |
| Carpets and rugs........... |  |  |  |  |  |
| Cars and general shop construction an steam railroads |  |  |  | $\begin{aligned} & 2,812 \\ & 1,506 \\ & 315 \\ & 315 \end{aligned}$ |  |
| Clothing, men's | $\begin{array}{r} 4 \\ 28 \\ 32 \\ 17 \\ 15 \\ 51 \\ 20 \\ 9 \end{array}$ | 4,248 <br> 1,477 <br> 18 |  |  | 4, 208 |
| Clothing, women's |  |  |  |  | 1,4914,1181851 |
| Confectionery- |  | 4, 140 |  | 77 44 48 |  |
| Copper, tin, sh |  | [0,056 | -36,256 | 3,811801.824 | 40,067 |
| Cutlery and tools |  | 2, 2,0936,6129,477 |  |  |  |
| Dyeing and finishing textiles |  |  |  | $\begin{array}{r}234 \\ \hline 529 \\ \hline\end{array}$ | 6,736 <br> 9,933 <br> 93 |
| Electrical machinery, apparatus, and supplies |  | $\begin{aligned} & 9,477 \\ & 2,870 \end{aligned}$ |  |  |  |
| Foundry products | ${ }_{36}^{20}$ |  | $\underset{\substack{2,134 \\ 3,154}}{ }$ | ${ }_{691}^{462}$ |  |
| Gas and by-products | 13 | ¢1,216 <br> 4.551 <br> , | ${ }_{\substack{1,137 \\ 4,537}}^{1,51}$ | 90 ${ }_{94}^{90}$ | ${ }_{4}^{1,227}$ |
| Hosiery and knit good | ${ }_{32}^{12}$ |  |  |  |  |
| Leather, tanned, curried, and finished | 31 | ¢, ${ }_{6,513}^{2,344}$ | $\begin{array}{r}2,147 \\ 6,109 \\ \hline 1\end{array}$ | 301 579 |  |
| Machine-shop products | ${ }^{43}$ | 5,177 <br> 2,687 <br> 2, | 4,486 <br> 2,127 <br> 1024 | 708 |  |
| Machine and other too | ${ }_{16}^{25}$ |  |  | 1,410 | 2, 2,68$\substack{264 \\ 1,031 \\ 1,031}$ |
| Motor venicles, bodies | 12 | 2, 660 | 1,024 |  |  |
| Maser and wood pulp. | ${ }_{26}^{12}$ |  |  |  | 1,031 6,183 4,113 , 113 |
| Printing and publishing, book and job Printing and publishing, newspaper.- | 50 17 | 4,014 2,081 , 082 | $\xrightarrow{3,831} 2$ | $\begin{gathered} 2,282 \\ \begin{array}{c} 282 \\ 118 \end{array} \end{gathered}$ |  |
|  | 3 | 9,032 | 9,4262,8281,2901,29 |  |  |
| Rubber goods | 10 | 2,711 <br> 4,050 <br> 1 <br> 505 |  | 2,774 | 4,4.0641,5381,5391,859 |
| Slak goods-1-2 | 5 |  |  |  |  |
| Stationery goods..... | 11 | 1,830 | 1,779 |  |  |
| Steam fittings and steam and hot-water heating |  | $\begin{array}{r} 1,716 \\ 1,524 \\ 4,4668 \\ 18,68 \\ 18828 \\ 30,979 \\ \hline \end{array}$ | $\begin{array}{r} 1,171 \\ 513 \\ 587 \\ 81 \\ 13,574 \\ 24,202 \\ \hline \end{array}$ |  | $\begin{array}{r} 1,628 \\ 1,554 \\ 4,532 \\ 538 \\ 188216 \\ 30,639 \\ \hline \end{array}$ |
|  |  |  |  |  |  |
| Textile machinery and par | $\begin{array}{r} 12 \\ 5 \end{array}$ |  |  |  |  |
| Tobacco-und worsted goods | $\begin{array}{r} 5 \\ 55 \end{array}$ |  |  |  |  |
| All other industries.-. |  |  |  |  |  |
| Total, all industries | 1,003 | 230,669 | 180, 075 | 51,334 | 231,409 |

## New Jersey

THE following data showing the changes in volume of employment and pay roll from September to October, 1927, in 847 establishments in that State is furnished by the New Jersey Department of Labor:

PER CENT OF OHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 847 NEW JERSEY ESTABLISHMENTS, OCTOBER, 1927, COM-

| Industry | Number of plants reporting <br> reporting | Employees |  | Weekly pay roll |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Number } \\ \text { in } \\ \text { October, } \\ 1927 \end{gathered}$ | Per cent of change as com- pared with Septem- ber, 1927 | $\begin{aligned} & \text { Amount } \\ & \text { in } \\ & \text { October, } \\ & 1927 \end{aligned}$ | Per cent of change as compared with September, 1927 |
| Food and kindred products: |  |  |  |  |  |
| Baking...... | 16 | 1,400 | -0.1 | \$44, 545 | -2. 5 |
| Confectionery and ice crea | 8 <br> 7 | 4,747 399 | -16.3 +6.4 +1 | 93, 800 | -35.7 |
| Provisions....-.-. | 3 | 1,319 | +6.4 +2.1 | - 80,211 | -3.2 -2.0 |
| Other food products. | 12 | 3,121 | +11.1 | 40,216 90,476 | -2.0 +7.0 |
| Total | 46 | 10,986 | -5.3 | 277, 735 | $-14.8$ |
| Textiles and their products: |  |  |  |  |  |
| Carpets and rugs....- | 3 | 1,207 | +. 8 | 42,575 | +26.7 |
| Cotton goods- | 29 | 4, 078 |  | 82, 154 | +1.0 |
| Dyeing and finishing to | 38 | 11, 437 |  | 145, 606 | $+4.7$ |
| Hats and caps | 6 | 11, 063 | -6.9 | 190,824 25,396 | -3.7 |
| Hosiery and knit goods | 17 | 3,915 | +2.5 | 108,449 | -21.7 +4.3 |
| Shirts and collars | 9 | 839 | +. 5 | 16,947 | +10.7 |
| Silk goods....... | $\stackrel{9}{5}$ | 2,049 |  | 40,679 | +4.6 |
| Woolen and worsted goods. | 18 | 8,407 10,659 | -8.7 +3.3 | 207, 585 | +1.4 +4.6 |
| Miscellaneous textile products | 10 | 1,863 | +1.4 +1 | 28, 338 | +4.6 -10.3 |
| Total | 211 | 52, 765 | -. 6 | 1,284, 274 | +1.1 |
| ron and steel and their products: |  |  |  |  |  |
|  |  |  |  |  |  |
| Electrical machinery, apparatus, and supplies-.-- | 28 | 20,801 | +6.1 | 557, ${ }^{89} \mathbf{}$ | +8.9 |
| Foundry and machine-shop product | 79 | 17,480 | -. 2 | 503, 229 | -3.3 |
| Iron and steel forgings | 8 | ${ }_{893}^{885}$ | +.4 +3.3 | 25, 205 | -7.9 |
| Machine tools........ | 21 | 3,377 | +.1 | 91, 800 | $-7.2$ |
| apparatus |  |  |  |  |  |
| Structural-iron work | 10 | 1,888 1,58 | -1.8 |  | -7.8 +4.4 |
| Total | 172 | 52, 204 | +1.9 | 1,452, 199 | +. 3 |
| Lumber and its products: |  |  |  |  |  |
| Furniture Lumber |  |  |  |  |  |
| Lumber and millwork | 13 | , 709 | +4.1 | 20,312 | +3.1 +2.2 |
| Total | 18 | 1,957 | +2.4 | 57, 073 | +2.8 |
| Leather and its products: |  |  |  |  |  |
| Leather............- |  | 1,028 | -1.1 | 24, 070 | -7.3 |
| Leather products | ${ }_{4}^{21}$ | $\begin{array}{r} 3,216 \\ 518 \end{array}$ | -1.6 +1.0 | $95,318$ | -1.7 +18.5 |
| Total | 31 | 4, 762 | +1.3 | 133, 527 | -1.1 |
| Tobacco products | 12 | 3,895 | +2.3 | 72, 878 | +3.2 |
| Paper and printing: |  |  |  |  |  |
| Paper and pulp <br> Paper boxes <br> Printing, book and | 22 |  | +1.5 |  |  |
|  | 18 | 1,576 | +.8 | 30, 955 | -. 4 |
| Printing, book and jo | 12 | 2,172 2,038 | +3.6 +20 | 66,802 85,904 | $+4.2$ |
| Total | 62 | 9,902 |  |  |  |
|  |  |  |  | 299, 705 | $+2.4$ |

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 847 NEW JERSEY ESTABLISHMENTS, OCTOBER, 1927, COMPARED WITH SEPTEMBER, 1927-Continued


## New York

THE following statistics of changes in number of employees and in amount of weekly pay rolls were furnished by the New York State Department of Labor. The figures are based on reports from a fixed list of about 1,600 factories, having in October 484,819 employees, the total of the weekly pay rolls for the middle week of October being $\$ 14,195,166$.

CHANGES IN EMPLOYMENT AND PAY ROLLS IN NEW YORK STATE FACTORIES FROM OCTOBER, 1926, AND SEPTEMBER, 1927, TO OCTOBER, 1927

${ }^{1}$ Change of less than one-tenth of 1 per cent.

CHANGES IN EMPLOYMENT AND PAY ROLLS IN NEW YORK STATE FACTORIES FROM OCTOBER, 1926, AND SEPTEMBER, 1927, TO OCTOBER, 1927 -Continued

| Industry | Per cent of change |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | September, 1927, to October, 1927 |  | October, 1926, to October, 1927 |  |
|  | Employ- ment | Pay rolls | $\underset{\text { ment }}{\text { Employ- }}$ | Pay rolls |
| Clothing and millinery | +.9 | -2.7 | -2.2 | -. 9 |
| Men's clothing-..- | -1.0 +4.1 | -10.5 +5.4 | $\pm 1.0$ | -1.0 |
| Shirts and collars. | +3.4 | +6.9 | -8.1 | -2.9 |
| Women's clothing | +1.8 | +1.9 | +3.1 | +5.8 |
| Women's underwear. | -2.9 +.8 | -.7 -3.0 | -23.7 +7.4 | -23.4 |
| Miscellaneous sewing. | +3.6 | +6.4 | -9.0 | -7.4 |
| Laundering and cleaning | +1.6 | -. 1 | +5.3 | +5.4 |
| Food and tobacco .-....... | +1.0 | -. 7 | +. 3 | -1.1 |
| Flour, feed, and cereals Flour | -2.1 | +.1 -4.1 | -4. 6 | -7.3 |
| Canning and preserving. | $+6.8$ | +11.2 | $+2.3$ | -6.4 |
| Other groceries......... | +1.1 | -. 6 | +14.3 | +7.7 |
| Sugar refining | -2.0 | -4. 6 | +32.8 | +14.8 |
| Meat and dairy products | -1.8 | -1.5 | -1.6 | -3.0 |
| Meat packing.- | $-1.6$ | $-1.3$ | -1.2 | -2.3 |
| Bakery products | $+.5$ | -. 8 | +2.5 | +2.4 |
| ndy Beverages $\qquad$ $\qquad$ | +2.0 +6 | -. ${ }_{-1}$ | -15.0 -.3 | -11.5 |
| Tobacco... | +1.9 | -6.4 | +. 4 | -1.2 |
| Water, light, and power | +1.4 | +. 7 | +. 1 | +. 4 |
| Total | +. 1 | -. 9 | -4. 2 | -4.4 |

## Pennsylvania

THE following statistics on changes in employment, in weekly manhours, and in pay-roll totals, from October to November, 1927, were furnished by the Bureau of Statistics of the Department of Labor and Industry of Pennsylvania:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES, IN TOTAL WEEKLY MANHOURS, AND IN WEEKLY PAY ROLL IN 490 PENNSYLVANIA ESTABLISHMENTS BETWEEN OCTOBER AND NOVEMBER, 1927

| Industry | Number of plants reporting | Wage earners, week ending Nov. 15, 1927 |  | Total weekly manhours, week ending Nov. 15, 1927 |  | Total weekly pay roll: Per cent of change as compared with October, 1927 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Per cent of change as compared with October, 1927 | Number | Per cent of change as compared with October, 1927 |  |
| Metal products: |  |  |  |  |  |  |
| Blast furnaces. | 8 | 2,079 | -12.0 | 102, 161 | -12.0 | -12.2 |
| Steel works and rolling mills | 25 | 35,545 | -. 6 | 1, 538, 889 | +2.4 | +1.3 |
| Iron and steel forgings.............-. -- | 8 | 1, 283 | $+2.5$ | 60,673 | +3.4 | +2.1 |
| Structural-iron work | 5 | 1, 176 | -7.0 | 50,418 | -17. 7 | $-18.4$ |
| Steam and hot-water heating apparatus. | 12 | 2, 414 | -5.1 | 113, 221 | $-5.7$ | $+2.0$ |
|  | 32 | 6, 656 | $-1.7$ | 290, 411 | +. 2 | +. 5 |
| Machinery and parts | 29 | 6, 605 | $-1.0$ | 311, 164 | $-2.7$ | -3.6 |
| Electrical machinery and apparatus. | 12 | 4, 016 | -12.3 | 176, 984 | -21.5 | -23.2 |
| Engines and pumps...-.-.-...--- | 8 | 2,850 | -1.9 | 107, 765 | -21.0 | -19.4 |
| Hardware tools..... | 14 | 4,462 | $+.6$ | 195, 875 | -2.8 | -3.2 |
| Brass and bronze products. | 8 | 664 | -4.3 | 32, 885 | -6. 1 | -7.2 |
| Jewelry and novelties...-. | 3 | 1,155 | +. 1 | 57, 215 | -. 1 | -. 1 |
| Total | 164 | 68, 905 | -2.1 | 3, 037, 661 | -2.8 | -3.0 |

$$
78271^{\circ}-28-11
$$

[155]
itized for FRASER
s://fraser.stlouisfed.org
teral Reserve Bank of St. Louis

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES, IN TOTAL WEEKLY MAN. HOURS, AND IN WEEKLY PAY ROLL IN 490 PENNSYLVANIA ESTABLISHMENTS BETWEEN OCTOBER AND NOVEMBER, 1927-Continued


## Wisconsin

THE October, 1927, issue of the Wisconsin Labor Market, issued by the State industrial commission, contains the following data on volume of employment in Wisconsin industries in September, 1927:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN FROM SEPTEMBER, 1926, AND AUGUST, 1927, TO SEPTEMBER, 1927

| Industry | Per cent of change |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | August, 1927, to September, 1927 |  | September, 1926, to September, 1927 |  |
|  | $\underset{\text { ment }}{\text { Employ- }}$ | Pay roll | Employ- | Pay roll |
| Manual |  |  |  |  |
| Agriculture | $\begin{array}{r} -1.2 \\ +2.8 \\ +1.9 \\ +3.0 \end{array}$ | $\begin{aligned} & +10.5 \\ & +19.7 \end{aligned}$ | $\begin{array}{r} +8.1 \\ +29.9 \end{array}$ | a+14$+\quad 3$ |
| Mining |  |  | +1.1+4.1 |  |
| Lead and |  | +1.6 +4.7 |  | +1.8 +1.9 |
| Iron. | +14.8+19.7 | -4.9 | -5.2 | -19.2 |
| Stone crushing and quarrying |  | +32.7 |  |  |
| Manufacturing-1.-.-.-.-. Stone and allied industries | -2.6+2.4+2.3 | -4.8 | -4.5 +19.0 | +4.2 +8.3 +8.0 |
| Brick, tile, and cement bi |  | -5.3-1.1 | +19.0 +10.1 | +10.3$+\quad+7.0$ |
| Stone finishing.-- | +2.3 +2.5 +2.5 |  | +2.3+10.8-1.8 |  |
| Metal. | ${ }_{-2.2}$ | -7.0 |  | +7.0 -10.7 |
| Pig iron and rolling mill | -11.3+5.4 | -1.5+1.5+4.4 | -25. 4 | -29.6-13.2 |
| Structural-iron work --...... |  |  | -8.4 |  |
| Foundries and machine shops | -1.1 | +4.4 -16.4 |  | -13.2 -17.2 +1.0 |
| Stoves.-...-- |  | -1.4 -2.3 +2.0 | -2.8 | +1.0 |
| Aluminum and enamelware | +1.5+3.6-.5 | +2.0-2.2-8.4 | -8.4 +2.9 | +4.4-10.2 |
| Machinery-- |  |  | -10.5 -15.5 |  |
| Automobiles -...-.-- | -.5 +1.0 | -8.4 | -11.4 | -10.2 -8.5 -1.5 |
| Wood................- | -1.9 -3.3 | -2.6 -6.2 |  | -13.5-5.3 |
| Sawmills and planing | - 4.8 | -1.1 | -6.2 -9.7 |  |
| Box factories ......... | -12.3 | -15.2 | -12.6 | -6.5 |
| Panel and veneer mills |  | -21.5 |  | -12.2 |
| Furniture-..-- | +1.2 |  | -1.3 |  |
| Sash, door, and interior |  | - -7.1 | -1.8 | -12.2 -5.3 |
| Other wood products | +2.9 +1.7 +1.7 | -1.6 | -6.9 | -5.7 |
| Rubber- | +2.0+1.3 | -3.6 | +20.5 | ++14.7-19.8 |
| Leather |  | -5.0 | -18.8 |  |
| Tanning Boots and shoes | -3.0 | -9.5 | -37.1 | -36.3-18.1 |
| Boots and shoes......- Other leather products | +.3+1.0 | -7.6 | -20.8 +12.7 |  |
| Paper... |  | +.5+.6 | +3.3 | +2. 7 |
| Paper and pulp mills | +1.0 +.3 -5 |  |  | +1.1 |
| Paper boxes-1-1.- | -.5 +5.9 | -2.3 +2.4 | + -1.5 |  |
| Textiles | +1.0+.4 | +2.4 +3.6 | +11.7+10.0 | +14.5+8.7 |
| Hosiery and other knit goods |  | ${ }_{-4.5}^{+3.6}$ |  |  |
| Clothing- | +2.3+1 | +13.6 | +18.1 | +26.3+6.2 |
| Other textile products. |  | +8.5 | +2.9-5.3 |  |
| Foods.............. | -12.8 |  |  | - 7 |
| Baking and confectionery | +7.2 +5.0 +2.0 | +8.6 +6.9 | +11.7 | +24.2 +.4 |
| Milk products | -29.1 | -22.7-37.2 | -20.5 | -9.3 |
| Canning and preserving. |  |  | -10.8 -5.6 | -12.9-3.9 |
| Tobacco manufacturing | +1.2 | -4.5 | -5.6 |  |
| Other food products.. | +.92 | -9.2 | -14.1 | -10.3 |
| Light and power --..- | -.8-1.2 | - -1 | +12.2 +6.4 +6.6 | +14.8+11.0-150 |
| Printing and publishing--.-.-. Laundering, cleaning, and dyeing |  | +1.5 | +6.4 +3.6 |  |
| Construction: |  |  | $+3.6$ | $2-15.2$ |
|  |  | $\begin{array}{r} 6.9 \\ +8.2 \\ +11.0 \\ +2.8 \end{array}$ | $\begin{array}{r} +8.0 \\ +7.8 \\ +44 \\ +4.9 \end{array}$ |  |
| Building.Highway. |  |  |  | $\begin{array}{r} +16.3 \\ +11.2 \\ +13.3 \\ +143.1 \end{array}$ |
|  |  |  |  |  |
| Marine, dredging, sewer digging |  |  |  |  |
| Communication: | $\begin{array}{r} +10.7 \\ -10.7 \\ +.5 \end{array}$ | $\begin{array}{r} +15.3 \\ +6.6 \\ +.6 \end{array}$ | $\begin{array}{r} -3.4 \\ +9.0 \end{array}$ | $\begin{array}{r} +3.6 \\ +3.3 \\ +6.4 \end{array}$ |
| Electric railway |  |  |  |  |
| Express, telephone, and telegraph |  |  |  |  |

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN FROM SEPTEMBER, 1926, AND AUGUST, 1927, TO SEPTEMBER, 1927-Continued.


## Unemployment in Chile ${ }^{1}$

THE Chilean Government is endeavoring to reduce unemployment in that country by advancing $4,000,000$ pesos $^{2}$ for road building, relief work, and for the repair of public buildings, while $1,500,000$ pesos is to be expended on irrigation work.

In addition to the saltpeter industry, which has been particularly affected, there has been serious unemployment among the public service employees, who have, nevertheless, been compensated by the Government. Each employee may borrow an amount proportionate to his length of service and $10,000,000$ pesos have been so distributed, the funds having been borrowed from the insurance fund for public employees and journalists.

[^34]
## WHOLESALE AND RETAIL. PRICES

## Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices ${ }^{1}$ received by the Bureau of Labor Statistics from retail dealers.
Table 1 shows for the United States retail prices of food November 15, 1926, and October 15 and November 15, 1927, as well as the percentage changes in the year and in the month. For example, the retail price per pound of plate beef was 14.7 cents in November, 1926; 15.8 cents in October, 1927; and 16.2 cents in November, 1927. These figures show increases of 10 per cent in the year and 3 per cent in the month.

The cost of the various articles of food combined shows a decrease of 3.2 per cent November 15, 1927, as compared with November 15, 1926, and an increase of 0.2 per cent November 15, 1927, as compared with October 15, 1927.

TABLE 1.-AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1927, COMPARED WITH OCTOBER 15, 1927, AND NOVEMBER 15, 1926
[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

| Article | Unit | Average retail price on- |  |  | Per cent of increase $(+)$ or decrease (-) Nov. 15, 1927, compared with- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Nov. } 15, \\ 1926 \end{gathered}$ | $\begin{aligned} & \text { Oct. } 15, \\ & 1927 \end{aligned}$ | Nov. 15, 1927 | Nov. 15, 1926 | Oct. 15, 1927 |
|  |  | Cents | Cents | Cents |  |  |
| Sirloin steak | Pound | 40.9 | 43. 7 | 43. 5 | $+6$ | -0.4 |
| Round steak | do | 35. 5 | 37. 9 | 37.8 | +6 | $-0.3$ |
| Rib roast..- | do. | 30.2 | 31.9 | 31.9 | +6 | 0 |
| Chuck roast | do. | 22.7 | 24.3 | 24.5 | +8 | +1 |
| Plate beef. | do. | 14.7 | 15.8 | 16.2 | +10 | +3 |
| Pork chops | do | 39.3 | 41.5 | 36.3 | -8 | -13 |
| Bacon....-. | do. | 51.0 | 46. 6 | 46.3 | -9 | -1 |
| Ham | do | 58.4 | 53. 6 | 53. 0 | -9 | -1 |
| Lamb, leg | do | 37.9 | 38. 2 | 37.6 | -1 | -2 |
| Hens..-...- | do | 37.1 | 35.7 | 35.6 | -4 | -0.3 |
| Salmon, canned, red | do. | 34.7 | 34.4 | 34.8 | +0.3 | +1 |
| Milk, fresh... | Quart | 14.1 | 14.2 | 14.2 | +1 | 0 |
| Milk, evaporated | 15-16 oz. ca | 11.4 | 11. 5 | 11.5 | +1 | 0 |
| Butter .......-- | Pound.- | 55.7 | 55.7 | 56.4 | +1 | +1 |
| Oleomargarine (all b tutes) |  | 30.1 | 27. 9 | 27.9 | -7 | 0 |
| Cheese....- | do | 36. 9 | 38.3 | 38.6 | +5 | +1 |
| Lard. | do | 21.1 | 19.6 | 19.5 | -8 | -1 |
| Vegetable lard substitu | do | 25.6 | 25.2 | 25.1 | -2 | -0.4 |
| Eggs, strictly fresh...- | Dozen | 66.0 | 56. 6 | 61. 7 | -7 | +9 |
| Eggs, storage..---- | -do | 47.0 | 42.1 | 43.2 | -7 | +4 |
| Bread. | Pound | 9.4 | 9. 3 | 9. 3 | -1 | 0 |
| Flour | ..-.do. | 5. 7 | 5. 5 | 5. 4 | -5 | -2 |
| Corn meal | do. | 5. 1 | 5. 2 | 5. 2 | $+2$ | 0 |
| Rolled oats | ....-do | 9.1 | 9.0 | 9. 0 | -1 | 0 |
| Corn flakes | 8-oz. pkg | 10.9 | 9. 7 | 9.7 | -11 | 0 |

${ }^{1}$ In addition to monthly retail prices of food and coal, the bureau publishes the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

TABLE 1.-AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1927, COMPARED WITH OCTO. BER 15, 1927, AND NOVEMBER 15, 1926-Continued

| Article | Unit | A verage retail price on- |  |  | Per cent of increase $(+)$ or decrease (-) Nov. 15, 1927, compared with- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Nov. } 15, \\ 1926 \end{gathered}$ | $\begin{aligned} & \text { Oct. } 15 \text {, } \end{aligned}$ | Nov. 15, 1927 | Nov. 15, 1926 | Oct. 15, 1927 |
|  |  | Cents | Cents | Cents |  |  |
| Wheat cereal | 28-oz. pkg | 25. 4 | 25.5 | 25.5 | +0.4 | 0 |
| Macaroni. | Pound | 20.1 | 20. 1 | 20. 0 | $-0.4$ | -0.4 |
| Rice--.-.-- | - do | 11.3 9.3 | 10.5 | 10.4 | -8 | -1 |
| Potatoes.- | do | 4.0 | 3.0 | 3. 0 | -25 | -1 |
| Onions | do | 5.0 | 5. 0 | 4.8 | -4 | -4 |
| Cabbage | do | 4. 0 | 3.9 | 3. 7 | -8 | -5 |
| Beans, baked | No. 2 can | 11.7 | 11. 5 | 11. 5 | -2 | 0 |
| Corn, canned | -.--do | 16.3 | 15. 7 | 15.7 | -4 | 0 |
| Peas, canned | do | 17.3 | 16.7 | 16.6 | -4 | -1 |
| Tomatoes, canned | -do | 12.1 | 11.9 | 11.8 | -2 | -1 |
| Sugar...-.-.- | Pound | 7.1 | 7.2 | 7.2 | +1 | 0 |
| Tea- | ---do | 77.1 | 77.5 | 77.5 | +1 | 0 |
| Coffee |  | 50.8 | 47.4 | 47.8 | -6 | +1 |
| Prunes. | do | 16.5 | 14.6 | 14.1 | -15 | -3 |
| Raisins. | -.-do | 14. 6 | 14. 2 | 13.8 | -5 | -3 |
| Bananas | Dozen. | 34.9 | 33.9 | 34.4 | -1 | +1 |
| Oranges | -do | 55.1 | 57.8 | 53.2 | -3 | -8 |
| Weighted food index. |  |  |  |  | -3.2 | +0.2 |

Table 2 shows for the United States average retail prices of specified food articles on November 15, 1913, and on November 15 of each year from 1921 to 1927, together with percentage changes in November of each of these specified years, compared with November, 1913. For example, the retail price per pound of pork chops was 21.5 cents in November, 1913; 32 cents in November, 1921; 33 cents in November, 1922; 28.9 cents in November, 1923; 31.6 cents in November, 1924; 37.5 cents in November, 1925; 39.3 cents in November, 1926; and 36.3 cents in November, 1927.

As compared with November, 1913, these figures show increases of 49 per cent in November, 1921; 53 per cent in November, 1922 ; 34 per cent in November, 1923; 47 per cent in November, 1924; 74 per cent in November, 1925; 83 per cent in November, 1926; and 69 per cent in November, 1927.

The cost of the various articles of food combined showed an increase of 49.2 per cent in November, 1927, as compared with November, 1913.

TARIE 2.-AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH NOVEMBER 15, 1913
[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

| Article | Unit | Average retail price on Nov. 15- |  |  |  |  |  |  |  | Per cent of increase Nov. 15 of each specified year compared with Nov. 15, 1913 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1913 |  |  |  | 1924 | 1925 | 1926 | 1927 | 19 |  | 1923 | 1924 | 1925 | 92 | 27 |
|  |  | $\begin{gathered} C t s . \\ 22.4 \\ 22.8 \\ 29.8 \\ 19.8 \\ 16.8 \\ 12.4 \end{gathered}$ |  | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |  |  |  |  |  |  |  |
| Sirloin st |  |  |  |  | $\begin{aligned} & 8.938 . \\ & 3.1 \\ & 32 . \end{aligned}$ |  | $\begin{aligned} & 740 . \\ & 934 . \end{aligned}$ | $340.94$ | $\begin{aligned} & 43.5 \\ & 37.8 \end{aligned}$ | $\begin{aligned} & 41 \\ & 36 \\ & 35 \\ & 18 \end{aligned}$ | $\begin{aligned} & 47 \\ & 40 \\ & 39 \\ & 20 \end{aligned}$ | $\begin{aligned} & 53 \\ & 45 \\ & 43 \\ & 25 \end{aligned}$ |  | $\begin{aligned} & 59 \\ & 51 \\ & 49 \\ & 33 \end{aligned}$ |  |  |
| Round ste |  |  |  |  |  |  |  | $\begin{aligned} & 61 \\ & 56 \\ & 53 \\ & 39 \end{aligned}$ |  |  |  |  |  |  | ${ }_{61}^{6}$ |
| Chuck roast |  |  |  |  | 20.4 | 20.4 |  |  | 21. 6 |  |  |  |  |  | 22. 7 | 24.5 | 50 |
| Plate beef |  |  |  | 2. 713 | 13.0 |  |  |  | $\begin{aligned} & 24.0 \\ & 16.2 \end{aligned}$ | $3$ | 2 | 5 |  | 14 | 19 | 31 |
| Puk cho | do |  |  |  | 938.5 |  |  |  |  |  | $\begin{aligned} & 53 \\ & 50 \end{aligned}$ | $\begin{aligned} & 34 \\ & 42 \end{aligned}$ |  | 74 | 83 | 69 |
| Bacon | ---do---- |  | $\begin{aligned} & 239 . \\ & 944.7 \\ & 530.6 \\ & 535.8 \end{aligned}$ |  |  |  |  | $\left\{\begin{array}{l} 39.3 \\ 51.0 \\ 56.3 \\ 58.4 \\ 58.3 \\ 58.0 \\ 53.0 \end{array}\right.$ |  | $\begin{aligned} & 49 \\ & 46 \end{aligned}$ |  |  | 47 | 81 <br> 99 | 88 | 10 |
| Ham | do |  |  |  | 345.5 835.8 |  |  |  |  | 72 69 <br> 94 94 |  |  |  |  |  |  |
| Lamb, leg | do |  |  |  | 35. 8 | 35. 4 | 8. 435 | $\begin{aligned} & \text { 58.4 } 433.0 \\ & 37.9 \\ & \hline 87.6 \end{aligned}$ |  |  |  |  | ${ }^{69}$ | 108 | 105 |  |
|  |  |  |  |  |  |  |  | 37. 13 |  | 74 | 65 | 64 | 67 | 74 |  | 10 |
| Salmon, cann | -do... |  | 4.331. |  | $31.431 .$ |  | $31.736 .$ | 34.734.8 |  |  |  |  |  |  |  |  |
| Milk, fresh | Quart... | $\left(\begin{array}{c} 9.1 \\ 2-7 \end{array}\right.$ | $\begin{aligned} 14.3 \\ 13.3 \\ 1 \end{aligned}$ | $\begin{aligned} & 13.4 \\ & 11.7 \\ & 11.7 \end{aligned}$ | $\text { 4. } 315$ | $\begin{aligned} & 11.81 \\ & 11.01 \\ & 1 . \end{aligned}$ | 14.31 |  | 1.5 | 57 | 47 | 57 | 52 | 57 | 55 | 56 |
| Milk, evaporat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Butter-- | Pound | 38.7 | $\begin{array}{r} 753.15 \\ -29.32 \end{array}$ | $\left\lvert\, \begin{aligned} & 54.6 \\ & 27.6 \end{aligned}\right.$ | $29.2$ |  | $\begin{aligned} & 11.6 \\ & 59.7 \\ & 3.2 \end{aligned}$ |  | $57.4$ | $37$ | 41 | 52 | 26 | 54 | 44 |  |
| Oleomargarine (all butter substitutes). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 46 |
| Cheese.- | do | 22.5 |  |  |  |  |  |  |  | 48 | 58 | 68 | 54 | 66 | 64 | ${ }_{23}$ |
| Lard | do | 15.9 | 16. 6 | 17.6 | 18. 9 | 22.4 | 23. 3 | 21. 11 | 19.5 |  | 11 | 19 | 41 | 47 | 33 |  |
| Vegetable lard substitute | $\begin{gathered} \text { Dozen } \\ \text { Dodo- }-1 . \end{gathered}$ |  |  | 23. 2 | 66. 36 | 68. 16 | 69.4 | 66.061.7 |  | 40 | 30 | -33 | 37 | 40 | 33 |  |
| Eggs, strictly fre |  | $\begin{gathered} 49 \\ 34 \\ 5 . \\ 3 . \\ 3 . \end{gathered}$ | 69. 56 | 64.5639.84 |  |  |  |  |  | 24 |  |  |  |  |  |  |
| Eggs, storage |  |  |  |  | 42.34 | 47.3 |  | 47.04 |  |  | 35 | 16 | 23 |  |  |  |  |
| Bread | Pound |  |  | $\begin{array}{ll} 8.7 & 8 . \\ 4.8 & 4 \\ 3.9 & 4 \\ 8.8 & 8 \\ 0.7 & 8 \\ \hline \end{array}$ |  | $\begin{aligned} & 7 \\ & \hline \\ & 68 \\ & 6 \\ & 4 \\ & 4 \\ & 8 \\ & 8 \\ & 8 \end{aligned}$ |  | 9.4  <br> 5.7  <br> 5.1  <br> 9  <br> 9 1 <br> 10  | $\begin{array}{r} 5.4 \\ 5.2 \\ 9.0 \\ \hline .0 \end{array}$ | $\begin{aligned} & 66 \\ & 55 \\ & 35 \end{aligned}$ | $\begin{aligned} & 55 \\ & 45 \\ & 26 \end{aligned}$ | $\begin{aligned} & 55 \\ & 39 \\ & 42 \end{aligned}$ | $\begin{aligned} & 59 \\ & 64 \\ & 65 \\ & 65 \end{aligned}$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| orn |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rolled oats |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corn fla | ${ }^{(3)}$ $\qquad$ <br> P <br> do <br> do <br> do |  |  |  |  |  |  |  | 10. |  |  |  |  |  |  |  |  |
| Wheat cere |  |  | 29.7225 | $25.624 .$ |  |  | $\text { 24. } 324 .$ |  |  |  |  |  |  |  |  |  |  |
| Macaroni |  |  |  |  |  | 19. | 20.5 | 20.12 | 20.0 |  |  |  |  |  |  |  |  |
| Rice |  | 8.7 | 9. 4 | 9. 5 | 9. 7 |  | 10.5 | 11.4 | 11. 3 | 0.4 |  |  | 11 | 21 | 31 | 30 | 20 |
| Beans, nav |  |  | 8.21 | 10.2 | 10.5 | 10.1 |  | 9. |  |  |  |  |  |  |  |  |  |
| Potatoes. |  | 1.8 | 3. |  | 2. 6 | 2. 2 | 5.2 | 4. 0 | 0 | 78 | 17 | 44 | 22 | 18 | 12 | 67 |  |
| nions. | do |  |  |  |  | 5.1 |  |  |  |  |  |  |  |  |  |  |  |
| Cabbage |  |  | 4.6 | 3.4 | 3.9 | 3.7 | 4.2 | 4.0 |  |  |  |  |  |  |  |  |  |
| Beans, baked |  |  | 13.91 | 13.2 | 12. 9 | 12.6 | 12. 31 | 11. 71 | 11.5 |  |  |  |  |  |  |  |  |
| Corn, canned |  |  | 16.1 | 15.2 | 15. 6 | 16. 6 | 17.1 | 16.311 | 15.7 |  |  |  |  |  |  |  |  |
| Peas, cann |  |  | 17.81 | 17.4 | 17. 7 | 18.3 | 18.11 | 17.31 | 16. |  |  |  |  |  |  |  |  |
| Tomatoes, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sugar, gra | Pound | 5.4 | 6.7 | 8.1 | 10.3 | 8. 8 | 6. 6 | 7.1 | 7.2 | 24 | 50 | 91 |  |  | 31 |  |  |
| Tea-..... | --do. | 54. 5 | 69.06 | 68.5 | 70.4 | 73.5 | 75.7 | 77. 17 | 77. 5 | 27 |  | 29 | 35 |  |  | 42 |  |
| Coffee | - | 29.8 | 35. 63 | 36. 5 | 37.8 | 49.0 | 51.25 | 50.8 | 47.8 | 10 | 22 | 27 | 64 | 72 | 70 | 60 |  |
| Prunes | do. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Raisin |  |  | 26.1 | 19.8 | 16. 4 | 14.8 | 14.2 | 14.6 | 13.8 |  |  |  |  |  |  |  |  |
| Bananas | Dozen |  | 37.83 | 36.8 | 38.3 | 37.3 | 34.73 | 34.93 | 34.4 |  |  |  |  |  |  |  |  |
| Oranges | --do- |  | 52.85 | 51.0 | 49.0 | 48.9 | 65.5 | 55.15 | 53.2 |  |  |  |  |  |  |  |  |
| dindex |  |  |  |  |  |  |  |  |  |  |  |  | 43.15 |  | 54.1 | 49.2 |  |
| odindex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^35]Table 3 shows the changes in the retail prices of each of 22 articles of food for which prices have been secured since 1913, as well as the changes in the amounts of these articles that could be purchased for $\$ 1$ in specified years, 1913 to 1926, and in October and November, 1927.

TABLE 3.-AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $\$ 1$ IN EACH YEAR, 1913 TO 1926, AND IN OCTOBER AND NOVEMBER, 1927

| Year | Sirloin steak |  | Round steak |  | Rib roast |  | Chuck roast |  | Plate beef |  | Pork chops |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aver$\underset{\text { retail }}{\text { age }}$ price | $\begin{aligned} & \text { Amt } \\ & \text { for } \$ 1 \end{aligned}$ | $\begin{aligned} & \text { Aver- } \\ & \text { age } \\ & \text { retail } \\ & \text { price } \end{aligned}$ | $\begin{aligned} & \text { At. } \\ & \text { for } \$ 1 \end{aligned}$ | Aver- atge retail price | $\begin{aligned} & \text { Art. } \\ & \text { for } \$ 1 \end{aligned}$ | $\begin{aligned} & \text { Aver- } \\ & \text { age } \\ & \text { retail } \\ & \text { price } \end{aligned}$ | $\begin{aligned} & \text { Amt, } \\ & \text { for } \$ 1 \end{aligned}$ |  | $\begin{aligned} & \text { Amt. } \\ & \text { for } \$ 1 \end{aligned}$ | Averretail price | Amt. <br> for $\$ 1$ |
|  | Cents |  | Cents |  | Cents |  | Cents |  | Cents |  | Cents |  |
| 1913 | per 25.4 | $\begin{array}{r} L b s . \\ 3.9 \end{array}$ | per lo 22.3 | $\begin{array}{r} L b s . \\ 4.5 \end{array}$ | $\begin{gathered} \text { per } l b . \\ 19.8 \end{gathered}$ | $\begin{array}{r} L b s . \\ 5.1 \end{array}$ | $\begin{gathered} \operatorname{per} l b . \\ 16.0 \end{gathered}$ | $\begin{array}{r} L b s . \\ 6.3 \end{array}$ | per $l b$. <br> 12.1 | $\begin{gathered} L b s . \\ 8.3 \end{gathered}$ | ${ }_{\text {per }}^{\text {per }}$ 21.0. | Lbs. 4.8 |
| 1920 | 43.7 | 2.3 | 39.5 | 2.5 | 33.2 | 3.0 | 26.2 | 3.8 | 18.3 | 5.5 | 42.3 | 2.4 |
| 1921 | 38.8 | 2.6 | 34.4 | 2.9 | 29.1 | 3.4 | 21.2 | 4.7 | 14.3 | 7.0 | 34.9 | 2.9 |
| 1922 | 37.4 | 2.7 | 32.3 | 3.1 | 27.6 | 3.6 | 19.7 | 5.1 | 12.8 | 7.8 | 33.0 | 3. 0 |
| 1923 | 39.1 | 2.6 | 33.5 | 3.0 | 28.4 | 3. 5 | 20.2 | 5.0 | 12.9 | 7.8 | 30.4 | 3.3 |
| 1924 | 39.6 | 2.5 | 33.8 | 3.0 | 28.8 | 3.5 | 20.8 | 4.8 | 13.2 | 7.6 | 30.8 | 3.2 |
| 1925 | 40.6 | 2.5 | 34.7 | 2. 9 | 29.6 | 3.4 | 21.6 | 4.6 | 13.8 | 7.2 | 36.6 | 2.7 |
| $\begin{aligned} & 1926 \\ & 1927: \end{aligned}$ | 41.3 | 2.4 | 35.6 | 2.8 | 30.3 | 3.3 | 22.5 | 4.4 | 14.6 | 6.8 | 39.5 | 2.5 |
| October-..--November- | 43.7 | 2.3 | 37.9 | 2.6 | 31.9 | 3.1 | 24.3 | 4.1 | 15.8 | 6.3 | 41.5 | . 4 |
|  | 43.5 | 2.3 | 37.8 | 2.6 | 31.9 | 3.1 | 24.5 | 4.1 | 16.2 | 6.2 | 36.3 | 2.8 |
|  | Bacon |  | Ham |  | Hens |  | Milk |  | Butter |  | Cheese |  |
|  | $\begin{gathered} \text { Cents } \\ \text { per lb. } \\ 27.0 \\ 52.3 \\ 4.3 \\ 39.8 \\ 39.8 \\ 39.1 \\ 3.7 \\ 46.7 \\ 50.3 \\ 46.6 \\ 46.3 \end{gathered}$ |  | per lb |  | , |  | Cents |  |  |  | Centsper lb. | Lbs |
| 1913 |  | $\begin{array}{r} L b s . \\ 3.7 \end{array}$ | per lo. | $\begin{array}{r} \text { Lbs. } \\ 3.7 \end{array}$ | per 10. <br> 21.3 | $\begin{array}{r} L b s . \dot{7} \\ 4 . \end{array}$ | per qt. | Qts. |  |  |  |  |
| 192 |  | 1.9 | 55.5 | 1.8 | 44.7 | 2.2 | 16.7 | 11. ${ }^{2}$ | 38.1 70.1 | 2.6 1.4 | ${ }_{41.6}^{22.1}$ | ${ }_{2.5}^{4.5}$ |
| 1921. |  | 2.3 | 48.8 | 2.0 | 39.7 | 2.5 | 14.6 | 6.8 | 51.7 | 1.9 | 34.0 | 2.9 |
| 1922 |  | 2.5 | 48.8 | 2.0 | 36. 0 | 2.8 | 13.1 | 7.6 | 47. 9 | 2.1 | 32.9 | 3.0 |
| 1923 |  | 2.6 | 45.5 | 2.2 | 35.0 | 2.9 | 13.8 | 7.2 | 55.4 | 1.8 | 36.9 | 2.7 |
| 1924 |  | 2.7 | 45.3 | 2.2 | 35.3 | 2.8 | 13.8 | 7.2 | 51.7 | 1.9 | 35. 3 | 2.8 |
| 1925 |  | 2.1 | 52.6 | 1.9 | 36. 6 | 2.7 | 14.0 | 7.1 | 54.8 | 1.8 | 36. 7 | 2.7 |
| 1926 |  | 2.0 | 57.4 | 1.7 | 38.8 | 2.6 | 14.0 | 7.1 | 53.1 | 1.9 | 36.6 | 2.7 |
| October-..November. |  | 2.1 | 53.6 | 1.9 | 35.7 | 2.8 | 14.2 |  |  |  |  |  |
|  |  | 2.2 | 53.0 | 1.9 | 35.6 | 2.8 | 14.2 | 7.0 | 56.4 | 1.8 | 38.3 38.6 | 2.6 |
|  | Lard |  | Eggs |  | Bread |  | Flour |  | Corn meal |  | Rice |  |
|  | Cents ${ }_{\text {per lb }}$ L Lbs. |  | nts |  | Cents |  | Cents |  | Cents |  |  |  |
| 1913 | $\begin{array}{\|c} \operatorname{per} l b . \\ 15.8 \end{array}$ | $\begin{array}{r} L b s . \\ 6.3 \end{array}$ | $\begin{gathered} \text { erdoz.e. } \\ 34.5 \end{gathered}$ | $\begin{array}{r} \text { Dozs. } \\ 2.9 \end{array}$ | $\operatorname{per}_{5.6} l .$ | $\underset{17.9}{ }$ | per $l$. 3.3 | $\begin{aligned} & L_{30 .}^{L b s .} \end{aligned}$ | per lo. | $L_{2 s}^{L b s}$ | per lb. | Lbs. |
|  | 29.5 | 3.4 | 68.1 | 1.5 | 11.5 | 8.7 | 8.1 | 12.3 | 6. 5 | 15.4 | 17.4 | 5,7 |
| 1921 | 18.0 | 5.6 | 50.9 | 2.0 | 9.9 | 10.1 | 5.8 | 17.2 | 4.5 | 22.2 | 9.5 | 10.5 |
| 1922 | 17.0 | 5.9 | 44.4 | 2.3 | 8.7 | 11.5 | 5.1 | 19.6 | 3. 9 | 25.6 | 9.5 | 10.5 |
| 1923 | 17.7 | 5.6 | 46. 5 | 2.2 | 8.7 | 11.5 | 4.7 | 21.3 | 4.1 | 24.4 | 9.5 | 10.5 |
| 1924 | 19.0 | 5.3 | 47.8 | 2.1 | 8.8 | 11.4 | 4.9 | 20.4 | 4.7 | 21.3 | 10.1 | 9.9 |
| 1925 | 23.3 | 4.3 | 52.1 | 1.9 | 9.4 | 10.6 | 6.1 | 16.4 | 5. 4 | 18.5 | 11.1 | 9.0 |
| 1922 | 21.9 | 4.6 | 48.5 | 2.1 | 9.4 | 10.6 | 6.0 | 16.7 | 5.1 | 19.6 | 11.6 | 8.6 |
| October.... November | 19.6 | 5.1 | 56.6 | 1.8 | 9.3 |  |  |  |  |  |  |  |
|  | 19.5 | 5.1 | 61.7 | 1.6 | 9.3 | 10.8 | 5.4 | 18.5 | 5. 2 | 19.2 | 10.4 | 9.6 |
|  | Potatoes |  | Sugar |  | Tea |  | Coffee |  |  |  |  |  |
|  | ents |  | Cents |  | Cents |  | Cents |  |  |  |  |  |
|  | per lb. | $\begin{aligned} & L b s . \\ & 58.8 \end{aligned}$ | per lb. | ${ }_{18}{ }_{18}{ }^{\text {b }}$. | per ll. | Lbs. | $\begin{gathered} \text { per lib. } \\ 29.8 \end{gathered}$ | Lbs. |  |  |  |  |
| 1920 | 6.3 | 15.9 | 19.4 | ${ }_{5}^{18.2}$ | 73.3 | 1.4 | 47.0 | 3.1 |  |  |  |  |
| 1921. | 3.1 | 32.3 | 8.0 | 12.5 | 69.7 | 1.4 | 36.3 | 2.8 |  |  |  |  |
| 1922 | 2.8 | 35.7 | 7.3 | 13.7 | 68.1 | 1.5 | 36.1 | 2.8 |  |  |  |  |
| 1923 | 2.9 | 34.5 | 10.1 | 9.9 | 69.5 | 1.4 | 37.7 | 2.7 |  |  |  |  |
| 1924 | 2.7 | 37.0 | 9.2 | 10.9 | 71.5 | 1.4 | 43.3 | 2.3 |  |  |  |  |
| 1925 | 3.6 | 27.8 | 7.2 | 13.9 | 75.5 | 1.3 | 51.5 | 1.9 |  |  |  |  |
| 1926 | 4.9 | 20.4 | 6.9 | 14.5 | 76.7 | 1.3 | 51.0 | 2.0 |  |  |  |  |
| 1927: October- |  | 33.3 |  | 13.9 | 77.5 | 1.3 |  | 2.1 |  |  |  |  |
| November. | 3.0 | 33.3 | 7.2 | 13.9 | 77.5 | 1.3 | 47.8 | 2.1 |  |  |  |  |

## Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, for 1913 and 1920 to $1926,^{2}$ and by months for 1926, and for January through November, 1927. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1926 was 162.6 , which means that the average money price for the year 1926 was 62.6 per cent higher than the average money price for the year 1913. As compared with the relative price, 159.8 in 1925, the figures for 1926 show an increase of nearly three points, but an increase of 1.75 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according the the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100 are 156.1 for October, 1927, and 156.5 for November, 1927.

The curve shown in the chart on page 165 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

[^36]TARLE 4.-INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913 AND 1920 TO 1926, AND BY MONTHS FOR 1926, AND JANUARY THROUGH NOVEMBER, 1927
[A verage for year $1913=100.0$ ]

${ }^{1} 22$ articles in 1913-1920; 43 articles in 1921-1927.


## Retail Prices of Food in

A VERAGE retail food prices are shown in Table 5 for 40 cities 15, 1927. For 11 other cities prices are shown for the same not scheduled by the bureau until after 1913.

Table 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL
[Exact comparisons of prices in different cities can not be made for some articles,

| Article | Unit | Atlanta, Ga. |  |  |  | Baltimore, Md. |  |  |  | Birmingham, Ala. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nov. 15- |  |  | Nov. 15 1927 | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{aligned} & \text { Nov. } \\ & 15, \\ & 1927 \end{aligned}$ | Nov. 15 |  | $\left\lvert\, \begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}\right.$ | $\begin{aligned} & \text { Nov. } \\ & 15, \\ & 1927 \end{aligned}$ |
|  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |
| Sirloin steak <br> Round steak <br> Rib roast. <br> Chuck roast | Pound | $\begin{aligned} & \text { Cts } \\ & 24.2 \end{aligned}$ | $\begin{aligned} & \text { Cts } \\ & 41.2 \end{aligned}$ | Cts. | Cts. | Cts. | Cts | Cts. | C | Cts. | Cts. | Cts. | Cts. |
|  |  |  |  | 44.6 | 43. 5 | 22 | 38.0 | 41.3 | 40.7 | 28.0 |  | 42.5 |  |
|  | do | 19.0 | 32.8 | 33.3 | 32.8 | 17.5 | 39.0 | ${ }^{37.6}$ | 37.9 | ${ }_{19}^{23.0}$ | 35. 3 | 37.0 30 | 36.8 |
|  |  | 15.8 | 25.3 | 25.2 | 25.8 | 15.0 | 21.6 | 23.4 | 24.1 | 16.5 | 23.0 | 23.3 | 30.4 |
| Plat |  | 9.9.9 | 13. 3 |  |  | 12.2 |  | 16.340.7 | 316.6 | 10.0 | 14.338.9 | 15.338.2 | 36 |
|  |  |  |  |  |  | 18.2 | 14.9 <br> 38.8 |  | 32.5 |  |  |  |  |
|  |  | 25.0 31.1 | 188. <br> 80. | 45. 7 | $\begin{aligned} & 45.2 \\ & 55.4 \end{aligned}$ | 21.5 | 45.759.9 |  | 42. | 34.0 | 50.857.6 | 46.455.3 | 36.8 46.9 |
|  |  | 30.8 |  |  |  | 27.5 |  | 57.1 |  |  |  |  | 46. 9 |
| Lamb, leg o |  | 20.2 |  | $\begin{array}{llll}40.8 & 40.2\end{array}$ |  | $\begin{aligned} & 18.0 \\ & 20.2 \end{aligned}$ | $\begin{aligned} & 37.3 \\ & 38.4 \\ & 31.8 \end{aligned}$ | 38.237.6 | 37. | $\begin{aligned} & 21.9 \\ & 19.3 \end{aligned}$ | $\begin{aligned} & 38.8 \\ & 37.8 \\ & 36.2 \\ & 18.0 \end{aligned}$ | 842.6 | 6 |
| Hens |  |  |  | 8. 40 <br> 7 30 <br> 5 36 | 36. 1 |  |  |  | 38.1 |  |  | 34. 2 | 33. |
| Salmon, can |  |  | - 613. |  | 34.0 |  |  | 32.1 | 32.6 |  |  | 34. 7 | 35. |
| Milk, fr |  | 10.6 |  |  | 18.0 |  | 14.0 | 14.0 | 14.0 | 10.0 |  | 18.0 16. |  |
| Milk, evap |  |  | 13.4 | 13.6 | 13.5 | 8.7 | 11.2 | 11.4 | 11.4 |  | 12.5 12.6 |  | 12.6 |
| Butter..- |  | $39 .$ | 56.831.0 |  |  | 38.4 | $\begin{aligned} & 59.9 \\ & 30.0 \end{aligned}$ |  | $\begin{aligned} & 61.0 \\ & 28.0 \end{aligned}$ | 41.7 | $\begin{aligned} & 58.0 \\ & 36.2 \end{aligned}$ | $\begin{aligned} & 58.0 \\ & 32.6 \end{aligned}$ | 32 |
| Oleomargarine (all butter substitutes). |  |  |  | 27.1 | 27.3 |  |  | 60.3 27.4 |  |  |  |  |  |
| Cheese |  | $\begin{aligned} & 25.0 \\ & 15.3 \end{aligned}$ | 36. 2 | 37.1 | 37.9 | 23.3 | 35.4 | 36.837. |  | 23.0 | 37.1 | 39. 2 | 38.9 |
| Lard |  |  | 20.1 | 20.5 | 19.4 | 15.0 | 19.6 | 18.6 | 18.9 |  | ${ }_{\text {21 }}$ | 19.822.248.1 | 19.622.153.8 |
| Eggs, strictly fresh. | Dozen | 40.0 | 22.2 58.1 |  | $\begin{aligned} & 22.9 \\ & 57.0 \end{aligned}$ | -45.9 | $24.1$ | $\begin{aligned} & 23.1 \\ & 53.3 \end{aligned}$ |  |  |  |  |  |
| ggs, st |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bread | Poun |  | 17.7 | 45.0 | 44.3 | 33.1 | 46.7 | 39.7 | 41.5 | 32. 5 | 46.7 | 40.0 | $\begin{array}{r}43.7 \\ 10.4 \\ 6.7 \\ 4.2 \\ \\ \hline 10\end{array}$ |
| Flour | Pound | 3. 5 | 6.6 | 10.8 6.5 | $\begin{array}{r}10.8 \\ 6.4 \\ \hline\end{array}$ | 5. 5 | 9.8 <br> 5.3 | 9.9 | 9.8 |  | 10.3 | 10.3 |  |
| Cor |  | 2.6 | 4.2 | 4.1 | 4.1 | 2. 6 | 3. 9 | 4.2 | 4. 2 | 2. 5 | 4.8 | 4.2 |  |
| Rolled oats <br> Corn flakes <br> Wheat cereal <br> Macaroni | 8-az pkg. 28-oz. pkg. Pound. | - | 11. <br> 11. <br> 25. <br> 21. | 9.4 9.4 <br> 9.8 9.8 |  |  | 8.310.124.518.6 | $\begin{array}{r} 8.3 \\ 9.1 \\ 24.5 \end{array}$ | $\begin{array}{r} 8.3 \\ 9.2 \\ 24.6 \end{array}$ |  | $\begin{aligned} & 10.1 \\ & 12.0 \\ & 26.9 \end{aligned}$ | $\begin{aligned} & 10.3 \\ & 10.5 \\ & 27.7 \end{aligned}$ | 10.310.527.718.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 26.6 | 27.3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 19.4 | 19.3 |  | 18.7 | 18, $\begin{aligned} & 18.8 \\ & 10.7\end{aligned}$ |  |
| Rice | do | $\begin{array}{r} 8.6 \\ \hdashline-3.3 \end{array}$ | $\begin{array}{r} 11.6 \\ 10.2 \\ 5.0 \\ 7.6 \end{array}$ | $\begin{array}{r} 10.0 \\ 10.5 \\ 4.1 \\ 7.3 \end{array}$ | $\begin{array}{r} 21.4 \\ 9.9 \\ 10.8 \\ 4.1 \\ 7.1 \end{array}$ | 9.0 | $\begin{array}{r} 10.4 \\ 8.1 \\ 4.2 \\ 4.8 \end{array}$ | $\begin{aligned} & 9.5 \\ & 8.7 \\ & 3.1 \\ & 4.2 \end{aligned}$ | ${ }_{8}^{9.5} 8.2$ |  |  |  | 27.8 10.5 10.5 |
| Beans, n |  |  |  |  |  |  |  |  |  |  | 10.5 | 10.4 | 10.510.34.56.5 |
| Potato |  |  |  |  |  | 1.8 |  |  | 3.0 | 2.2 | 5.3 | 4.7 |  |
|  |  |  |  |  |  |  |  |  |  |  | 7.6 | 6.7 |  |
| Cabbage_ <br> Beans, baked <br> Corn, canned <br> Peas, canned | No. 2 can. | ---- | $\left\lvert\, \begin{array}{r} 4.9 \\ 11.5 \\ 17.8 \\ 20.0 \end{array}\right.$ | 5.0 | $\begin{array}{r} 4.7 \\ 11.4 \end{array}$ | $\cdots$ | 4.2 | 3.8 | 3. 1 |  | . 2 |  |  |
|  |  |  |  |  |  |  | 10.4 | 10.8 | 10.8 |  | 12.0 | 11.8 | 11.9 |
|  | do |  |  | 18.2 | 18.0 |  | 14.6 | 14.7 | 14.8 |  | 18.3 | 16.8 | 16.8 |
|  |  |  |  | 19.7 | 19.7 |  | 15.1 | 15.0 | 15.0 |  | 21.0 | 21.0 | 21.3 |
| Tomatoes, can |  |  | 11.0 |  | 11. |  | 10.7 | 10.5 | 10.3 |  |  |  |  |
| Sugar, gran | Pound | 5.7 | 7.5 | 7.7 | 7.7 | 4.8 | 6.5 | 6. 4 | 6.5 | 5.4 | 7.6 | 7.7 |  |
|  | .-.-do | 60.0 | 106. 1 | 103.3 | 03.1 | 56.0 | 73.8 | 73.4 | 73.0 | 61. 3 | 96.7 | 98.5 | 96.2 |
|  |  | 32.0 | 52.2 | 48.2 | 48.2 | 24.4 | 47.4 | 43.0 | 43.8 | 28.8 | 54.0 | 51.2 | 50.9 |
| Prunes. |  |  | 17.6 | 14.9 | 14.8 |  | 13.9 | 12.4 | 12.0 |  | 19.3 | 17.8 | 17. |
| Raisins, |  |  | 16.8 | 15.9 | 15. 5 |  | 13.2 | 13.0 | 12.6 |  | 15.4 | 15.0 | 15.0 |
| Oranana | Dozen |  | 28.6 | 29.0 | 28.6 |  | 26.7 | 5. | 26.2 |  | 38.5 | 37.8 | 37. |
| Oranges. |  |  | 41.1 | 53.2 | 41.2 |  | 49.3 | 57.7 | 50.8 |  | 50.5 | 53.2 | 46.5 |

[^37]
## 51 Cities on Specified Dates

for November 15, 1913, and 1926, and for October 15 and November dates with the exception of November 15, 1913, as these cities were

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES
particularly meats and vegetables, owing to differences in trade practices]

| Boston, Mass. |  |  |  | Bridgeport, Conn. |  |  | Buffalo, N. Y. |  |  |  | Butte, Mont. |  |  | Charleston, S. C. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15, 1926 | Oct. 15, 1927 | $\begin{gathered} \text { Nov. } \\ 15, \\ 1917 \end{gathered}$ | Nov.15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{aligned} & \text { Nov. } \\ & 15, \\ & 1927 \end{aligned}$ |
| 1913 | 1926 |  |  |  |  |  | 1913 | 1926 |  |  |  |  |  | 1913 | 1926 |  |  |
| $\begin{array}{r} \text { Cts. } \\ 134.0 \\ 35.0 \\ 23.9 \\ 16.2 \end{array}$ | $\begin{gathered} \text { Cts. } \\ { }_{1} 64.7 \end{gathered}$ | Cts. | $\begin{gathered} \text { Cts. } \\ 171.1 \end{gathered}$ | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | $\begin{gathered} \text { Cts. } \\ 32.7 \end{gathered}$ |
|  |  | 171.7 |  | 49.2 | 54.0 | 54.6 | 22.2 | 40.0 | 43.6 | 42.5 | 30.0 | 33. 2 | 33.0 | 21.4 | 32.7 | 32.3 |  |
|  | 49.7 | 55. 9 | 55.6 | 41.9 | 47.5 | 47.6 | 19.4 | 33.8 | 37.2 | 36.3 | 26.9 | 28.0 | 30.3 | 20.8 | 30.0 | 30.0 | 30.3 |
|  | 37. 9 | 30.4 | $\begin{aligned} & 41.3 \\ & 30.7 \end{aligned}$ | 36.3 | 41.0 | 40.9 | 16.4 | 30. 4 | 32.3 | 31.8 | 26.8 | 28.2 | 28.0 | 20.0 | 24.9 | 26.7 | 27.0 |
|  | 28.5 |  |  | 27.6 | 31.3 | 31.1 | 15.2 | 23.7 | 25.4 | 25.3 | 18.7 | 20.3 | 20.3 | 15.0 | 19.5 | 20.8 | 20.3 |
|  | 18.6 | 20.6 | 21.9 | 11. 7 | 12. 9 | 12.9 | 11.7 | 14.5 | 15. 0 | 15.6 | 12.1 | $\begin{aligned} & 13.2 \\ & 37.5 \end{aligned}$ | 13.6 | 12.0 | 14.2 | 14.5 | 14.2 |
| 22.4 | 41.8 | 47.3 | 39.6 | 41. 7 | 44.8 | 38.4 | 19.8 | 41. 7 | 46.1 | 38.5 | 41.2 |  | 37.1 | 25. 0 | 38. 5 | 34.0 | 33.2 |
| 24.6 | 49.263.3 | $\begin{aligned} & 45.8 \\ & 59.1 \end{aligned}$ | 58.9 | 54. 9 | 50.7 | 49.9 | 21. 2 | 46. 9 | 42. 7 | 41.2 | 58.2 | 52.5 | 52.5 | 26.6 | 45.0 | 40.2 | 39.547.4 |
| 31.0 |  |  |  | 64.3 | 57.7 | 57.0 | 26.3 | 56. 8 | 50.5 | 49.0 | 61.3 | 57.5 | 58.8 | 27.5 | 54.8 | 48.4 |  |
| 20.5 | 38.6 | 38.7 | 39.3 | 38.8 | $\begin{aligned} & 38.9 \\ & 40.2 \end{aligned}$ | $\begin{aligned} & 38.1 \\ & 40.2 \end{aligned}$ | $\begin{aligned} & 15.6 \\ & 20.0 \end{aligned}$ | $\begin{array}{r} 32.8 \\ 37.9 \end{array}$ | 33.2 | 32.7 | 37.3 | 37.1 | 36.3 | $\begin{aligned} & 22.5 \\ & 21.5 \end{aligned}$ | 41.3 | 39. 4 | 38.8 |
| 24.3 | 40.6 | 39.9 | 39.1 | 40.6 |  |  |  |  | 37.1 | 36. 6 | 33.3 | 32.9 | 32.9 |  | 39.8 | 35. 5 | 35. 5 |
|  | 33.1 | 33.6 |  | 33. 6 | 32.8 | 33.3 |  | 33.8 | 32.6 | 33.1 | 32.5 | 31.2 | 32.7 |  | 30.0 | 32.6 | 33.119.0 |
| 8.9 | 15.1 | 15.5 | $\begin{aligned} & \text { Bo. } \\ & 15.5 \end{aligned}$ | 16.0 | 16.0 | 16.0 | 8.0 | 13.0 | 13.0 | 13.0 | 14.3 | 14.0 | 14.0 | 12.0 | 19.0 | 19.0 |  |
|  | 12.1 | 12.1 | 12.1 | 11.6 | 11.6 | 11.6 |  | 11.3 | 11.3 | 11.3 | 11.1 | 11.1 | 10.9 |  | 11.8 | 11.8 | 11.8 |
| 38. 2 | $\begin{aligned} & 55.3 \\ & 29.8 \end{aligned}$ | $\begin{aligned} & 56.4 \\ & 27.3 \end{aligned}$ | $\begin{aligned} & 57.1 \\ & 27.9 \end{aligned}$ | $\begin{aligned} & 55.3 \\ & 30.6 \end{aligned}$ | $\begin{aligned} & 56.1 \\ & 27.8 \end{aligned}$ | $\begin{aligned} & 56.0 \\ & 26.8 \end{aligned}$ | 38.1 | $\begin{aligned} & 57.7 \\ & 29.8 \end{aligned}$ | $\begin{aligned} & 56.5 \\ & 27.4 \end{aligned}$ | $\begin{aligned} & 57.7 \\ & 27.8 \end{aligned}$ | 51.0 | 51.9 | 53.2 | 37.8 | 52.431.3 | 50.8 | 53.029.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 29.2 |  |
| 23. 4 | 38.2 | 39.2 | 39.1 | 39.3 | 40.9 | 41.6 | 21.514.2 | 37.6 | 38.9 | 38.7 | 35.7 | 36.5 | 37.5 | 21.0 | 34.9 | 35. 6 | 36. 4 |
| 15.8 | 20.8 | 19.9 | 19.4 | 20.3 | 19.1 | 18.7 |  | 20.4 | 19.1 | 19.0 | 25.0 | 23.6 | 23.0 | 15.0 | 21.3 | 19.7 | 21. 3 |
|  | 24.7 | 25.3 | 25.4 | 25.8 | 25.4 | 25. 4 |  | 25. 9 | 25. 9 | 25.7 | 29.3 | 30.5 | 30.6 |  | 23. 4 | 22.2 | 22.1 |
| 60.6 | 94, 4 | 79.8 | 85.1 | 91.0 | 77.9 | 83.2 | 48.5 | 69.0 | 58.8 | 67.8 | 67.1 | 54.8 | 59.6 | 40.0 | 64.3 | 56.7 | 57.0 |
| 35.2 | 54.6 | 50.3 | 49.3 | 52.2 | 44.8 | 48.6 | 30.6 | 45.6 | 42.9 | 43.6 | 47.1 | 39.4 | 38.1 | 33.5 | 43.8 | 39.4 | 39.6 |
| 6. 0 | 9.1 | 8. 5 | 8.5 | 8. 8 | 8. 8 | 8. 8 | 5. 6 | 8. 9 | 8. 7 | 8. 7 | 9.8 | 9.8 | 9.8 | 6. 4 | 10. 2 | 10. 9 | 10.9 |
| 3. 6 | 6. 0 | 6. 0 | 5. 9 | 5. 8 | 5.7 | 5. 6 | 3.0 | 5.1 | 4. 8 | 4. 8 | 5.6 | 5. 4 | 5.3 | 3. 7 | 7.1 | 6. 7 | 6. 9 |
| 3.5 | 6.2 | 6.7 | 6.4 | 7.9 | 7.8 | 7.9 | 2.6 | 5.3 | 4.7 | 5.1 | 5.8 | 6.1 |  | 2.6 | 3.9 | 3. 0 | 3.9 |
|  | 9.3 | 8.9 | 9.1 | 8. 4 | 8. 4 | 8. 5 |  | 8. 7 | 8. 7 | 8. 8 | 7.3 | 7.5 | 7.6 |  | 9.5 | 9.5 | 9. 4 |
|  | 10.7 | 10.0 | 9.9 | 10.4 | 9. 6 | 9. 6 |  | 10. 2 | 9.5 | 9. 3 | 12. 2 | 10. 5 | 10.5 |  | 11.8 | 9. 9 | 9. 9 |
|  | 24.5 | 25.1 | 25.1 | 24. 7 | 24.7 | 24.7 |  | 24. 6 | 24.8 | 24.8 | 28.4 | 28.5 | 28.5 |  | 26. 2 | 25. 7 | 25. 7 |
|  | 22.4 | 22.4 | 21.9 | 22.7 | 22.7 | 22.6 |  | 21.7 | 21.4 | 21.5 | 19.2 | 19.5 | 19.7 |  | 18.5 | 18.7 | 18.7 |
| 9.4 | 11.7 | 12.2 | 12.1 | 10.9 | 11.4 | 11.3 | 9.3 | 11.3 | 10.3 | 10.0 | 12.1 | 11.0 | 11.0 | 5.6 | 8. 3 | 7.1 | 7.1 |
|  | 9.8 | 10.4 | 10.2 | 9. 6 | 9. 5 | 9. 6 |  | 9.2 | 9. 4 | 9. 4 | 10.4 | 9. 8 | 9.9 |  | 9.9 | 10.1 | 10.1 |
| 1.7 | 3.9 | 3. 0 | 3. 0 | 3. 8 | 2. 8 | 3.0 | 1.8 | 4. 1 | 2.7 | 2. 9 | 3.0 | 1. 5 | 1.5 | 2. 2 | 4.3 | 3.4 | 3.4 |
|  | 4.9 | 4.5 | 4.7 | 4.7 | 5.1 | . |  | 5.9 | 5.8 | 5. 6 | 4.3 | 4.1 |  |  | 5.8 | 5. | 5. 6 |
|  | 5.4 | 4.8 | 4.5 | 4.3 | 4.5 | 4.6 |  | 3. 5 | 3.3 | 2. 8 | 3.9 | 3.3 | 3. 4 |  | 4.4 | 4.2 | 4.1 |
|  | 13.0 | 13.3 | 13.3 | 11. 4 | 11.7 | 11.5 |  | 9.9 | 10.1 | 10.0 | 14.1 | 13.3 | 13. 5 |  | 9. 8 | 10.0 | 10.0 |
|  | 18.8 | 17.9 | 18.0 | 19.5 | 18.5 | 19.0 |  | 16.9 | 15.5 | 15.8 | 16. 2 | 14.4 | 14.6 |  | 14.8 | 14.7 | 14.3 |
|  | 19.8 | 20.0 | 20.0 | 21.0 | 20.7 | 20.5 |  | 16.8 | 16.0 | 16.0 | 14.8 | 13.8 | 13.8 |  | 16.7 | 16. 7 | 16.4 |
|  | 12.3 | 11.3 | 11.3 | 13.4 | 13.7 | 13.4 |  | 13.8 | 13. 2 | 13.3 | 13.7 | 12.8 | 12.8 |  | 10.3 | 9. 9 |  |
| 5.4 | 7.1 | 7.2 | 7.2 | 6. 8 | 7.1 | 7.1 | 5.3 | 7.0 | 6.9 | 6. 8 | 8.4 | 8.6 | 8.6 | 5. 0 | 6. 7 | 6.7 | 6. 7 |
| 58.6 | 74.9 | 72.9 | 73.5 | 59.5 | 60.9 | 60. 9 | 45.0 | 70.5 | 67.9 | 68.5 | 83.8 | 83.1 | 82.2 | 50.0 | 74.9 | 82.4 | 82. 4 |
| 33.0 | 55.1 | 51.7 | 51.5 | 48.5 | 46.0 | 46.6 | 29.3 | 48.5 | 45.4 | 45.5 | 56.6 | 54.0 | 54.1 | 26.8 | 46.5 | 42.8 | 43.2 |
|  | 15.3 | 14.7 | 14.2 | 16.0 | 15.6 | 15.2 |  | 16. 4 | 13.6 | 13. 7 | 17.9 | 14.9 | 14.5 |  | 14.9 | 12. 4 | 12.2 |
|  | 13.1 | 13.0 | 13. 0 | 14.6 | 14.2 | 13. 8 |  | 14.1 | 13. 7 | 13. 4 | 15. 2 | 14. 8 | 14.6 |  | 14.7 | 14.0 | 14.0 |
|  | 45.0 | 45.0 | 46.7 | 34.5 | 36.5 | 36.5 |  | 42.3 | 41.9 | 41.6 | ${ }^{2} 14.5$ | ${ }^{2} 12.7$ | ${ }^{2} 13.0$ |  | 31.7 | 27.0 | 25.0 |
|  | 62.3 | 70.1 | 60.8 | 61.6 | 69.3 | 66.8 |  | 62.8 | 65.7 | 58.4 | 56.2 | 56.2 | 60.7 |  | 38.2 | 35.0 | 31.5 |

${ }^{2}$ Per pound.

TAbLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL

| Article | Unit | Chicago, Ill. |  |  |  | Cincinnati, Ohio |  |  |  | Cleveland, Ohio |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. $15-$ |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15, 1927 | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{aligned} & \text { Nov. } \\ & 15, \\ & 1927 \end{aligned}$ |
|  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |
|  |  | $\mathrm{Cts}^{\text {s }}$ | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cis. | Cts. | Cts. | Cts. |
| Sirloin steak | Poun | 24.7 | 45.4 | 48.0 | 47.8 | 22.7 | 36.5 | 39.5 | 39.3 | 25.0 | 37.7 | 41.8 | 41.6 |
| Round ste | --do | 21.4 | 37.1 | 38. 7 | 38.8 | 20.7 | 33.1 | 35.8 | 35. 7 | 22.4 | 32. 3 | 35. 7 | 35. 5 |
| Rib roast.... | -- do | 19.5 | 36.6 | 36.5 | 36.5 | 19.2 | 30.7 | 31.6 | 31. 7 | 18.6 | 27.3 | 29.7 | 28.8 |
| Chuck roast | -do | 15.9 | 25.8 | 27.8 | 27.9 | 16.1 | 21.6 | 23.1 | 23.4 | 17.0 | 22.9 | 25.0 | 25.1 |
| Plate beef | do | 12.0 | 15.0 | 16. 0 | 16.0 | 11.5 | 15. 2 | 16. 3 | 16.3 | 12.6 | 13.3 | 15.2 | 15.0 |
| Pork chops | do | 19.3 | 38. 3 | 42.5 | 35.9 | 19.8 | 34. 7 | 41.2 | 32. 5 | 21. 6 | 38. 9 | 43. 6 | 35. 7 |
| Bacon, sliced |  | 32.4 | 55. 7 | 51.2 | 50.7 | 24.6 | 45.5 | 40.5 | 40.1 | 28.1 | 50.4 | 44. 7 | 44. 6 |
| Ham, sliced. |  | 32.3 | 59.7 | 54.6 | 53.7 | 28.5 | 58.0 | 52.0 | 52.0 | 35.7 | 60.0 | 53.3 | 52.5 |
| Lamb, leg | --do.-.-.-- | 19.3 | 38.8 | 38.0 | 37. 7 | 17. 5 | 35. 2 | 35. 5 | 35. 6 | 18.1 | 35.6 | 36.4 | 35.8 |
| Hens. | -.do.......- | 17.4 | 36. 4 | 36.8 | 36.0 | 20.2 | 35.8 | 34.3 | 35.0 | 19.9 | 35. 9 | 35. 7 | 35.0 |
| Salmon, can | , |  | 38.1 | 35. 4 | 36.1 |  | 31.1 | 34.9 | 36.4 |  | 33.9 | 34.6 | 34.8 |
| Milk, fresh | Quart | 8.0 | 14. 0 | 14.0 | 14.0 | 8. 0 | 14.0 | 13.3 | 13.3 | 8. 0 | 14.3 | 14.0 | 14.0 |
| Milk, evaporated | 15-16 oz. |  | 11.2 | 11.3 | 11.3 |  | 10.8 | 11.3 | 11.2 |  | 11.3 | 11.4 | 11.4 |
| Butter | Pound | 36.5 | 56.3 | 54.3 | 56.2 | 38. 2 | 55.1 | 54. 1 | 55.6 | 40.7 | 59.6 | 58.8 | 59.8 |
| Oleomargarine (all butter substitutes). | d |  | 27.6 | 27.4 | 27.5 |  | 30.2 | 28.6 | 28.7 |  | 33.2 | 28.8 | 28.9 |
| Cheese. | do.--.--- | 25.3 | 42.4 | 42.5 | 43.4 | 21.0 | 36.3 | 39. 1 | 40.4 | 24.0 | 36.6 | 39.4 | 39.8 |
| Lard. |  | 15.0 | 21.5 | 19.8 | 19.8 | 14.2 | 19.4 | 18.4 | 18.0 | 16.3 | 22.3 | 20.9 | 21.0 |
| Vegetable lard substitut | do.......- |  | 26.8 | 26.3 | 26.5 |  | 26.1 | 26.2 | 26.1 |  | 27.4 | 26.9 | 26.9 |
| Eggs, strictly fresh. | Doze | 39.8 | 65.1 | 53.7 | 59.6 | 44.3 | 65.6 | 56.2 | 64, 8 | 50.0 | 73.2 | 60.6 | 66.4 |
| Eggs, | do | 30.3 | 50.5 | 43.2 | 44.8 | 33.6 | 44.0 | 39.9 | 41.3 | 35. 7 | 48.8 | 42.3 | 41.5 |
| Bread | Poun | 6.1 | 9. 8 | 9.9 | 9.9 | 4.8 | 9.2 | 8.7 | 8.7 | 5. 6 | 7.9 | 7.7 | 7. 7 |
| Flou | -. do ......- | 2. 9 | 5. 4 | 5.1 | 4.9 | 3. 3 | 5. 8 | 5. 8 | 5. 6 | 3. 2 | 5. 7 | 5. 6 | 5. 5 |
| Corn meal | -do.-.-.--- | 2.9 | 6.6 | 6.6 | 6.7 | 2.8 | 3.9 | 4.5 | 4. 4 | 3. 0 | 5.2 | 5. 5 | 5. 5 |
| Rolled oats | do |  | 8.6 | 8.5 | 8. 6 |  | 8. 7 | 8.9 |  |  |  |  |  |
| Corn flakes | 8-oz.pkg.- |  | 10.1 | 9.5 | 9.5 |  | 10.4 | 9. 4 | 9.6 |  | 11.2 | 9.8 | 9.9 |
| Wheat cerea | 28-oz. pkg |  | 25.3 | 25. 4 | 25.5 |  | 24.5 | 25.1 | 25.1 |  | 25. 2 | 25.3 | 25. 4 |
| Macaroni | Pound |  | 19.4 | 18.9 | 19.0 |  | 18.4 | 18.5 | 18.6 |  | 21.7 | 21.5 | 22.4 |
| Rice | do | 9.0 | 11.9 | 10.7 | 10.6 | 8.8 | 10.9 | 10.2 | 10.0 | 9.0 | 11.9 |  | 10 |
| Beans, na | -do......-- |  | 9.5 | 9.6 | 9.6 |  | 7.9 | 8.8 | 8. 8 | 9.0 | 8.2 | 8.8 | 8. |
| Potatoes | --do | 1.7 | 3. 8 | 2.9 | 2.8 | 1.9 | 4.0 | 3. 2 | 3. 0 | 2.0 | 4.3 | 3.2 | 3.1 |
| Or | ---do |  | 5.3 | 4.9 | 5. 0 |  | 4.5 | 4.7 | 4.6 |  | 4.5 | 4. 6 | 4.3 |
| Cabbage |  |  | 4.6 | 4.3 | 4.0 |  | 3.9 | 3.7 | 3.4 |  | 4.1 | 1 | 6 |
| Beans, baked | No. 2 can.- |  | 12.9 | 12.5 | 12.6 |  | 10.9 | 10.5 | 10.5 |  | 12.6 | 12.8 | 12.8 |
| Corn, canned | --do |  | 17.4 | 16.0 | 15.9 |  | 15.1 | 15.1 | 15. 2 |  | 17.0 | 16.9 | 16.7 |
| Peas, canned |  |  | 17. 7 | 16.1 | 16.0 |  | 16.8 | 17.1 | 17.1 |  | 17.8 | 17.9 | 17.6 |
| Tomatoes, canned | do |  | 14, 1 | 14.1 | 13.8 |  | 11.9 |  |  |  |  |  |  |
| Sugar, granulated | Pound | 5. 1 | 6.9 | 7.0 | 6.9 | 5.3 | 11.3 | 7.5 | 7. 4 |  | 13.8 7 | 14. 7 | 14.0 7.6 |
| Tea- | --do. | 55.0 | 74, 8 | 71.3 | 71.8 | 60.0 | 77.4 | 78.4 | 79.1 | 50. 0 | 80.7 | 81.2 | 81.2 |
| Coffee | ---do..----- | 30.7 | 51.0 | 46.3 | 46. 7 | 25.6 | 45.9 | 43.0 | 44.1 | 26.5 | 54.8 | 50.8 | 51.4 |
| Prunes | do |  | 18.7 | 16.9 | 15.6 |  | 16.4 |  | 13.7 |  |  |  |  |
| Raisins | do |  | 15.6 | 14.8 | 14.4 |  | 15. 1 | 14.3 | 14.0 |  | 14.7 | 14.6 | 13.7 |
| Bananas | Dozen |  | 40.5 | 38.3 | 39.3 |  | 37.5 | 38.3 | 38.3 |  | 10.6 | 10.3 | 13.7 |
| Oranges | do |  | 61.3 | 65.6 | 61.4 |  | 55.0 | 57.5 | 47.8 |  | 62.5 | 60.8 | 55.6 |

1 The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

| Columbus, Ohio |  |  | Dallas, Tex. |  |  |  | Denver, Colo. |  |  |  | Detroit, Mich. |  |  |  | Fall River, Mass. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | Nov. 15,1927 | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15,1927 | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov.$\begin{gathered} 15 \\ 1927 \end{gathered}$ | Nov.15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct, } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov } \\ 15, \\ 1927 \end{gathered}$ |
|  |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |
| Cts. | Cts | Cts | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |  |
| 39.7 | 41.6 | 41.5 | 23.6 | 36.2 | 37.9 | 37.8 | 22.9 | 33.0 | 34.9 | 34.4 | 25.6 | 41.6 | 44. 4 | 43.9 | 134.3 | 160.5 | 166.3 | 165. 4 |
| 34.8 | 37. 5 | 36.7 | 21.0 | 32.9 | 35.0 | 34.0 | 20.3 | 29.7 | 30.0 | 31.4 | 20.6 | 34.3 | 37. 3 | 36.6 | 27.3 | 46.5 | 49.1 | 50.0 |
| 29.9 | 32.3 | 31.9 | 20.1 | 26. 6 | 27.9 | 29.2 | 16. 7 | 23.1 | 24.8 | 25.5 | 20.0 | 30.7 | 32. 8 | 32.3 | 23.3 | 31.9 | 34. 0 | 33.8 |
| 25. 0 | 26.4 | 26.4 | 16.4 | 22. 7 | 23.5 | 24.0 | 15.3 | 19.0 | 20.3 | 20.1 | 15.2 | 22.5 | 25.4 | 25.3 | 18.3 | 22.5 | 25.4 | 25.5 |
| 16.0 | 16.8 | 17.0 | 15.0 | 17.3 | 18.5 | 19.0 | 9.9 | 11.1 | 12. 4 | 12. 5 | 11. 4 | 14.5 | 15. 2 | 15.1 |  | 14.0 | 14.7 | 15.0 |
| 37.4 | 40.3 | 35.8 | 21.8 | 37.2 | 39.1 | 36.5 | 20.4 | 37.7 | 38. 2 | 35. 1 | 19.4 | 41. 0 | 44.5 | 37.1 | 23.3 | 40.7 | 41.9 | 37.1 |
| 52.3 | 48.8 | 48.5 | 37.5 | 46.4 | 47.9 | 48.9 | 28.0 | 52.0 | 46.3 | 45.4 | 22.3 | 54, 3 | 47.9 | 47. 4 | 25.7 | 46.7 | 43.8 | 42.9 |
| 59.5 | 52. 5 | 53.3 | 31.6 | 59.3 | 54.8 | 55.0 | 29.2 | 59.9 | 51.5 | 52.1 | 27.0 | 63.5 | 56.0 | 54.6 | 30.4 | 57.4 | 52.9 | 52.7 |
| 42.4 | 42.5 | 42.5 | 22.5 | 43.4 | 44.1 | 43.3 | 15. 2 | 35.5 | 36.2 | 36. 2 | 15. 1 | 38.9 | 39.1 | 38.0 | 19.3 | 42, 1 | 40.9 | 40.6 |
| 37.7 | 36. 1 | 35.9 | 18.4 | 31. 6 | 31.7 | 32.1 | 18.5 | 31.3 | 28.1 | 28.5 | 19.2 | 37. 2 | 36. 5 | 37.4 | 24.6 | 43.9 | 43.6 | 43.6 |
| 36.3 | 36. 6 | 36.9 |  | 37.6 | 37.9 | 38.9 |  | 34.7 | 35. 8 | 36.5 |  | 35.5 | 35.5 | 35.9 |  | 37.2 | 34. 5 | 35.4 |
| 12.0 | 12.0 | 12.0 | 10.8 | 13.0 | 13.0 | 13.0 | 8.4 | 12.0 | 12.0 | 12.0 | 9.0 | 14.0 | 14. 0 | 14.0 | 9.0 | 14.4 | 15.0 | 15.0 |
| 11.4 | 11.6 | 11.7 |  | 13.0 | 13.2 | 13.5 |  | 10.6 | 10.6 | 10.7 |  | 11.2 | 11.3 | 11.2 |  | 12.7 | 12.8 | 12.7 |
| 56.7 | 55. 1 | 55.6 | 40.0 | 55.7 | 55.4 | 56.7 | 35.0 | 49.1 | 50.9 | 51.2 | 37.1 | 56.8 | 56.8 | 57.1 | 36.0 | 53.1 | 54.4 | 53.8 |
| 29.9 | 28.1 | 28.5 |  | 32.5 | 30. 3 | 30.4 |  | 28.5 | 24, 6 | 24.6 |  | 28.4 | 27.8 | 27.3 |  | 30.4 | 29.7 | 28.8 |
| 36.8 | 37.3 | 37.8 | 20.0 | 36.8 | 38.3 | 38.8 | 26.1 | 37.5 | 39.0 | 39.4 | 22.3 | 38.8 | 40.3 | 40.9 | 23.6 | 38.5 | 40.7 | 40.2 |
| 19.6 | 17.3 | 17.3 | 16.8 | 24.9 | 23.9 | 22.9 | 16.0 | 21.8 | 19.8 | 19.8 | 16.4 | 21.1 | 19.5 | 19.3 | 15.3 | 20.0 | 18.9 | 18.7 |
| 26. 5 | 26.2 | 26.3 |  | 22.8 | 23.6 | 24.5 |  | 23.7 | 22.2 | 22. 5 |  | 27.4 | 26.8 | 26.8 |  | 26.7 | 26.7 | 26.7 |
| 61.7 | 45.7 | 55.1 | 40.0 | 54.8 | 46.2 | 48.8 | 45.0 | 63.9 | 54.6 | 57.7 | 41.0 | 66.1 | 54.3 | 63.3 | 58.8 | 87.9 | 76.4 | 85.9 |
| 47.3 | 42.0 | 41.3 | 35.0 | 44. 0 | 35.0 | 40.0 | 33.0 | 45.7 | 40.5 | 41.0 | 32. 2 | 46. 6 | 41.5 | 41.6 | 34.6 | 50.9 | 46.9 | 45.6 |
| 8. 1 | 7. 7 | 7. 7 | 5. 3 | 9.5 | 9.5 | 9.5 | 5. 5 | 8.3 | 8. 0 | 8. 0 | 5. 6 | 8.5 | 8. 3 | 8.3 | 6.2 | 9.2 | 9.0 | 9.0 |
| 5.5 | 5. 1 | 5. 1 | 3.3 | 5. 6 | 5. 5 | 5. 5 | 2.5 | 4.5 | 4. 3 | 4.3 | 3. 1 | 5. 6 | 5. 3 | 5.1 | 3.3 | 6. 1 | 5. 6 | 5.5 |
| 3.6 | 4.1 | 4.1 | 3.6 | 4.2 | 4.6 | 4.5 | 2. 6 | 4.2 | 4.4 | 4.5 | 2.9 | 5.9 | 6.1 | 5. 8 | 3. 6 | 6. 6 | 6.6 | 6.7 |
| 9.3 | 9. |  |  | 10.1 | 10.5 | 10.7 |  | 8. | 7.7 |  |  | 9. | 9.6 | 9.6 |  | 9.4 | 9.4 | 9.7 |
| 10.9 | 9.5 | 9.9 |  | 11.3 | 10.6 | 10.5 |  | 11.1 | 9.7 | 9.5 |  | 10.6 | 9.8 | 9.8 |  | 11.3 | 10.2 | 10.0 |
| 24.7 | 26.0 | 26.2 |  | 27.6 | 27.6 | 27.8 |  | 24.7 | 24. 6 | 24.5 |  | 26. 0 | 25.9 | 25. 8 |  | 25. 6 | 25.0 | 24.6 |
| 20.3 | 21.0 | 21.0 |  | 21.4 | 21.7 | 21.5 |  | 19.8 | 19.4 | 19.3 |  | 21.9 | 22.3 | 22.3 |  | 23.8 | 24.2 | 23.5 |
| 13.3 | 12.0 | 12.1 | 9.3 | 12.4 | 12.3 | 12.0 | 8.6 | 10.5 | 9.7 | 9.5 | 8.4 | 12.6 | 11.4 | 11.4 | 10.0 | 11.7 | 10.8 | 10.6 |
| 8.3 | 8.8 | 8. 8 |  | 10.7 | 10.9 | 11.3 |  | 9.7 | 10.0 | 9.5 |  | 8.5 | 8. 9 | 8. 8 |  | 10.1 | 10.8 | 10.4 |
| 4. 0 | 3. 0 | 2. 7 | 2.3 | 5. 2 | 4.8 | 4.9 | 1.6 | 3.7 | 2. 0 | 2.1 | 1. 7 | 3.3 | 2. 6 | 2. 5 | 1.8 | 4. 0 | 3.1 | 3. 0 |
| 4.9 | 4.9 | 4. |  | 6.8 | 6.9 |  |  | 3.6 | 4. 3 | 3.9 |  | 4.6 | 4. 4 | 4. 0 |  | 4.9 | 5.1 | 5.0 |
| 4. 1 | 4.5 | 4.3 |  | 5. 7 | 5. 8 | 5. 7 |  | 2.4 | 2. 6 | 2. 7 |  | 3.7 | 3.4 | 3.2 |  | 3.9 | 4.9 | 4.9 |
| 12.0 | 12.6 | 12.6 |  | 13.5 | 13.2 | 13.1 |  | 11.2 | 10.6 | 10.9 |  | 11.6 | 11.3 | 11.3 |  | 12. 2 | 11.9 | 12.4 |
| 14.4 | 13.9 | 14.3 |  | 18.0 | 18.4 | 18.9 |  | 14.7 | 14.0 | 13.9 |  | 16.2 | 16.5 | 1.2 |  | 17. 1 | 17.0 | 16.4 |
| 15.1 | 14.8 | 14.8 |  | 21.7 | 21.5 | 22.2 |  | 15.6 | 15. 2 | 15.1 |  | 16.7 | 17.0 | 17. 1 |  | 18.5 | 18.5 | 17.9 |
| 12. 2 | 12.8 | 13.3 |  | 12.5 | 12.5 | 13.2 |  | 12.5 | 12. 2 | 12. 1 |  | 12.5 | 12.7 | 12.7 |  | 12. 1 | 13.1 | 12.4 |
| 7.4 | 7. 7 | 7.8 | 5.6 | 7. 7 | 8. 0 | 8.1 | 5. 1 | 7.6 | 7.8 | 7.7 | 5. 2 | 7.3 | 7.5 | 7. 4 | 5. 3 | 7. 1 | 7.3 | 7. 2 |
| 89.3 | 89.3 | 89.3 | 66.7 | 106.8 | 107.5 | 107.8 | 52.8 | 68.9 | 70.3 | 69.6 | 43.3 | 74.5 | 74.5 | 73.0 | 44.2 | 60.7 | 63.8 | 63.7 |
| 51.3 | 47.3 | 48.2 | 36.7 | 59.8 | 57.1 | 57.1 | 29.4 | 50.9 | 47.9 | 48.4 | 29.3 | 51.5 | 47.6 | 48.3 | 33.0 | 52.7 | 48.5 | 48.8 |
| 18.0 | 16.0 | 15.8 |  | 21.4 | 18.6 | 18.9 |  | 17.8 | 14.9 | 14.5 |  | 18.3 | 16. 4 | 14.9 |  | 15.7 | 14.8 | 14. 1 |
| 14.7 | 14.8 | 14.2 |  | 16. 1 | 15. 7 | 15.8 |  | 14.5 | 14.1 | 13.6 |  | 15.0 | 14.3 | 13.9 |  | 14.3 | 14.2 | 13.5 |
| 38.9 | 38.6 | 38.6 |  | 36.3 | 35.0 | 35.0 |  | ${ }^{211.9} 9$ | 211.4 | ${ }^{2} 11.9$ |  | 35. 6 | 34.8 | 34.7 |  | 29.8 | 29.8 | ${ }^{2} 10.3$ |
| 52.7 | 62.9 | 52.9 |  | 54.3 | 54.0 | 54.3 |  | 54.8 | 46.8 | 51.9 |  | 60.5 | 68.7 | 64. 2 |  | 58.6 | 62.9 | 56.7 |

${ }_{2}$ Per pound.

TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL

| Article | Unit | Houston, Tex. |  |  | Indianapolis, Ind. |  |  |  | Jacksonville, Fla. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Nov | 15- |  |  | No | 15- |  |  |
|  |  | 1926 | 1927 | 192 | 1913 | 1926 | 192 | 19 | 1913 | 1926 | 1927 | 19 |
| Sirloin steak | Pound ...-. | $\begin{aligned} & \text { Cts. } \\ & 34.1 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 35,0 \end{aligned}$ | Cts. | $\begin{aligned} & \text { Cts. } \\ & 26.0 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 38.4 \end{aligned}$ | Cts. | Cts. | $\begin{aligned} & \text { Cts. } \\ & 25.6 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 37.9 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 35.8 \end{aligned}$ | Cts. 35.4 |
|  |  |  |  | 35.0 |  |  | 41.5 | 42. 9 |  |  |  |  |
| Round steak | ----do ----. | 32. 7 | 33. 6 | 34.5 | 24.7 | 37.0 | 38.8 | 38.7 | 21.2 | 31.8 | 31.2 | 31.6 |
|  | do | $\begin{aligned} & 27.1 \\ & 20.5 \end{aligned}$ | $\begin{aligned} & 27.3 \\ & 22.3 \end{aligned}$ | 27.5 | 17.8 | 29.0 | 29.9 | 29.2 | 21.6 | 29.1 | 27.3 | 27.1 |
|  | ----do-------- |  |  | 22.0 | 16.3 | 24.3 | 25.7 | 25.4 | 14.4 | 20.5 | 20.4 | 20.8 |
| Plate beef | do | 17.3 | 18.3 | 19.2 | 12. 9 | 15.5 | 15.8 | 16.4 | 11.2 | 12.8 | 13.0 | 13.4 |
| Pork chops | do | 38.6 | 36.8 | 35.6 | 21.5 | 37.4 | 41. 5 | 33.8 | 24.0 | 39.1 | 34.1 | 32.4 |
| Bacon, slicedHam, sliced | do | 57.1 | 45.1 | 45.0 | 29. 2 | 47.9 | 43.7 | 44.1 | 30.9 | 50.0 | 42.2 | 40.5 |
|  |  |  | 50.0 | 50.9 | 30.3 | 58.6 | 53.5 | 51.5 | 30.2 | 59.0 | 49.6 | 49.2 |
| Lamb, leg | do | 35.0 | 32. 0 | 32.0 | 19.0 | 40.0 | 37.8 | 39.0 | 21.6 | 38.8 | 38.8 | 38.5 |
| Hens | do | 36.1 | 30.6 | 32.5 | 19.8 | 38.2 | 36.4 | 34.8 | 24.6 | 40.3 | 34.2 | 33.7 |
| Saimon, can | , | 33.1 | 33. 8 | 33.8 |  | 34.6 | 34.2 | 34.2 |  | 36.1 | 34.6 | 34.1 |
| Milk, fresh | Quart | 15.8 | 15.6 | 15.6 | 8.0 | 12.0 | 12. 0 | 12.0 | 12.3 | 22.3 | 20.3 | 20.3 |
| Milk, evaporate | 15-16 oz.c | 11. 5 | 11. 6 | 11.6 |  | 10.8 | 10. 8 | 10.7 |  | 11.9 | 11.7 | 11.9 |
| Oleomargarine (all butter substitutes). <br> Cheese <br> Lard. | Pound | 55.2 | 53. 9 | 55.7 | 37.5 | 57.2 | 54. 6 | 55. 9 | 39.0 | 55.6 | 55.0 | 54.2 |
|  |  | 30.0 | 27. 3 | 27.3 |  | 30.4 | 29.3 | 29.2 |  | 32.3 | 30.4 | 30.1 |
|  | do | 33.9 | 35.3 | 35.1 | 21.3 | 36.5 | 39:0 | 38.9 | 22.5 | 35.2 | 36.6 | 36.8 |
|  |  | 22.3 | 20.6 | 20.4 | 15.0 | 19.1 | 17.9 | 17.5 | 15.7 | 22.6 | 21.8 | 22. 0 |
| Vegetable lard subs | - | 17.6 | 18.2 | 18.0 |  | 26.8 | 27.4 | 27.4 |  | 24.8 | 22.0 | 21.5 |
| Eggs, strictly fresh | Dozen | 51.3 | 43.1 | 42.9 | 43.5 | 60.8 | 50.6 | 56.8 | 45.0 | 67.9 | 56.7 | 62.3 |
| Eggs, s |  | 40.6 | 36. 0 | 38.8 | 35.8 | 42.5 | 45.0 | 45.8 | 40.0 | 46. 0 | 40.7 | 41.3 |
| Bread | Poun | 8. 8 | 8. 5 | 8.5 | 5.1 | 8. 1 | 8.1. | 8.1 | 6.2 | 11.0 | 10.9 | 10.9 |
| Flour |  | 5. 6 | 5. 1 | 5.1 | 3.2 | 5. 5 | 5.5 | 5. 6 | 3.7 | 6.9 | 6.5 | 6.4 |
| Corn |  | 4.1 | 4.3 | 4. 2 | 2.6 | 4.2 | 4.3 | 4.2 | 2.9 | 4.1 | 4.4 | 4.2 |
| Rolled oa | do | 8. 9 | 8. 9 | 8.9 |  | 8. 3 | 8. 5 | 8.5 |  | 9.5 | 9. 3 | 9.1 |
| Corn flakes | 8-oz. pk | 11.4 | 9.3 | 9.1 |  | 10.1 | 9.4 | 9.4 |  | 11. 4 | 9.9 | 9. 8 |
| Wheat cereal | 28-oz. p | 25.6 | 25.0 | 25.0 |  | 25.1 | 25.9 | 26.0 |  | 24.9 | 24.6 | 24.6 |
| Macaroni. | Poun | 18.3 | 18.3 | 18.0 |  | 19.2 | 19.2 | 19.2 |  | 20.2 | 19.2 | 19.2 |
| Rice_.-...-.-Beans,Potavy | do | 9.5 | 8.5 | 8.1 | 9.2 | 11.8 | 10.8 | 10.8 | 6.8 | 10. 9 | 9.4 | 9.2 |
|  |  | 9.4 | 10.14.4 | 9.8 |  | $\begin{aligned} & 8.2 \\ & 4.0 \end{aligned}$ | $\begin{aligned} & 9.1 \\ & 2.8 \end{aligned}$ | $\begin{aligned} & 8.6 \\ & 2.7 \end{aligned}$ |  |  |  | 9.8 <br> 3.7 |
|  |  |  |  | 4.3 | --7 |  |  |  | 2.5 | 5. 0 | 3.9 |  |
|  |  | 5.4 | 5.2 | 4.9 |  | 4.9 | 5.8 | 5.6 |  | 7.3 | 6. 0 | 5.4 |
| Cabbage | --.-do... | 5.1 | 5.3 | 5.1 | ----- | 3.9 | 4.3 | 4. 0 | --.-- | 5. 41 | 4. 2 | 4.2 |
| Beans, baked | No. 2 can | $\begin{aligned} & 11.0 \\ & 15.0 \end{aligned}$ | $\begin{array}{r} 0.8 \\ 10.8 \\ 13.5 \end{array}$ | $\begin{aligned} & 10.7 \\ & 13.5 \end{aligned}$ |  | $\begin{aligned} & 10.6 \\ & 14.4 \end{aligned}$ | $\begin{aligned} & 10.3 \\ & 14.0 \end{aligned}$ | $\begin{aligned} & 10.8 \\ & 14.0 \end{aligned}$ |  |  | 10.5 | $\begin{aligned} & 10.3 \\ & 18.1 \end{aligned}$ |
| Corn, canned | do |  |  |  |  |  |  |  |  | 20.0 |  |  |
| Peas, canned |  | 14.0 | 13.4 | 13.0 |  | 14.8 | 13.8 | 13.8 | ----- | 19.8 | 17.6 | 17.9 |
| Tomatoes, canned | Pound | 11.3 | $\begin{aligned} & 9.8 \\ & 6.9 \end{aligned}$ | 9.7 | ----- | 11.7 | 12.9 | 12.9 | ----- | 11.2 | 9.8 7.5 | $\begin{array}{r} 9.8 \\ 7.1 \\ 98.9 \end{array}$ |
| Sugar, granulate |  | 7.0 |  | 6. 8 | 5.7 | 7.5 | 7.5 | 7.5 | 5.9 | 7.5 |  |  |
| Tea |  | 82.7 | 84. 2 | 84.2 | 60.0 | 88.2 | 85. 3 | 85.7 | 60.0 | 100.9 | 98.746.4 |  |
| Cof |  | 44.8 | 40.3 | 41.5 | 30.0 | 51.1 | 47.5 | 47.8 | 34.5 | 50.3 |  | $46.4$ |
| Prunes | do | 17.3 | 13.4 | 13.0 |  | 18.4 | 17.3 | 16.4 |  | 16.8 | 15.9 | 14.9 |
| Raisins | d | 14.2 | 13.4 | 12.9 |  | 15.6 | 15. 5 | 15.2 |  | 15.9 | 14.8 | 14.8 |
| Bananas | Dozen | 28.5 | 26. 3 | 27.2 |  | 31.4 | 31. 0 | 30.5 |  | 30.0 | 30.8 | 29.3 |
| Oranges | d | 48.2 | 39.4 | 41.8 |  | 51.3 | 55. 0 | 53.8 |  | 32. 2 | 56.3 | 33.6 |

[^38] included in this report it would be known as "porterhouse" steak.

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

${ }^{2}$ No. $21 / 2$ can.
${ }^{8}$ Per pound.

TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL

| Article | Unit | Memphis, Tenn. |  |  |  | Milwaukee, Wis. |  |  |  | Minneapolis, Minn. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | Nov.$\begin{gathered} 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{aligned} & \text { Nov, } \\ & 15, \\ & 1927 \end{aligned}$ |
|  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |
|  | Pound <br> ---do... <br> -- do | $\begin{aligned} & \text { Cts. } \\ & 24.0 \end{aligned}$ | Cts. 36. | Cts. 39.8 | $\begin{aligned} & \text { Cts. } \\ & 38.9 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 23.6 \end{aligned}$ | Cts. 38.2 | Cts.$41 .$ | Cts. | Cts. | $\begin{aligned} & \text { Cts. } \\ & 30.8 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 35.8 \end{aligned}$ | $\begin{aligned} & \text { Cts. } \\ & 35.2 \end{aligned}$ |
|  |  |  | 33. 3 | 39.8 37.3 |  | $23.6$ | $38.2$ |  | 41.1 | 20.0 |  |  |  |
|  |  |  |  | 28.4 | 28.8 | 18.4 | 27.8 | 29.4 | 35.9 | 18.7 | 27.7 | 31.7 | 31.2 |
|  |  | 21.0 | $\begin{aligned} & 26.5 \\ & 20.2 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
| Plate beef |  | $\begin{aligned} & 12.5 \\ & 20.5 \end{aligned}$ | 15. 6 | 18.9 | 18.8 | 12.1 | 14. 6 | 15.8 | 16.0 | 10.1 | 12.3 |  |  |
| Pork chops |  |  | 35.444.357.5 | 37. <br> 38.9 | 30.7 | 19.627.8 | 35. 5 | 41.0 | 33.1 | 18.027.7 | 34.3 | 14. 4 | 14.3 <br> 34.4 <br> 46. |
| Bacon, sliced Ham, |  | 30.029.0 |  |  | 39.2 |  |  | 46. 8 | 46.8 |  |  | 47.2 |  |
| Ham, slice |  |  |  |  | 51.4 | 28. 2 | 53.3 | 47. 4 | 47.6 | 30.0 | 52.9 | 50.8 | 50.8 |
| Lamb, leg | do | 20.619.5 | 38.8 | 36.2 | 35. 7 | 19.0 | 36.9 | 37.7 | 37.2 | $14.6 \quad 34.1$ |  | 1 34.1 |  |
| Salmon, |  |  | 32.2 | 31.9 | 30.5 | 17.2 | 30.8 | $\begin{array}{lll}30.1 & 29.9 \\ 33.8 & 33.8\end{array}$ |  | 16.4 | 34.730.738.6 | 30. 8 | $\begin{aligned} & 33.6 \\ & 30.7 \\ & 36.0 \end{aligned}$ |
| Milk, fresh |  | 10.0 | 15.0 | 15.0 | 15.0 | -7.0 | 11.0 | 33.8 11.0 | 33.8 11.0 |  |  | 36.6 12.0 |  |
| Milk, evaporate | 15-16 oz. |  | 11.2 | 11. 6 | 11.6 |  | 11.0 | 11.311 .3 |  | 8.0 |  |  |  |
| Butter | Pound | 38.8 | 53.526.4 | 54. 8 | $\begin{aligned} & 55.6 \\ & 25.1 \end{aligned}$ |  | $\begin{aligned} & 55.7 \\ & 27.5 \end{aligned}$ |  |  | 11.7 | 11.811 .6 |  |  |
| Oleomargarine (all butter substitutes). | Pun |  |  | 25. 6 |  | 36.6 |  | $\begin{aligned} & 53.8 \\ & 27.1 \end{aligned}$ | $\begin{array}{r} 54.2 \\ 27.1 \end{array}$ |  | ---- | $\begin{aligned} & 54.8 \\ & 27.7 \end{aligned}$ | 52.8 | $\begin{aligned} & 11.6 \\ & 53.9 \\ & 25.6 \end{aligned}$ |
| Cheese...-.- |  | 22.0 | 33.7 | 38.4 | 37.3 | 22.3 | 35.3 | 37.2 | 37.1 | 21.3 | 35.2 | 36.736 .5 |  |
| Vegetable lard sub | do | 15.6 | $\begin{aligned} & 18.1 \\ & 21.8 \end{aligned}$ | $\begin{array}{\|l\|} \hline 16.7 \\ 21.6 \end{array}$ | $\begin{aligned} & 16.4 \\ & 21.8 \end{aligned}$ | 16.0 | $\begin{aligned} & 20.8 \\ & 26.9 \end{aligned}$ | 19.726.7 | $\begin{aligned} & 19.5 \\ & 26.7 \end{aligned}$ | 15.6 | $\begin{aligned} & 19 . \\ & 27 . \\ & \hline \end{aligned}$ | $\begin{array}{lll}18.3 & 18.5\end{array}$ |  |
| Eggs, strictly fresh | Doze | 38.0 |  |  |  | -45.0 |  |  |  |  |  | 27.0 27.0 |  |
|  |  |  | $51.4$ | $43.7$ | 48.8 |  | $\begin{aligned} & 26.9 \\ & 65.9 \end{aligned}$ | 51. 4 | 61.8 | 41.6 | 27. 43 | 44.8 |  |
| Eggs, <br> Bread | Pour | 30.0 | 42.7 | 39.0 | 38.5 | 33.0 | 42.6 | 37.0 | 39.1 | 31.642 .2 |  |  |  |  |
| ${ }_{\text {Brad }}$ Braur | Pou | 6. 03.52.5 | 9. 66.23.9 |  | $\begin{aligned} & 9.5 \\ & 6.0 \end{aligned}$ | 5.73.13.3 | 9.0 | 9.1 | 9.1 | 5.6 | 8. 9 | 8.9 | 8.7 |
| Corn mea |  |  |  |  |  |  | 5. 2 | 4.9 | 4. 8 | 2.8 | 5. 4 | 5. 2 | 5. 1 |
|  |  |  |  |  | 3.7 |  | 5.5 | 5.6 | 5. 6 | 2. | 5. 2 | 5.4 | 5. 3 |
| Rolled oats | do. |  | 9.1 | 9.0 | 9.0 |  | 8.4 | 8.4 | 8. 4 |  | 8.4 | 8.1 |  |
| Corn flakes | 8-oz. pkg |  | 10.9 | 9.8 | 9.8 |  | 10.2 | 9.2 | 8. 3 |  | 10.8 | 9. 8 | 9.8 |
| Wheat cereal | 28-oz. pikg |  | 25. 5 | 25.8 | 25.8 |  | 24.6 | 24.7 | 24.6 |  | 25.3 | 25.6 | 25.8 |
| Macaroni | P |  | 19.3 | 19.4 | 19.4 |  | 17.8 | 17. 5 | 17.4 |  | 18.9 | 18.8 | 18.8 |
| Rice |  | 8.1 | 9.7 |  | 8.6 | 9.0 | 11.5 |  |  |  |  |  |  |
| Beans, n |  |  | 9.4 | 9.3 | 8. 9 | 9.0 | 8.4 | 8. 7 | 10.4 8 | 6 | 11.5 | 10.5 | 10.3 |
| Potatoes |  | 2.0 | 4. 6. | 3.3 | 3. 2 | 1.7 | 3. 5 | 2. 6 | 2. 5 | 1. 6 | ${ }_{3} 9.1$ | 9.8 | 9.9 |
| Onions |  |  | 4.9 | 4.8 | 4.6 | 1.7 | 4. 4 | 4. 6 | 2.5 4.3 | 1. 6 | 3. 2.8 | 1. 4.7 | 1.9 |
| Cabbage |  |  | 3.6 | 3.7 | 3. 4 |  | 3.4 |  |  |  |  |  |  |
| Beans, baked | No. 2 ca |  | 11.6 | 11. 0 | 11.0 |  | 11.3 | 10.9 | 2.8 |  | 3. 2 | 2.9 | 2. 8 |
| Corn, canned | --do..- |  | 15.3 | 14. 6 | 14.7 |  | 11.3 | 10.9 | 11.2 |  | 12.4 | 12.4 | 12.4 |
| Peas, canned |  |  | 17.0 | 15.6 | 15.0 |  | 15.6 | 10.6 | 15.8 |  | 14.1 | 14.1 | 14. 0 |
|  |  |  |  |  |  |  | 10.2 | 15. 5 | 15.2 |  | 14.3 | 14.5 | 14.4 |
| Tomatoes, canned | do |  | 10.4 | 9.9 | 9.9 |  | 13.4 | 13.3 |  |  |  |  |  |
| Sugar, granula | Poun | 5. 1 | 7.0 | 6. 9 | 7. 1 | 5.3 | 6.9 | 6.9 | 13.8 | 5. 1 | 13.5 7.2 | 13.2 7 | 13.5 |
|  | -.do. | 63.8 | 99.0 | 98.4 | 98.4 | 50.0 | 70.8 | 70.0 | 70.0 | 45.0 | 61.1 | 60.6 | 60.6 |
|  |  | 27.5 | 50.1 | 47.3 | 47.6 | 27.5 | 46.8 | 42.7 | 42.7 | 30.8 | 53.7 | 50.1 | 50.3 |
| Prunes | do |  | 16.6 | 14.0 | 13.9 |  | 16. 4 |  |  |  |  |  |  |
| Raisins. |  |  | 15.0 | 14.7 | 14.6 |  | 14.4 | 14.5 | 14. 1 |  | 16. 9 | 15.0 | 14.9 |
| Bananas | Dozen |  | 29.1 | ${ }_{2}^{14.6}$ | 12.0 |  | 14.8 29 | 14.5 <br> 39.5 | 13.9 |  | 14.3 | 14.4 ${ }^{11}{ }^{3}$ | 14.3 |
| Oranges | -.do... |  | 46.5 | 45.4 | 42.9 |  | 55.8 | 53.7 | 53.2 |  | 58.5 | 58.4 ${ }^{11}$ | 11.3 60.4 |

1 Whole.

ARTICLES OF FOOD IN 51 CITIES ON SPEOIFIED DATES-Continued

| Mobile, Ala. |  |  | Newark, N. J. |  |  |  | New Haven, Conn. |  |  |  | New Orleans, La. |  |  |  | New York, N. Y. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | Oct. <br> 15, 1927 | Nov. 15,1927 | Nov. 15 - |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | Oct. 15 1927 | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{aligned} & \text { Nov。 } \\ & 15, \\ & 1927 \end{aligned}$ |
|  |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |
| Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |  |  |  |  | Cts. |  |  |  | Cts. | s. | , |  |
| 34. 5 | 36.4 | 35. 9 | 27.4 | 44.5 | 48.8 | 48.7 | 32. 2 | 54. 0 | 58.7 | 58.7 | 21.5 | 35.6 | 37.2 | 36. 3 | 25.9 | 44.1 | 49.9 | 50.3 |
| 33. 6 | 35.5 | 35. 0 | 27. 3 | 42. 5 | 46. 3 | 46.4 | 29.6 | 43. 7 | 47. 3 | 47.3 | 19.0 | 31.1 | 32.8 | 32.5 | 25.4 | 43.0 | 46.8 | 47.1 |
| 28.6 | 30.5 | 29.5 | 21.3 | 35. 2 | 38.7 | 37.8 | 23.8 | 35. 5 | 38. 4 | 38.9 | 18. 0 | 30. 4 | 31. 4 | 30.8 | 21.3 | 38.6 | 41.9 | 42.6 |
| 23.2 | 24.1 | 23.6 | 17.8 | 24.9 | 27.5 | 28.6 | 19.6 | 26.8 | 29.0 | 29.2 | 14.9 | 21.5 | 22.1 | 21.7 | 16.0 | 24.3 | 28.1 | 28.4 |
| 17.5 | 18.2 | 18.4 | 12. 4 | 12.8 | 15. 0 | 16.0 |  | 15.8 | 15. | 16. 2 | 11.9 | 18.1 | 18.2 | 18.6 | 14.5 | 20.4 | 22.0 | 22.6 |
| 41.4 | 40.0 | 37.7 | 23.7 | 38.5 | 42.1 | 36. 4 | 23. 0 | 39.5 | 44. 2 | 38.3 | 24.5 | 36.9 | 40. 4 | 35. 7 | 22. 6 | 42. 6 | 45.2 | 40.6 |
| 51.5 | 45.8 | 44.8 | 25.3 | 47.8 | 45.8 | 45.0 | 28.8 | 51.1 | 45.7 | 46.2 | 30.5 | 50. 4 | 45.9 | 46.9 | 25.6 | 50.6 | 48.9 | 49.2 |
| 54.2 | 52.1 | $52.1{ }^{1}$ | 19.8 | 56.9 | 54.3 | 55.2 | 32.4 | 62.9 | 57.8 | 58.7 | 26.0 | 53.7 | 50.9 | 49.3 | 27.8 | 62.3 | 58.4 | 58.0 |
| 40 | 41. | 41. | 19.7 | 38.1 | 38.3 | 38.5 | 19.8 | 38.8 | 39.2 | 39.3 | 20.5 | 39.0 | 38.5 | 38.8 | 15.1 | 36.5 | 37.5 | 7.0 |
| 36.8 | 35.0 | 36.3 | 22.0 | 38.0 | 37.5 | 36.4 | 23.8 | 42.2 | 40.5 | 39.9 | 20.5 | 36.5 | 36. 5 | 35. 0 | 21.1 | 40.3 | 38.7 | 38.5 |
| 34.5 | 34.5 | 34.7 |  | 33.3 | 32.3 | 32.8 |  | 33.5 | 33. 6 | 34.3 |  | 38.7 | 37.9 | 37.0 |  | 33.3 | 33.5 | 34.2 |
| 17.8 | 17.8 | 17.8 | 9.0 | 15.0 | 16.0 | 16.0 | 9.0 | 16.0 | 16.0 | 16.0 | 9.8 | 14.0 | 14.0 | 14.0 | 9.0 | 15.0 | 16.0 | 16.0 |
| 11 | 11.7 |  |  | 11.1 | 11. 1 | 11. |  | 12.1 | 12. 1 | 12. |  | 11.0 | 11.1 | 11 |  | 11.1 | 11.1 | 11.1 |
| 56.8 | 54.9 | 56. 6 | 42.7 | 58.0 | 59.6 | 59.3 | 36.3 | 54.7 | 54.9 | 54.9 | 38.1 | 54.9 | 55, 6 | 56. | 39.9 | 58.8 | 58.4 | 59.0 |
| 30. 8 | 29.1 | 29.4 |  | 30.4 | 30.6 | 30.2 |  | 31.7 | 29.1 | 29.0 |  | 30.7 | 29.5 | 29. |  | 30.1 | 27.6 | 28.0 |
| 37.9 | 38. | 38. | 24.8 | 39.4 | 40. 4 | 40.9 | 23.5 | 38.4 | 39.6 | 40.1 | 21. 9 | 36.1 | 38.1 | 39. 2 | 20.2 | 37.9 | 39.8 | 40.3 |
| 20.8 | 19.8 | 19.8 | 16.3 | 21.9 | 19.8 | 19.7 | 15.7 | 20.9 | 18.8 | 18.7 | 15.0 | 20.5 | 19.6 | 19.5 | 16.2 | 21.3 | 20.5 | 20.6 |
| 20.6 | 21. 0 | 21.3 |  | 25. 9 | 25.5 | 25. 4 |  | 26.0 | 25.6 | 25.4 |  | 20.3 | 19.4 | 20.0 |  | 26.3 | 25.9 | 25.9 |
| 61.3 | 47.6 | 53.0 | 67.0 | 76.7 | 69.2 | 74.7 | 59.7 | 86.5 | 73.2 | 80.9 | 41.3 | 52.5 | 45.1 | 46. 6 | 56.1 | 82. 0 | 74.1 | 80.0 |
| 48.1 | 41.3 | 42.0 | 36.8 | 48.0 | 43.3 | 42.9 | 33. 0 | 52.3 | 49.6 | 49.6 | 30.0 | 42.0 | 36. 0 | 38.0 | 37.3 | 48.2 | 43.9 | 42.1 |
| 9.7 | 10.1 | 10. 1 | 5.6 | 9.5 | 9.5 | 9. 5 | 6. 0 | 9.2 | 9. 2 | 9.2 | 4.8 | 8.8 | 8.7 | 8.7 | 6.0 | 9. 6 | 9.7 | 9.6 |
| 6. 4 | 6.1 | 6.1 | 3. 6 | 5. 6 | 5. 3 | 5.3 | 3. 2 | 5.8 | 5.5 | 5.4 | 3.7 | 7.0 | 6. 6 | 6. 6 | 3.2 | 5. 7 | 5.5 | 5.4 |
| 3.9 | 4.1 | 4.1 | 3.6 | 6. 6 | 6. 8 | 7.0 | 3. 2 | 6.7 | 6. 9 | 7.0 | 2.8 |  | 4.2 | 4.1 | 3.5 | 6.5 | 6.6 | 6.7 |
| 8. 6 | 8.5 |  |  | 8.4 | 8. 3 | 8. |  | 9.3 | 9. |  |  |  |  |  |  | 6 | 8.7 | 8. 6 |
| 11. 1 | 9.5 | 9. |  | 10.0 | 8. 6 | 3.3 |  | 10.8 | 10.1 | 10.2 |  | 10.3 | 9.7 | 9. 7 |  | 10.0 | 8.8 | 9.1 |
| 25.0 | 24.9 | 24.5 |  | 24.3 | 24. 2 | 24.2 |  | 24.7 | 24.9 | 24.6 |  | 24.4 | 24. 6 | 24.6 |  | 24.0 | 23.9 | 24.0 |
| 20.6 | 20.7 | 20.7 |  | 21.0 | 21.4 | 21.4 |  | 22.3 | 22.3 | 22.3 |  |  | 10.6 | 10.6 |  | 21.1 | 21.1 | 21.1 |
| 10.7 | 9. 6 | 9. | 0 | 10.9 | 10.4 | 10.2 | 9.3 | 11.6 | 10.5 | 10.2 | 7.5 | 9. | 9.5 | 9.4 | 8.0 | 10.4 | 10.1 | 10.1 |
| 8.8 | 8. 8 | , |  | 9.8 | 9. 8 | 10.0 |  | 9.6 | 9. 5 |  |  | 8. 4 | 8. 8 | 8. 7 |  | 10.3 | 10.3 | 10.2 |
| 5.1 | 3. 7 |  | 2.7 | 4. 6 | 3.3 | 3. 3 | 1. 8 | 4. 0 | 3. 2 | 3. 2 | 2.2 | 4. 7 | 4. 0 | 3.9 | 2.3 | 4. 4. | 3. 6 | 3.5 |
| 5.1 | 4.9 |  |  | 4. 7 | 4.9 | 5.0 |  | 5.4 | 5.5 |  |  | 4 | 4.5 | 4.5 |  | 4.5 | 5.0 | 4.9 |
| 4.6 |  | 4.7 |  | 4.0 | 4.5 | 4.4 |  | 4.3 | 4. 5 | 4.5 |  | 4.1 | 4.4 | 4.5 |  | 3. | 3.6 | 3.5 |
| 10.6 | 10.3 | 10.2 |  | 10.5 | 10.7 | 10.3 |  | 11.1 | 11.6 | 11.7 |  | 10.9 | 10.9 | 11. 1 |  | 10.7 | 11.2 | 11.0 |
| 17.3 | 15. 8 | 15.8 |  | 16.6 | 15.3 | 15.1 |  | 19.1 | 18.3 | 18.1 |  | 15.1 | 14.4 | 14. 4 |  | 14. 7 | 14.3 | 14.5 |
| 16.0 | 15.4 | 15.3 |  | 17.1 | 17.8 | 17.8 |  | 20.3 | 18.4 | 18.8 |  | 17.4 | 17.9 | 17.6 |  | 15.5 | 14.6 | 14.9 |
| 10.6 | 10.3 | 10. 2 |  | 11.3 | 10.6 | 10.5 |  | 12.5 | 13.5 | 13.0 |  | 11.5 | 10.7 | 10.5 |  | 10.7 | 11.2 | 11.2 |
| 7.2 | 7.1 | 7.1 | 5.2 | 6. 8 | 6.7 | 6.7 | 5. 2 | 7.0 | 7. 1 | 7.1 | 5.1 | 6.7 | 6. 7 | 6. 6 | 4.9 | 6. 4 | 6.4 | 6.3 |
| 80.5 | 80.3 | 80.3 | 53.8 | 63.2 | 61.8 | 60.1 | 55.0 | 60.0 | 60.3 | 60.3 | 62.1 | 83.1 | 79.3 | 79.3 | 43.3 | 65. 9 | 67.1 | 67.3 |
| 50.3 | 47.7 | 47.8 | 29.3 | 50.2 | 46.8 | 46.9 | 33.8 | 51.9 | 48.8 | 49.4 | 25.7 | 35.6 | 35.7 | 35. 4 | 27.2 | 47.4 | 45.4 | 45.8 |
| 16.7 | 15. 7 | 12.5 |  | 15.0 | 14.2 | 14.0 |  | 16.3 | 14.5 | 14.2 |  | 17.6 | 15.9 | 15.4 |  | 14.5 | 13.0 | 12.8 |
| 14. 7 | 14.1 | 13.8 |  | 14.7 | 14.3 | 14.4 |  | 14.1 | 13.7 | 13.5 |  | 14.3 | 13.6 | 13.1 |  | 14.5 | 13.9 | 13.6 |
| 22.5 | 24, 4 | 25. 0 |  | 37.5 | 37. 5 | 38.0 |  | 33.8 | 33.4 | 32.5 |  | 18.6 | 16.7 | 15.8 |  | 40.3 | 35.4 | 38.5 |
| 38.0 | 47.5 | 46.0 |  | 62.5 | 65.8 | 57.4 |  | 58.3 | 67.3 | 54.9 |  | 49.0 | 51.9 | 43.8 |  | 68.1 | 74.3 | 67.4 |

${ }_{2}$ Per pound.

TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL

| Article | Unit | Norfolk, Va. |  |  | Omaha, Nebr. |  |  |  | Peoria, Ill. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | Nov. 15, 1927 | Nov. 15, 1926 | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | Nov. 15, 1927 |
|  |  |  |  |  | 1913 | 1926 |  |  |  |  |  |
|  |  | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |
| Sirloin stea | Poun | 41.0 | 42.5 | 41.9 | 25.9 | 37.5 | 39.8 | 39.1 | 34.6 | 35. 7 | 35.5 |
| Round ste | do | 34.5 | 37.0 | 36.4 | 23.1 | 34.8 | 37.4 | 36.8 | 33.8 | 34. 4 | 34.4 |
| Rib roast.... |  | 32.0 23.5 | 32.0 | 32.9 | 20.0 | 26. 2 | 27.4 | 26. 6 | 25.0 | 25. 4 | 25.3 |
| Chuck roast |  | 23.5 | 23.3 | 23.9 | 17.0 | 22.0 | 23.5 | 23.2 | 21.5 | 22.5 | 22.5 |
| Plate beef. | do | 15. 5 | 15.9 | 15.9 | 11.1 | 12.6 | 13.0 | 13.6 | 14.6 | 15.7 | 15.3 |
| Pork chops | do | 37.2 | 38.6 | 34.2 | 21.1 | 37.5 | 41.1 | 34.5 | 36.2 | 37.1 | 32.3 |
| Bacon, sliced | do | 49.9 | 45.1 | 41.7 | 28.8 | 54.8 | 49.1 | 48.8 | 51.3 | 48.8 | 48.8 |
| Ham, sliced. | do | 50.5 | 48.3 | 47.0 | 31.3 | 61.6 | 50.3 | 50.4 | 56.4 | 54.2 | 53.8 |
| Lamb, leg | do | 40.5 | 42. 2 | 39.2 | 16.7 | 36.8 | 38.1 | 37.5 | 40.0 | 39.4 | 40.0 |
| Hens.-. | do | 38.3 | 35. 7 | 37.1 | 16.3 | 31.1 | 29.9 | 29.5 | 33.4 | 32.5 | 31.7 |
| Salmon, can | do | 35.4 | 36.5 | 35.9 |  | 36.4 | 34.9 | 35. 5 | 35.8 | 34.0 | 34.5 |
| Milk, fresh | Quart | 17.5 | 18. 0 | 18.0 | 8. 7 | 11.3 | 11.3 | 11.3 | 12.0 | 13.0 | 13.0 |
| Milk, evaporat | 15-16 oz. | 11.1 | 11.8 | 11.8 |  | 11.8 | 11.7 | 11.8 | 11.5 | 11.3 | 11.2 |
| Butter | Pound | 57.4 | 57.8 | 58.9 | 37.0 | 52.1 | 51.0 | 52.6 | 52.5 | 51.8 | 53.0 |
| Oleomargarine (all butter substitutes). | -do | 27.2 | 26.4 | 27.4 |  | 29.9 | 26.0 | 26.2 | 29.4 | 28.2 | 28.2 |
| Cheese....-.-- | do | 34.8 | 35.8 | 36.4 | 23.3 | 36.9 | 37.7 | 38.6 | 36.3 | 37.4 | 37.8 |
| Lard | do | 20.2 | 19. 1 | 19.4 | 17.7 | 23.2 | 20.3 | 20.3 | 22.1 | 18.8 | 18.8 |
| Vegetable lard subst | do | 22.8 | 22.5 | 22.4 |  | 28.1 | 26.0 | 25.4 | 27.0 | 27.4 | 27.6 |
| Eggs, strictly fresh. | Dozen | 65.5 | 60.0 | 62.2 | 43.3 | 50.1 | 42.1 | 46.1 | 54.6 | 44.1 | 55.7 |
| Eggs, | do | 48.7 | 42.8 | 45.4 | 30.0 | 43.4 | 37.8 | 35.9 | 46.5 | 38.4 | 39.9 |
| Bread | Pound | 9.9 | 9. 9 | 9.9 | 5. 2 | 10.2 | 9.7 | 9. 7 | 10.1 | 10.0 | 10.0 |
| Flour | do | 5. 8 | 5. 6 | 5. 5 | 2. 7 | 4.8 | 4. 6 | 4. 5 | 5. 6 | 5. 3 | 5.2 |
| Corn meal | d | 4.6 | 4.7 | 4.6 | 2. 7 | 4.9 | 4.9 | 4.7 | 4.9 | 4.8 | 4.8 |
| Rolled oats | do | 8.7 | 8. 6 | 8. 5 |  | 10.3 | 10.1 | 10.1 | 9.1 | 9.3 | 9.3 |
| Corn flakes | 8-oz.pkg | 10.5 | 9.7 | 9.7 |  | 12.4 | 10.1 | 10.1 | 11.9 | 10.2 | 10.2 |
| Wheat cereal | 28-0z. pkg | 24.2 | 25.0 | 24.8 |  | 28.0 | 27.8 | 27.8 | 25.6 | 26.3 | 26.3 |
| Macaroni. | Pound. | 19.1 | 19.1 | 19.1 |  | 21.0 | 21.3 | 21.3 | 19.9 | 18.6 | 18.6 |
| Rice. | do | 12. 6 | 11.7 | 11. 6 | 8.5 | 11.4 | 11.0 | 10.9 | 11.5 | 11.3 | 11.2 |
| Beans, na | --.- do | 8.4 | 8.8 | 8. 4 |  | 9.6 | 10.1 | 10.0 | 8.8 | 9.0 | 9.1 |
| Potatoes | ---.-do | 4. 4 | 3.8 | 3.7 | 1. 8 | 4.0 | 2. 4 | 2. 2 | 3.8 | 2.4 | 2.3 |
| Onions |  | 5.6 | 5.4 | 5.3 |  | 5.1 | 5.1 | 5.3 | 5.8 | 5.9 | 5.5 |
| Cabbage | , | 4.6 | 4.5 | 4.5 |  | 3.7 | 3. 2 | 3.3 | 3.3 | 3.2 | 3.1 |
| Beans, baked | No. 2 can | 9.8 | 9.8 | 9.9 |  | 13.9 | 12.9 | 13.0 | 12. 1 | 11.2 | 11.1 |
| Corn, canned | do | 15. 8 | 15. 4 | 14.6 |  | 15.6 | 16. 4 | 15.9 | 15.8 | 14.8 | 15.0 |
| Peas, canned |  | 19.9 | 18.5 | 17.3 |  | 16.1 | 15.3 | 15.4 | 18.1 | 17.2 | 17.8 |
| Tomatoes, canned | do | 10.0 | 9.9 | 9.7 |  | 13.4 | 13.1 | 13.1 | 13.5 | 12.5 | 12.7 |
| Sugar, granulate | Pound | 6. 7 | 6. 9 | 6. 8 | 5. 7 | 7.3 | 7.5 | 7.4 | 7.7 | 8.4 | 8.4 |
| Tea | do | 89.4 | 96.4 | 96.4 | 56.0 | 78.8 | 78.4 | 78.1 | 69.5 | 70.9 | 70.8 |
| Coffee | ---.-do. | 51.4 | 47.2 | 48.4 | 30.0 | 55.9 | 53.6 | 53.6 | 51.8 | 46.8 | 47.8 |
| Prunes | do. | 16.4 | 14.9 | 14.1 |  | 17.1 | 14.8 | 14.4 | 19.2 | 17.4 | 18.0 |
| Raisins | d | 14.8 | 14. 2 | 14. 1 |  | 15. 6 | 15.0 | 14.9 | 15.3 | 14.5 | 14.3 |
| Bananas | Dozen | 33.3 | 33. 5 | 34.0 |  | ${ }^{3} 11.5$ | ${ }^{3} 11.1$ | ${ }^{3} 11.8$ | ${ }^{3} 10.2$ | ${ }^{3} 10.0$ | ${ }^{3} 10.4$ |
| Oranges | do | 51.5 | 60.7 | 50.9 |  | 49.8 | 44.8 | 47.1 | 54.3 | 47.0 | 47.6 |

[^39]ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

| Philadelphia, Pa. |  |  |  | Pittsburgh, Pa. |  |  |  | Portland, Me. |  |  | Portland, Oreg. |  |  |  | Providence, R. I. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\left.\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered} \right\rvert\,$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | Oct. 15, 1927 | $\left\|\begin{array}{c} \text { Nov. } \\ 15, \\ 1927 \end{array}\right\|$ | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov.$\begin{gathered} 15 \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ |
| 1913 | 1926 |  |  | 1913 | 1926 |  |  |  |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |
| 130.5 | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |
|  | 154.8 | 159.1 | 159.0 | 27.3 | 46.1 | 50.2 | 49.3 | ${ }^{160.5}$ | 163.9 | ${ }^{1} 64.7$ | 22.9 | 29.4 | 31. 1 | 31.0 | ${ }^{1} 39.8$ | 170.0 | 175.4 | 176.2 |
| 25.7 | 41.4 | 45.4 | 45.2 | 24.0 | 39.4 | 41.9 | 41.0 | 47.2 | 47.8 | 47.0 | 21.0 | 26.5 | 28.9 | 28.8 | 31. 0 | 49.3 | 51.4 | 50.9 |
| 21.5 | 36. 3 | 38.2 | 39.0 | 21. 7 | 34.0 | 36.0 | 35. 6 | 29.7 | 32.2 | 32. 2 | 19.1 | 24.4 | 25.8 | 26.2 | 24. 2 | 37.8 | 40.4 | 40.730.5 |
| 18.0 | 25.7 | 27.8 | 28. 7 | 17.3 | 25.4 | 28.3 | 27.8 | 21.6 | 22. 6 | 22.8 | 16.7 | 18.6 | 19.4 | 19.9 | 18.8 | 28.7 | 31.6 |  |
| 12.0 | 12.6 | 14. 0 | 14.7 | 12.8 | 13.0 | 14.2 | 15.4 | 16.8 | 18.7 | 18.5 | 13.5 | 13.4 |  |  |  | 17.7 | 8.4 | 19.1 |
| 22.5 | 43. 4 | 45.3 | 38.8 | 22.5 | 39.7 | 46.6 | 39.2 | 41.2 | 44.4 | 39.6 | 21.4 | 39.5 | 38.8 | 36. 4 | 22.0 | 42.9 | 48. 7 | 40.1 |
| 26.9 | 48.3 | 45.6 | 45. 1 | 30.4 | 55.4 | 51. 4 | 50.7 | 46.3 | 43.1 | 43.1 | 30.3 | 58.3 | 53.6 | 53.4 | 22.8 | 46.2 | 42.1 | 41.9 |
| 30.4 | 59.6 | 55.7 | 54.8 | 29.8 | 64. 1 | 59.0 | 57.3 | 59.2 | 56. 5 | 52.0 | 30.0 | 60.0 | 56.0 | 55.4 | 32. 7 | 61.8 | 52.7 | 54.8 |
| 18.8 | 40.5 | 40.3 | 40.8 | 20.323.8- | $\begin{aligned} & 40.1 \\ & 41.8 \end{aligned}$ | $\begin{aligned} & 41.4 \\ & 42.6 \end{aligned}$ | 40.1 | 37.2 | 37.9 | 36.9 | 17.5 | 35.7 | 35. 6 | 35.9 | 18.7 | 40.9 | 39.8 | 39.8 |
| 23.1 | 41.2 | $\begin{aligned} & 39.9 \\ & 34.1 \end{aligned}$ | $\begin{aligned} & 40.0 \\ & 34.7 \end{aligned}$ |  |  |  | $\begin{aligned} & 41.6 \\ & 33.1 \end{aligned}$ | $\begin{array}{r} 42.0 \\ 33.9 \end{array}$ | $\begin{aligned} & 40.8 \\ & 35.0 \end{aligned}$ | $\begin{aligned} & 40.2 \\ & 35.4 \end{aligned}$ |  | 34.5 | 29. 7 | 32.2 |  | 42.8 | $\begin{aligned} & 40.8 \\ & 33.0 \end{aligned}$ | $\begin{aligned} & 41.0 \\ & 32.9 \end{aligned}$ |
|  | 31.6 |  |  |  | 34.0 | 32. 6 |  |  |  |  |  | 36.2 |  | 35. 0 |  | 35.7 |  |  |
| 8. 0 | $\begin{aligned} & 13.0 \\ & 11.4 \end{aligned}$ | $\begin{aligned} & 13.0 \\ & 11.8 \end{aligned}$ | $\begin{aligned} & 34.7 \\ & 13.0 \end{aligned}$ | $9.2$ | 14.7 | 15. 0 | 15.0 | 13. 8 | 13. 8 | 13. 8 | 9.7 | 12.0 | 12 | 12.0 | 9.0 | 14.8 | 15. 7 | 15. 7 |
|  |  |  |  |  | $\begin{aligned} & 11.4 \\ & 59.9 \end{aligned}$ | $\begin{aligned} & 11.1 \\ & 58.7 \end{aligned}$ | $\begin{aligned} & 11.2 \\ & 59.4 \end{aligned}$ | $\begin{aligned} & 12.5 \\ & 56.1 \end{aligned}$ | $\begin{aligned} & 12.5 \\ & 57.2 \end{aligned}$ | $\begin{aligned} & 12.5 \\ & 57.4 \end{aligned}$ | 40.4 | 10.7 | 10. | $10 .$ | 38.4 | 12. 2 |  | 12.253.9 |
| 44.3 | $\begin{aligned} & 60.9 \\ & 30.6 \end{aligned}$ | $\begin{aligned} & 61,0 \\ & 28.6 \end{aligned}$ | $\begin{aligned} & 61.9 \\ & 28.9 \end{aligned}$ | 40.4 |  |  |  |  |  |  |  | 53.130.4 | 54. 8 | $\begin{aligned} & 55.9 \\ & 55.9 \\ & 26.3 \end{aligned}$ |  | 54.5 | 53. 9 |  |
|  |  |  |  |  |  |  | 31.4 | 28.3 | 26.4 | 26.4 |  |  |  |  |  | 29.1 | 27.5 | 27.4 |
| $\begin{aligned} & 25.0 \\ & 15.5 \end{aligned}$ | 39.0 | 40.4 | 40.8 | 24. 5 | 39.7 | 40.6 | 41.3 | 38.0 | 38.6 | 38.7 | 20.817.8 | 37.3 | 38.3 | 38.6 | 22.0 | 36. 8 | 37.8 | 37.4 |
|  | $\begin{aligned} & 20.5 \\ & 25.2 \end{aligned}$ | $\begin{aligned} & 18.6 \\ & 25.4 \end{aligned}$ | $\begin{aligned} & 18.3 \\ & 25.2 \end{aligned}$ |  | 21.5 | 19.5 | 19.7 | 19.7 | 18.9 | 18.6 |  | 23.2 | 21.0 | 21.0 | 15.8 | $\begin{aligned} & 20.2 \\ & 27.1 \end{aligned}$ | 18. 626.5 | 37.418.726.6 |
|  |  |  |  |  | 27.5 |  | 27.3 | 25. 2 | 26. 4 | 26.6 |  | 28.9 | 28.9 | 28.7 |  |  |  |  |
| 50.8 | 73.0 | 62.5 | 66.5 | 46.3 | 67.3 | 58.4 | 63.4 | 82, 0 | 68.5 | 77.9 | 55 | 53.8 | 52.6 | 54.9 | 0 | 87.9 | 75.0 | 83.1 |
| 34.7 | 48.2 | 47.0 | 46.7 | 33.4 | 48.4 | 40.7 | 43.8 | 50. 2 | 44.0 | 48. 1 | 37.5 | 48.0 | 43.0 | 41.0 | 36.8 | 48.9 | 48.1 | 47.0 |
| 4. | 9.5 | 9.4 | 9. 4 |  | 9.3 | 9. 0 | 8.4 | 10. 1 | 10.3 | 10.3 | 5. 5 | 9. 5 | 9.3 | 9.2 | 6.1 | 9.2 | 9.1 | 9.1 |
|  | 5.5 | 5. 2 | 5. 1 | 3. 2 | 5. 4 | 5. 2 | 5. 1 | 5. 6 | 5.4 | 5.3 | 2. 9 | 5. 2 | 5. | 4.8 | 2.9 | 6. 1 | 5. 7 | 5.5 |
| 2. | 4 | ${ }^{8}$ | 18 | 3.0 | 6.0 | 5.7 |  | 5.1 | 5.0 | 5.0 | 3.5 | 5. | 5. | 5.5 | 3.1 | 5.1 |  | 5.1 |
|  | 8.7 |  |  |  |  | 9. 1 | , | 7.9 | 7. |  |  | 10.3 | 10.1 | 10.2 |  | 9.2 |  | 8.9 |
|  | 10.1 | 9.4 | 9.4 |  | 10.5 | 9. 8 | 9.9 | 11.6 | 9.6 | 9. |  | 11.4 | 9. 6 | 97. |  | 10.8 |  | 9.5 |
|  | 24.5 | 24.6 | 24.6 |  | 25.0 | 24. 9 | 24. 9 | 25.8 | 25.5 | 25.5 |  | 26.8 | 27.0 | 27.0 |  | 25.5 | 25.2 | 25.1 |
|  | 20.8 | 20.7 | 20.5 |  | 24.0 | 23.4 | 23.6 | 24.9 | 24.1 | 24.1 |  | 18.0 | 18.3 | 18 |  | 23.3 | 23 | 23.0 |
| 8 | 12.1 | 11.3 | 11.2 | 2 | 12.8 | 11. 4 | 11.1 | 13.2 | 12. 2 | 12.2 | 8.6 | 10.8 | 10.2 | 10.1 | 9. 3 | 12.1 | 10.9 | 10.8 |
|  | 9.2 | 9.3 | 9. 5 |  | 8. 8 | 9. 1 | 8. 9 | 9.6 | 10.3 | 9.9 |  | 9.9 | 10.4 | 9.6 |  | 9.7 | 10. 0 | 9.9 |
|  | 4. 6 | 3. 6 | 3. 5 |  | 4. 1 | 3. 0 | 2. 9 | 3. 6 | 2. 8 | 2. 8 | 1. 2 | 2.4 | 2. 6 | 2. | 1.7 | 3. 7 | 3. 0 | 2. 9 |
|  | 4.9 | 4.2 |  |  | 5. | 5.2 |  | . 6 | 4.6 | . |  | 3.3 | 3. 6 |  |  | 4.7 |  | . 5 |
|  | 2 | 3.7 | 3.2 |  | 4.7 | 4. 3 | 3.9 | 3.2 | 2. 7 | 2.7 |  | 3.0 | 3.2 | 2.9 |  | 3.7 | 3.9 | 3.7 |
|  | 10.6 | 10.9 | 10.8 |  | 12.8 | 12.9 | 12.6 | 15.0 | 13.8 | 14.7 |  | 13.4 | 11.8 | 12.0 |  | 11.3 | 11.1 | 10.9 |
|  | 14.7 | 14. 0 | 14.0 |  | 16. 7 | 16. 1 | 16.2 | 16.5 | 14.2 | 13.9 |  | 18.5 | 18.1 | 18. 1 |  | 17.9 | 16.9 | 17.1 |
|  | 15.8 | 14.9 | 14.3 |  | 17.3 | 16.9 | 17.0 | 18.9 | 17.3 | 17.3 |  | 18.3 | 17.5 | 17.5 |  | 19.7 | 18.6 | 18.4 |
|  | 11. 7 | 11. 7 |  |  | 12.5 | 11.6 | 11.7 | 12.4 | 12.7 | 12.5 |  |  |  |  |  | 13.3 | 3. 4 | 12.8 |
| 5.0 | 6.7 | 6.7 | 6. 7 |  | 7.2 | 7.4 | 7.4 | 7.1 | 7.3 | 7.2 | 6.1 | 7.1 | 7.1 | 7.2 | 5. 0 | 6. 9 | 6.9 | 6.9 |
| 54. 0 | 70.9 | 67.3 | 67. 9 | 58.0 | 85.1 | 83.0 | 83.0 | 61. 9 | 62. 2 | 62.2 | 55.0 | 76.9 | 76.4 | 76. 7 | 48.3 | 60.5 | 60.6 | 61.1 |
| 24.5 | 45.6 | 39.2 | 40.2 | 30.0 | 51.4 | 46.2 | 47.2 | 53.8 | 49.3 | 49.1 | 35.0 | 52.2 | 50.7 | 51.9 | 30.0 | 53.8 | 48.9 | 49.2 |
|  |  |  |  |  |  |  |  |  |  |  |  | . | 10. | 10.2 |  | . | 13.5 | 13.5 |
|  | 13.8 | 13.6 | 13.3 |  | 14.8 | 14.4 | 14.0 | 13.6 | 13.0 | 13.0 |  | 13.9 | 13.5 | 12.8 |  | 14.4 | 14.1 | 13.7 |
|  | 30.3 | 30.7 | 31.9 |  | 39. 7 | 39.1 | 41.5 | ${ }^{3} 10.9$ | ${ }^{3} 11.1$ | ${ }^{3} 11.4$ |  | ${ }^{3} 13.1$ | ${ }^{3} 12.8$ | 13.0 |  | 31.4 | 31.7 | 32.5 |
|  | 57.1 | 61.2 | 52.9 |  | 59.0 | 59.2 | 51.4 | 61.4 | 71.1 | 64.0 |  | 56.2 | 60.6 | 57.1 |  | 65.1 | 73.3 | 60.4 |

${ }^{8}$ Per pound.

TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL

| Article | Unit | Richmond, Va. |  |  |  | Rochester,N.Y. |  |  | St. Louis, Mo. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nov. $15-$ |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov.$1927$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15 |  | $\begin{aligned} & \text { Oct. } \\ & 15, \\ & 1927 \end{aligned}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ |
|  |  | 1913 | 1926 |  |  |  |  |  | 1913 | 1926 |  |  |
| loin ste |  | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |
| Round steak | Pou | 22.2 | 39. 9 | 40.8 | 42.2 | 40.5 | 43. 7 | 43.9 | 26.6 | 38.0 | 40.7 | 40.5 |
| Rib roast. |  | 18.9 | 32.0 | 32.8 | 33.5 | 33.9 30.5 | 36.9 32.4 | 37.3 32.4 | 23.6 20.1 | 36.7 30.4 | 39.4 | 39.2 |
| Chuck roast |  | 15.9 | 23.3 | 23.8 | 24.2 | 24.5 | 27.1 | 27.6 | 16.0 | 21.4 | 23.9 | 24.0 |
| Plate beef | do | 13.2 | 16.3 | 16.8 | 17.3 | 14.0 | 15. 0 | 15.6 | 12.4 | 15.6 | 16.3 | 16.8 |
| Pork chops |  | 21.2 | 41. 1 | 42.4 | 37.3 | 41.7 | 44.6 | 39.8 | 17.8 | 35. 6 | 38.7 | 32.5 |
| Bacon, sliced | d | 27.2 | 48.1 | 44.4 | 43.8 | 45.8 | 41.4 | 41.1 | 25.8 | 48.6 | 43. 5 | 43.3 |
| Ham, sliced |  | 25.0 | 47.2 | 44.6 | 44.8 | 58.1 | 53.9 | 52.4 | 27.3 | 58.6 | 52.1 | 51.9 |
| Lamb, leg | do | 19.3 | 44.8 | 43.9 | 43.8 | 36.8 | 38.7 | 38.4 | 18. 3 | 37.6 | 37.3 | 36.4 |
| Hens. | do | 19.5 | 36.3 | 33.5 | 34.0 | 40.7 | 39.4 | 38.7 | 16.5 | 33.1 | 31.6 | 31.0 |
| Salmon, canned, re | .-..do |  | 34.5 | 35.3 | 35.5 | 32. 8 | 35. 5 | 35.6 |  | 35. 7 | 36.0 | 35.8 |
| Milk, fresh | Quart | 10.0 | 14.0 | 14.0 | 14.0 | 12.5 | 13. 5 | 13.5 | 8.8 | 13.0 | 13.0 | 13.0 |
| Milk, evaporated | 15-16 oz. |  | 12.4 | 12.4 | 12.6 | 11. 6 | 11. 4 | 11.3 |  | 10.4 | 10.9 | 10.9 |
|  | Pound | 41.2 | 60.1 | 57.6 | 59.6 | 55.1 | 55.1 | 55.8 | 38.1 | 58.6 | 57.6 | 58.9 |
| Oleomargarine (all butter substitutes). |  |  | 31.9 | 31.3 | 30.7 | 31.2 | 29.6 | 29.9 |  | 27.2 | 26.6 | 26.7 |
| Cheese | do | 22.8 | 36. 3 | 36.8 | 36.7 | 36.0 | 39.2 | 39.6 | 20.3 | 35.8 | 38.0 | 38.7 |
| Lard..............- | d | 15.4 | 20.6 | 19.2 | 19.4 | 19.5 | 18.6 | 18.3 | 12.9 | 17.0 | 16. 2 | 15. 6 |
| Vegetable lard subs | do |  | 25.5 | 25.9 | 25.9 | 24.4 | 24.7 | 26.0 |  | 25.8 | 25. 5 | 25. 3 |
| Eggs, strictly fresh. | Dozen | 40.0 | 58.6 | 52.6 | 59.5 | 77.3 | 64.0 | 68.7 | 38.9 | 58.8 | 46.1 | 51.4 |
| Eggs, stor | , | 33.0 | 45.0 | 40.7 | 42.2 | 49.0 | 45.7 | 47.2 | 32.5 | 43.0 | 37.6 | 36. 1 |
| Bread | Pound | 5.3 | 9.5 | 9.4 | 9.4 | 9.0 | 9.0 | 9.0 | 5. 6 | 9.8 | 9.9 | 9. 9 |
| Flour | ----do | 3. 2 | 5.8 | 5.6 | 5.4 | 5.6 | 5. 3 | 5. 3 | 2.9 | 5. 4 | 5. 5. | 9.9 |
| Corn meal |  | 2.3 | 4.7 | 4. 9 | 4.8 | 5. 6 | 6.1 | 6.1 | 2.5 | 4. 3 | 4.5 | 4. 4 |
| Rolled oat | , |  | 8.9 | 8.3 | 8.5 | 9.1 | 9.1 | 9.1 |  | 8.4 | 8.4 | 8.4 |
| Corn flake | 8-oz. pkg |  | 11.0 | 9.7 | 9.7 | 10.3 | 9.6 | 9.6 |  | 10.0 | 9.0 | 9. 0 |
| Wheat cer | 28-oz. pk |  | 25.8 | 25.9 | 25.9 | 25. 4 | 25.0 | 25. 7 |  | 24.7 | 24.7 | 24.7 |
| Macaron | Poun |  | 20.2 | 20.9 | 20.9 | 21.7 | 20.3 | 20.2 |  | 21.0 | 20.1 | 20.1 |
| Rice. | do | 10.0 | 13.0 | 11.6 | 11.6 | 11.0 | 10. 4 | 10.5 | 8.1 | 10.7 | 10.3 | 10.1 |
| Beans, na |  |  | 9.3 | 9.8 | 9.5 | 9.3 | 9. 5 | 9.4 | 8.1 | 8.1 | 8. 7 | 10. 8 |
| Potatoes |  | 2.0 | 4.5 | 3. 4 | 3. 2 | 3. 3 | 2. 5 | 2. 6 | 1.8 | 4. 2 | 3. 1 | 3.0 |
| On |  |  | 6.9 | 6.1 | 5. 7 | 4.7 | 4.5 | 4.4 |  | 5. 0 | 5. 5 | 5.0 |
| Cabbage. |  |  | 4.3 | 3.8 | 3. 7 | 3.2 | 2. 2 | 2.2 |  | 3.5 | 3.8 |  |
| Beans, baked | No. 2 ca |  | 9.9 | 10.1 | 10. 2 | 10. 4 | 10.2 | 10.1 |  | 10.6 | 10. 5 | 10.3 |
| Corn, canned | -.-.-do. |  | 15.3 | 15.1 | 15.3 | 16.9 | 16.6 | 16.6 |  | 16.0 | 15.6 | 15.6 |
| Peas, canned. |  |  | 20.1 | 18.6 | 18.4 | 18.1 | 17. 7 | 17.7 |  | 15.9 | 15. 5 | 15.1 |
| Tomatoes, canned |  |  | 10.6 | 10.5 | 10.3 | 13.8 | 13.4 | 13.6 |  | 11.3 | 11.2 |  |
| Sugar, granulated | Pound | 5.4 | 7.0 | 7.1 | 7.0 | 6.8 | 6.7 | 6.6 | 5. 1 | 7.1 | 7.1 | 7.0 |
| Tea.- |  | 56.0 | 89.2 | 91.4 | 92.2 | 68.7 | 69.7 | 69.6 | 55. 0 | 74.0 | 75.9 | 76.1 |
| Coffee |  | 27.4 | 48.9 | 46.0 | 45.5 | 47.7 | 44, 8 | 45.3 | 24.4 | 48.1 | 45.4 | 45.4 |
| Prunes |  |  | 17.2 | 15.1 | 14.7 | 16.0 | 15.3 | 14. 2 |  | 18.6 | 15. 2 | 15.2 |
| Raisins |  |  | 14.4 | 13.9 | 13.9 | 14. 2 | 14.6 | 14.6 |  | 14.8 | 14.0 | 13. 7 |
| Banana | Doze |  | 37.3 | 38.5 | 39.0 | 37.0 | 36.4 | 36. 4 |  | 31. 8 | 30.8 | 31.5 |
| Oranges |  |  | 54.6 | 54.2 | 47.9 | 56.5 | 58.2 | 53.9 |  | 52.0 | 55.2 | 50.8 |

${ }^{1}$ No. $21 / 2$ can.

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

| St. Paul, Minn. |  |  |  | Salt Lake City, Utah |  |  |  | San Francisco, Calif. |  |  |  | Savannah, Ga. |  |  | Scranton, Pa. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov. 15- |  | $\begin{gathered} \text { Oct, } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | $\begin{gathered} \text { Nov. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15 |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15, 1927 |
| 1913 | 1926 |  |  | 1913 | 1926 |  |  | 1913 | 1926 |  |  |  |  |  | 1913 | 1926 |  |  |
| Cts. | $\begin{aligned} & C t s . \\ & 34.4 \end{aligned}$ | Cts. | Cts. | Cts. | Cts. | Cts. | Cis. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. 53.3 | Cts. |
| 25.0 |  | 38.6 | 37.6 | 22.4 | 30.8 | 33.1 | 33.2 | 21.0 | 31.8 | 33.8 | 34.2 | 34.2 | 35.0 | 35.4 | 26.0 | 51.0 |  | 54.5 |
| 20.8 | 30.1 | 33. 9 | 32.1 | 20. 0 | 27.6 | 30.5 | 30.5 | 19.7 | 29.5 | 31.0 | 32. 6 | 27.5 | 28.8 | 29.2 | 21.5 | 42.3 | 44.5 | 46.1 |
| 20.0 | 29.2 | 31.1 | 30.3 | 14.5 | 23.7 | 25.7 | 25.6 | 21.3 | 29.5 | 31.2 | 31.9 | 27.1 | 27.5 | 26.3 | 23.0 | 37.7 | 38.9 | 39.8 |
| 16.0 | 22.9 | 25.1 | 24.6 |  | 17.9 | 20.2 | 20.4 | 15.5 | 19.2 | 20.3 | 21.4 | 18.8 | 18.0 | 18.4 | 17.6 | 28.2 | 29.5 | 31.0 |
| 10.8 | 13.0 | 15.1 | 15.1 | 12.5 | 12.9 | 14.5 | 14.6 | 14.3 | 15.0 | 15.9 | 16.9 | 13.3 | 15, 8 | 15.7 | 11. 9 | 12.6 | 13.7 | 14.3 |
| 18.8 | 34.0 | 38.4 | 32. 2 | 23. 4 | 40.1 | 39.9 | 37.3 | 24.2 | 46.9 | 44.3 | 43.8 | 37.1 | 33.5 | 32.5 | 21.8 | 43.6 | 45.4 | 40.5 |
| 25. 3 | 49.1 | 45.9 | 45.3 | 30,0 | 52.1 | 46.9 | 47.9 | 34. 4 | 63.9 | 57.1 | 57.3 | 46.8 | 41. 6 | 41.7 | 27.5 | 52.7 | 48.9 | 48.6 |
| 28.3 | 51.6 | 47.1 | 47.2 | 30.0 | 60.7 | 57.1 | 56.2 | 32.0 | 67.9 | 63.8 | 63.8 | 50.0 | 45.0 | 44.2 | 29.362 .7 |  | 56.5 | 55.5 |
| 16.1 | 32.430.2 | 32. 7 | 32.1 | 18. 0 22.6 | $\begin{aligned} & 34.6 \\ & 33.2 \end{aligned}$ | 35.3 | 34.7 | 17.0 | 37.446.1 | 38.7 | 38.6 | 39.0 | 39.0 | 38.0 | 18.7 | 44.7 | 45.3 | $\begin{aligned} & 44.1 \\ & 42.7 \end{aligned}$ |
| 16. 4 |  | 28.8 | 29.1 |  |  | $\begin{aligned} & 30.4 \\ & 35.7 \end{aligned}$ | 30.3 |  |  | 43.3 |  | 34.236.9 | $33,031.8$ |  | 21.0 | 44.3 | 43.3 |  |
|  | 11.0 |  |  |  | 37.4 |  |  |  | 32.414.0 | $\begin{aligned} & 33.0 \\ & 14.0 \end{aligned}$ | 33. 0 |  | 33.6 |  |  | 35.1 |  |  |
| 7.8 |  | 12. 0 | 12.012.152.0 | -8.7 | $\begin{aligned} & 11.5 \\ & 10.5 \end{aligned}$ | $\begin{aligned} & 11.0 \\ & 10.6 \end{aligned}$ | 11.0 | 10.0 |  |  | 14. 0 | 17.0 | 17.0 | 17.0 | 8.8 | 12.0 | 12.0 | $\begin{aligned} & 12.0 \\ & 11.9 \end{aligned}$ |
|  | 11.7 | $\begin{aligned} & 12.0 \\ & 50.9 \end{aligned}$ |  |  |  |  | 10.6 |  | 10.1 |  | 10. 3 | 11.0 | 11. 5 | 11.5 |  | 11.754.1 | 11.9 |  |
| 35.0 | 52.327.5 |  |  | -39.2 | $\begin{aligned} & 49.0 \\ & 29.7 \end{aligned}$ | $\begin{aligned} & 52.1 \\ & 27.0 \end{aligned}$ | $\begin{aligned} & 10.0 \\ & 51.8 \\ & 27.0 \end{aligned}$ | 40.4 | 55. 2 | $58.0$ | 58. 7 | 55. 9 | 55. 4 | 56.7 | 37.1 |  |  | $56.4$ |
|  |  | $\begin{aligned} & 50.9 \\ & 25.4 \end{aligned}$ | 25.2 | ----- |  |  |  |  | 30.8 |  | 25.3 | 34.7 | 31.3 | 31.5 |  | 30.3 | 28.4 | 28.4 |
| $\begin{aligned} & 21.0 \\ & 14.8 \end{aligned}$ | 35.1 | 36.5 37.6 |  | 24.2 | 30.2 | 30.7 | 30.7 | 21.0 38.7 |  | $39.1$ | 39.7 | 35. 5 | 36.9 | 37.6 | 18.3 | 35.6 | 36.3 | 36.6 |
|  | 20.5 | 19.0 | 18.8 | 20.0 | 24.3 | 21.6 | 21.5 | 17.7 | 24.6 | 23.0 | 23.3 | 20.0 | 19.3 | 19.4 | 16.5 | 21.6 | 19.7 | 19.9 |
|  | 52.6 | $44,4$ | $\begin{array}{r} 28.7 \\ 47.9 \end{array}$ | -46.7 | $\begin{aligned} & 29.7 \\ & 54.2 \end{aligned}$ | $\begin{aligned} & 29.0 \\ & 46.8 \end{aligned}$ | 29.1 |  | 28.5 | 28.2 | 27.8 | 17.7 | 18.0 | 17.9 |  | 26.3 | 26.0 | 26.1 |
| -39.6 |  |  |  |  |  |  | 49.2 | 65.0 | 59.6 | 55.7 | 55.6 | 63.3 | 56.7 | 58.8 | 51.3 | 76.9 | 60.3 | 67.0 |
| 31.2 | 43.3 | 39.6 | 37. 1 | 35. 0 |  | 40.0 |  | 40.7 | 48.8 | 43.0 | 44.3 | 46.0 | 41.0 | 43.4 | 32.5 | 49.4 | 46.2 | 45. 4 |
| 0 | 10.0 | 9.5 | 9. 5 | 5. 9 | 9.9 | 9.7 | 9.9 | 5. 9 | 9.8 | 9.5 | 9.5 | 10.5 | 10.7 | 10.7 | 5. 6 | 10.4 | 10.6 | 10.7 |
|  | 5. 6 | 5. 1 | 5.1 | 2.4 | 4.3 | 4.1 | 4.1 | 3. 5 | 5. 8 | 5. 6 | 5.6 | 6.7 | 6. 5 | 6. 6 | 3.6 | 6.2 | 5.8 | 5. 8 |
| , |  | 5.2 | 5. 0 | 3.3 | 5.3 | 5. 6 | 6 | 3.5 | 6.3 | 6.3 | 6.3 | 3.5 |  | 6. 7 |  | 7.7 | 7.8 | 7.6 |
|  |  | 10.1 | 10.2 |  |  | 8.8 | 8.8 |  | . 7 | 10.1 | 10.1 | 8.8 | 8.9 |  |  | 10.0 | 9.9 | 9.8 |
|  | 12.0 | 10.2 | 10.2 |  | 12.3 | 10.1 | 10.2 |  | 10.5 | 10.1 | 10.1 | 10.4 | 9. 6 | 8. |  | 11.1 | 10.1 | 10.1 |
|  | 27.0 | 26.5 | 26.3 |  | 25.5 | 25.7 | 25.8 |  | 25.3 | 25.2 | 25.2 | 24.3 | 24.3 | 24.3 |  | 25.6 | 25.3 | 25. 2 |
|  | 18.5 | 18.6 | 18.3 |  | 20.0 | 19.5 | 19,4 |  | 16.0 | 16.0 | 16.0 | 18.5 | 18.2 | 18.3 |  | 23.1 | 22.8 | 22.9 |
| 10 | 12.3 | 10.5 | 10.6 | 8. 2 | 10.5 | 9.1 | 9.1 | 5 | 11.5 | 11.1 | 10.6 | 10.0 | 9. 6 | 9.6 | 8.5 | 11.7 | 11.3 | 10.7 |
|  | 9.3 | 9.8 | 9.5 |  | 9. 2 | 9.1 | 9. |  | 9. 6 | 10.1 | 9.9 | 10.4 | 9. 5 | 9.6 |  | 10.9 | 10.5 | 11.0 |
|  | 3.1 | 1. 8 | 1.8 | 1.3 | 2. 6 | 1.9 | 1.9 | . 9 | 3. 8 | 3.2 | 3. 0 | 4.7 | 3. 7 | 3.8 | 1.8 | 4.1 | 3.1 | 3. 0 |
|  |  |  |  |  | 2.5 | 2.6 |  |  | 3.6 | 4.3 | 3. 8 | 6.2 |  |  |  | 5.4 | 5.1 | 4.8 |
|  | 2.7 | 2.0 | 1.8 |  | 2.7 | 2. 6 | 7 |  |  |  |  | 4.8 | 4.4 | 4.5 |  | 3.4 | 3.5 | 3.4 |
|  | 13.9 | 13.6 | 13.7 |  | 13.8 | 12.9 | 12.8 |  | 13.3 | 13.0 | 12,9 | 12.5 | 12.1 | 12.2 |  | 10.9 | 11.4 | 11.2 |
|  | 15. 0 | 14. 4 | 14.4 |  | 15.0 | 14.7 | 14.7 |  | 18.3 | 17.9 | 18.0 | 15.4 | 14.7 | 14.7 |  | 17.1 | 16.9 | 16.8 |
|  | 15.6 | 15. 4 | 15.4 |  | 15.8 | 15.7 | 15.6 |  | 18.4 | 17.9 | 17.8 | 16.4 | 17.0 | 16.6 |  | 17.2 | 17.1 | 17.3 |
|  | 14. 6 | 14. 1 | 14.0 |  | 14.5 | 14.2 | 14. 1 |  | \% 2 |  | 14.9 | 10.3 | 9.9 | 9.9 |  | 12.6 | 12.2 | 12.2 |
| 5.1 | 7.5 | 7.3 | 7.3 | 5. 7 | 7.9 | 8.1 | 8.0 | 5. 4 | 6.8 | 7.0 | 6.9 | 6.9 | 7. 0 | 6. 9 | 5. 6 | 7. 0 | 7.1 | 7.1 |
| 45. 0 | 68.7 | 65.7 | 65. 4 | 65.7 | 87.1 | 86.5 | 87.2 | 50.0 | 69.3 | 72.8 | 72.8 | 81.0 | 82. 6 | 81.9 | 52.5 | 67.6 | 71.2 | 71.5 |
| 30.0 | 52.8 | 52.2 | 52.4 | 35, 8 | 56.7 | 54.0 | 54.3 | 32.0 | 53,4 | 52.0 | 52.5 | 47.4 | 45.1 | 45.4 | 31.3 | 52.4 | 49.4 | 49.5 |
|  | 16. | 15. 2 | 14.8 |  | 15.6 | 14.0 | 13.4 |  | 14.1 | 12.1 | 11.3 | 15.8 | 13.5 | 13.5 |  | 17.9 | 14.4 | 15.0 |
|  | 15.5 | 15.2 | 14.9 |  | 13.8 | 13.4 | 13.1 |  | 13.1 | 12.9 | 12.2 | 14. 7 | 14.5 | 14. |  | 14.8 | 14.5 | 14.4 |
|  | 12.0 56.2 | ${ }^{2} 11.1$ | ${ }^{2} 11.8$ |  | ${ }^{2} 14.1$ | ${ }^{2} 12.7$ | ${ }^{2} 12.3$ |  | 30.0 | 30.6 | 31.3 | 33. 0 | 30.0 | 31.2 |  | 33.0 | 33.3 | 33.0 |
|  | 56.2 | 60.0 | 58.8 |  | 53.8 | 54, 7 | 54.0 |  | 51.1 | 50.5 | 53.6 | 39.7 | 46.4 | 40.3 |  | 62.3 | 62.3 | 56.8 |

${ }^{2}$ Per pound.

TABLE 5.-AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES-Continued

| Article | Unit | Seattle, Wash. |  |  |  | Springfield, Il . |  |  | Washington, D. C. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nov. 15- |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15,1927 | $\begin{gathered} \text { Nov. } \\ 15, \\ 1926 \end{gathered}$ | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov. 15, 1927 | Nov. $15-$ |  | $\begin{gathered} \text { Oct. } \\ 15, \\ 1927 \end{gathered}$ | Nov, <br> 1927 |
|  |  | 1913 | 1926 |  |  |  |  |  | 1913 | 1926 |  |  |
|  |  | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. |
| Sirloin stea | Pound | 23.6 | 32.2 | 34.8 | 35.1 | 35.4 | 36.7 | 36.3 | 26.5 | 46.1 | 48.7 | 48.2 |
| Round stea | do | 20.6 | 28.8 | 30.6 | 3.14 | 35.0 | 36.1 | 35.7 | 22.5 | 39.6 | 42.7 | 41.9 |
| Rib roast. | do | 20.0 | 27.0 | 28.0 | 28.7 | 23.6 | 24.6 | 24.8 | 21.0 | 34.7 | 34.4 | 35.2 |
| Chuck roast | do | 15.6 | 19.5 | 20.6 | 21.8 | 21.6 | 22.9 | 22.5 | 17.6 | 24.9 | 25.6 | 26.2 |
| Plate beef | do | 12.8 | 14.7 | 15.5 | 16.5 | 13.8 | 15.2 | 15.1 | 12.8 | 14.0 | 14.0 | 14.8 |
| Pork chops | do | 24.0 | 41.3 | 40.2 | 38.3 | 36.7 | 37.1 | 31.8 | 21.4 | 42. 1 | 43.8 | 37.2 |
| Bacon, sliced | d | 32.0 | 59.6 | 57.7 | 56. 4 | 49.6 | 45.8 | 45.8 | 26.4 | 49.9 | 44.6 | 44.2 |
| Ham, sliced | do | 30.0 | 63.9 | 59.3 | 58.1 | 56.5 | 49.6 | 48.8 | 31.3 | 60.0 | 57.1 | 56.8 |
| Lamb, leg | do | 18.4 | 36.1 | 35.7 | 35.0 | 39.0 | 40.6 | 38.3 | 19.1 | 39.7 | 39.0 | 38.8 |
| Hens. | do | 24.2 | 34. 2 | 31.1 | 32.2 | 34.0 | 32.5 | 32.0 | 21.3 | 39.7 | 39.0 | 37.9 |
| Salmon, can |  |  | 35.5 | 35. 2 | 34.8 | 38.3 | 36.6 | 36.0 |  | 32.3 | 34.0 | 34.4 |
| Milk, fresh. | Quart | 10.0 | 10.3 | 12.0 | 12.0 | 12.5 | 14.4 | 14. 4 | 9.0 | 15. 0 | 15.0 | 15. 0 |
| Milk, evaporate | 15-16 oz. can. |  | 10.7 | 10.6 | 10.5 | 11.8 | 11.7 | 11.8 |  | 12. 0 | 11.9 | 12. 1 |
| Butter --.-.-.--.-.-.-.-. | Pound | 40.8 | 53.3 | 54.4 | 55. 0 | 56.5 | 54.1 | 54.8 | 40.3 | 58.7 | 58.6 | 59.4 |
| Oleomargarine (all butter substitutes). |  |  | 30.9 | 26.4 | 26.1 | 30.3 | 28.7 | 28.2 |  | 31, 1 | 28.5 | 28.4 |
| Cheese........ |  | 22.8 | 35.0 | 35.2 | 35.3 | 36.7 | 38.1 | 39.4 | 23.5 | 39. 1 | 41.5 | 41.1 |
| Lard |  | 16.9 | 23.1 | 21.2 | 21.0 | 21.9 | 18.8 | 18.6 | 15.0 | 20.2 | 18.8 | 18. 1 |
| Vegetable lard substitute. |  |  | 28.0 | 27.1 | 27.2 | 28.0 | 27.5 | 27.3 |  | 25.8 | 24.2 | 23.8 |
| Eggs, strictly fresh.. | Doze | 59.2 | 55.2 | 54.7 | 54.5 | 63.0 | 47.7 . | 58.2 | 47.9 | 71. 7 | 63.1 | 65.8 |
| Eggs, | -.--do | 37. 5 | 48.0 | 45.0 | 44.0 | 47.0 | 38.8 | 42.1 | 35. 0 | 49.7 | 46.3 | 45.2 |
| T | Pound | 5. 6 | 9.8 | 9.7 | 9.8 | 10.1 | 10.3 | 10.3 | 5.7 | 8.9 | 9.1 | 9.1 |
| Flour | .-.-do | 2. 9 | 5. 0 | 4.7 | 4. 7 | 5.9 | 5.5 | 5.4 | 3. 8 | 6. 3 | 5. 8 | 5. 6 |
| Corn m | do | 3.2 | 5.0 | 5.7 | 5. 7 | 5.1 | 4.9 | 4.9 | 2.6 | 5. 2 | 5.1 | 5.1 |
| Rolled oats | do |  | 9.0 | 8.5 | 8. 6 | 10.1 | 10.3 | 10.2 |  | 9.2 | 9.4 | 9.2 |
| Corn flakes. | 8-oz. pkg |  | 11.6 | 10.1 | 10.1 | 11.8 | 10.2 | 10.2 |  | 10.8 | 9.5 | 9. 4 |
| Wheat cere | 28-0z. pkg |  | 27.7 | 27.6 | 27.5 | 27.3 | 27.5 | 27.5 |  | 24.6 | 24.5 | 24.5 |
| Macaroni | Pound |  | 18.4 | 18.2 | 18.1 | 19.3 | 19.0 | 18.9 |  | 23.8 | 22.9 | 22.4 |
| Rice. | do | 7.7 | 12.3 | 11.8 | 11.0 | 11.2 | 11.1 | 10.9 | 9.4 | 12.4 | 11.4 | 11.6 |
| Beans, | ...-do |  | 9.9 | 11.0 | 10.4 | 9.0 | 9. 6 | 9. 5 |  | 8.6 | 9.0 | 8.9 |
| Potatoe | d | 1.4 | 2. 9 | 2.0 | 1.9 | 4.1 | 2. 8 | 2. 6 | 1.8 | 4. 3 | 3. 5 | 3.4 |
| Oni | do |  | 3. 6 | 3.5 | 3.2 | 4.4 | 4.8 | , |  | 5.8 | 4. 7 | 4.7 |
| Cabbage | do |  | 3. 6 | 3. 6 | 3.2 | 3.8 | 3.8 | 3.1 |  | 4.5 | 4.2 | 3.8 |
| Beans, baked | No. 2 ca |  | 12.9 | 11.8 | 11.6 | 10.6 | 10.4 | 10.3 |  | 10.3 | 10.2 | 10.0 |
| Corn, canned | do |  | 18.4 | 17. 4 | 17. 3 | 15. 2 | 14.6 | 15.0 |  | 15. 7 | 14.7 | 14.7 |
| Peas, canned |  |  | 20.3 | 18.5 | 18.0 | 17.1 | 15.9 | 16.3 |  | 16.6 | 15.6 | 14.8 |
| Tomatoes, canned | --- do |  | 117.1 | 116.7 | 116.5 | 13.8 | 13.6 | 13.6 |  | 11.3 | 10.3 | 10.0 |
| Sugar, granulate | Pound | 6.1 | 7.1 | 7.2 | 7.1 | 7. 7 | 7.8 | 7.8 | 5. 1 | 6.8 | 6. 9 | 6.8 |
| Tea. |  | 50.0 | 77.9 | 76.0 | 75. 2 | 82.5 | 84.6 | 84.6 | 57.5 | 89.7 | 90.7 | 89.1 |
| Coffee |  | 28.0 | 52.8 | 49.2 | 49.5 | 53.7 | 49.9 | 50.8 | 28.8 | 48.7 | 42.5 | 43.9 |
| Prunes | do |  | 14.6 | 12.7 | 12.0 | 16.6 | 15.0 | 14.3 |  | 17.9 | 15.7 | 14.4 |
| Raisins | .-..do |  | 14. 4 | 13.6 | 13. 3 | 16.1 | 15.0 | 14.4 |  | 14.8 | 14. 2 | 13.6 |
| Bananas | Dozen |  | ${ }^{2} 13.9$ | 212.9 | ${ }^{2} 12.9$ | 211.6 | ${ }^{2} 10.4$ | ${ }^{2} 10.3$ |  | 35.0 | 33.6 | 34. 2 |
| Oranges | -.-.do. |  | 54.0 | 52.4 | 56.0 | 66.1 | 62.0 | 52.1 |  | 54.4 | 63.3 | 48.2 |

${ }^{1}$ No. $21 / 2$ can.

## Comparison of Retail Food Costs in $\mathbf{5 1}$ Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food ${ }^{3}$ in November, 1927, compared with the average cost in the year 1913, in November, 1926, and October, 1927. For 12 other cities comparisons are given for the one-year and the one-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city. ${ }^{4}$

[^40]TABLE 6.-PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN NOVEMBER, 1927, COMPARED WITH THE COST IN OCTOBER, 1927, NOVEMBER, 1926, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES


## ${ }^{1}$ Decrease.

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of November 99 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 39 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Boston, Bridgeport, Butte, Charleston, S. C., Cincinnati, Cleveland, Columbus, Denver, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Los Angeles, Louisville, Manchester, Memphis, Minneapolis, Mobile, New Haven, New York, Norfolk, Omaha, Peoria, Pittsburgh, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, San Francisco, Savannah, Scranton, and Seattle.

The following summary shows the promptness with which the merchants responded in November, 1927:

RETAIL PRICE REPORTS RECEIVED FOR NOVEMBER, 1927

| Item | United States | Geographical division |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | North Atlantic | South Atlantic | North Central | South Central | Western |
| Percentage of reports received | 99.0 | 99.1 | 99.4 | 99.0 | 98.0 | 99.0 |
| Number of cities in each section from which every report was received. | 39 | 11 | 7 | 10 | 5 |  |

[179]

## Retail Prices of Coal in the United States ${ }^{a}$

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, November 15, 1926, and October 15 and November 15, 1927, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.
The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

TABLE 1.-AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, NOVEMBER 15, 1926, AND OCTOBER 15 AND NOVEMBER 15, 1927

| City, and kind of coal | 1913 |  | 1926 | 1927 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. 15 | July 15 | Nov. 15 | Oct. 15 | Nov. 15 |
| United States: <br> Pennsylvania anthracite- <br> Stove - |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Average price | \$8.15 | \$7. 68 | \$15.41 | \$15. 07 | \$15.07 |
| Index ( $1913=180$ ) | 103.0 | 97.0 | 194.7 | 190.4 | 190.4 |
| Bituminous- |  |  |  |  |  |
| Average price Index (1913=100) | \$5.48 | 85. $\mathbf{9 9 . 2}$ | $\$ 10.24$ 188.4 | ${ }_{171.7}^{89.33}$ | $\begin{aligned} & \$ 9.32 \\ & 171.5 \end{aligned}$ |
| Atlanta, Ga.: |  |  |  |  |  |
| Bituminous. | \$5.88 | \$4. 83 | \$9.97 | \$8.37 | \$8. 37 |
| Baltimore, Md.: |  |  |  |  |  |
|  | 17.70 | 17. 24 | ${ }^{1} 16.00$ | 116.00 | ${ }^{1} 16.00$ |
| Chestnut | 17.93 | 17.49 | ${ }^{1} 15.50$ | 115.25 | ${ }^{1} 15.25$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Boston, Mass.: |  |  |  |  |  |
| Pennsylvania anthraciteStove | 8. 25 | 7. 50 | 16. 50 |  |  |
| Chestnut | 8.25 | 7.75 | 16. 25 | 16. 25 | 16. 25 |
| Bridgeport, Conn.: <br> Pennsylvania anthracite- |  |  |  |  |  |
|  |  |  | 15. 75 | 15. 00 | 15.00 |
| Chestnut |  |  | 15.75 | 15.00 | 15.00 |
|  |  |  |  |  |  |
| Pennsylvania anthraciteStove |  |  |  |  |  |
| Chestnut | 6.75 6.99 | 6.54 6.80 | 13.76 13.39 | 13.99 13.59 | 13.97 |
| Butte, Mont.: |  |  |  |  |  |
| Bituminous |  |  | 11.03 | 10.96 | 11.03 |
| Charleston, S. C.: |  |  |  |  |  |
| Chicago, Ill.: |  |  |  |  |  |
|  |  |  |  |  |  |
| Stove..- | 8.00 | 7.80 | 17.00 | 16. 94 | 16.95 |
| Chestnut | 8.25 | 8.05 | 16. 81 | 16.45 | 16.46 |
| Bituminous | 4. 97 | 4.65 | 10.15 | 9.30 | 9.29 |
| Cincinnati, Ohio: |  |  |  |  |  |
| Cleveland, Ohio: <br> $\begin{array}{l}\text { Pennsylvania anthracite- }\end{array}$ |  |  |  |  |  |
|  |  |  |  |  |  |
| Stove_ |  |  |  |  |  |
| Chestnut | 7. 75 | 7.25 | 15. 00 | 14. 170 | 14. 20 |
| Bituminous | 4.14 | 4.14 | 10.54 | 9.02 | 9.03 |

${ }^{1}$ Per ton of 2,240 pounds.

[^41]TAble 1.-AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSE. HOLD USE, ON JANUARY 15 AND JULY 15, 1913, NOVEMBER 15, 1926, AND OCTOBER 15 AND NOVEMBER 15, 1927-Continued

| City, and kind of coal | 1913 |  | 1926 | 1927 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. 15 | July 15 | Nov. 15 | Oct. 15 | Nov. 15 |
| Columbus, Ohio: |  |  |  |  |  |
|  |  |  | \$9.16 | \$7. 22 | \$7. 24 |
| Dallas, Tex.: <br> Arkansas anthracite- |  |  |  |  |  |
| Egg- |  |  | 16. 00 | 15. 33 | 15. 50 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | 8.88 | 9.00 | 16.00 | 16.10 | 16. 10 |
| Stove, 3 and 5 mixed...- | 8. 50 | 8.50 | 16. 50 | 16. 10 | 16. 10 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Chestnut. | 8.25 | 7.65 | 15.83 | 15. 50 | 15. 50 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | 8.25 | 7.43 | 16.75 | 16.75 | 16. 75 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Indianapolis, Ind.: |  |  |  |  |  |
| Bituminous... | 3.81 | 3.70 | 8.34 | 7.45 | 7.35 |
| Jacksonville, Fla.: |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Stove No. 4. |  |  | 15.83 | 15. 33 | 15. 33 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  <br> 14.00 <br> 13. 50 <br> 13. 50 |  |  |  |  |  |
| Bituminous, | 6.00 | 5.33 | 10.80 | 11. 80 | 10.43 |
| Los Angeles, Calif.: 13.52 12.50 16.06 16.50 <br> Bituminous. 16.50    |  |  |  |  |  |
| Louisville, Ky.: <br> Bituminous <br> . <br> 4.00 <br> 9.19 <br> 7.50 <br> 7. 50 |  |  |  |  |  |
| Manchester, N. H.: <br> Pennsylvania anthracite- |  |  |  |  |  |
|  |  |  |  |  |  |
| Stove.-.--- | 10.00 | 8. 50 | 17. 50 | 17. 50 | 17. 50 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Milwaukee, Wis.: <br> Pennsylvania anthracite- |  |  |  |  |  |
|  |  |  |  |  |  |
| Chestnut.---.---.---.-- | 8.25 | 8.10 | 16. 65 | 16. 20 | 16. 20 |
|  |  |  |  |  |  |
| Minneapolis, Minn.: <br> Pennsylvania anthracite- |  |  |  |  |  |
| Stove..............---- | 9. 25 | 9.05 | 18.10 | 18. 15 | 18.15 |
| Chestnut. | 9. 50 | 9. 30 | 17.95 | 17. 70 | 17. 70 |
| Mobile, Ala.: |  |  |  |  |  |
|  |  |  |  |  |  |
| Newark, N. J.:$\qquad$ |  |  |  |  |  |
| Stove-.................- | 6. 50 | 6. 25 | 14.00 | 14.00 | 14. 00 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Pennsylvania anthracite- <br> Stove |  |  |  |  |  |
| Chestnut. | \% 50 | 6.25 | 15. 35 | 15.05 | 15. 10 |
| New Orleans, La.: |  |  |  |  |  |
| New York, N. Y.: |  |  |  |  |  |
| Nennsylvania anthracite-Pe |  |  |  |  |  |
| Stove....... | 7.07 | 6.66 |  | 14.38 |  |
| Chestnut------------- | 7. 14 | 6.80 |  |  |  |
| Norfolk, Va.: <br> Pennsylvania anthracite- |  |  |  |  |  |
| Stove-- |  |  | 16. 00 | 15.00 | 15. 00 |
| Bituminous.-- |  |  | 16.00 10.39 | 15.00 9.07 | 15.00 9.07 |

${ }^{2}$ Per 10 -barrel lot (1,800 pounds).

TABLE 1.-AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, NOVEMBER 15, 1926, AND OCTOBER 15 AND NOVEMBER 15, 1927 -Continued

| City, and kind of eoal | 1913 |  | 1926 | 1927 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. 15 | July 15 | Nov. 15 | Oct. 15 | Nov. 15 |
| Omaha, Nebr.: | \$6. 63 | \$6.13 |  |  |  |
| Bituminous Peoria, Ill.: |  |  | \$10. 29 | \$10. 52 | \$10.21 |
| Bituminous |  |  | 7.46 | 7. 13 | 7.16 |
| Philadelphia, Pa.: |  |  |  |  |  |
| Pennsylvania anthraciteStove $\qquad$ |  |  |  |  |  |
| Chestnut | 17.16 17.38 | 16.89 17.14 | 1115. 79 <br> 1 15. 54 <br> 1 | 115.04 <br> 114.54 | $\begin{aligned} & 115.04 \\ & { }^{1} 14.54 \end{aligned}$ |
| Pittsburgh, Pa.: <br> Pennsylvania anthracite- |  |  |  |  |  |
| Chestnut | $\begin{aligned} & 18.00 \\ & 3 \\ & 3 \\ & 3.16 \end{aligned}$ | $\begin{array}{r} 17.44 \\ \mathrm{r} 3.18 \end{array}$ | $\begin{array}{r} 15.38 \\ 7.23 \end{array}$ | $\begin{array}{r} 14.88 \\ 5.76 \end{array}$ | $\begin{array}{r} 14.88 \\ 5.69 \end{array}$ |
| Bituminous |  |  |  |  |  |
| Portland, Me.: <br> Pennsylvania anthracite- |  |  |  |  |  |
| Stove....------------ |  |  | 16. 80 | 16. 8016.80 | $\begin{aligned} & 16.80 \\ & 16.68 \end{aligned}$ |
| Chestnut |  |  | 16.80 |  |  |
| Portland, Oreg.: |  |  |  |  |  |
| Providence, R. I.: <br> Pennsylvania anthracite- |  |  |  |  |  |
|  | $\begin{aligned} & 48.25 \\ & 48.25 \end{aligned}$ | $\begin{aligned} & 4.50 \\ & 4.75 \end{aligned}$ | $\begin{aligned} & 16.50 \\ & 16.50 \end{aligned}$ | $\begin{aligned} & { }^{4} 16.25 \\ & { }_{4} 16.00 \end{aligned}$ | $\begin{aligned} & 416.25 \\ & 415.94 \end{aligned}$ |
| Chestnut |  |  |  |  |  |
| Richmond, Va:: <br> Pennsylvania anthracite- |  |  |  |  |  |
| Stove.....-------- | $\begin{aligned} & 8.00 \\ & 8.00 \\ & 5.50 \end{aligned}$ | $\begin{aligned} & 7.25 \\ & 7.25 \\ & 4.94 \end{aligned}$ | $\begin{aligned} & 16.67 \\ & 16.67 \\ & 11.91 \end{aligned}$ | $\begin{array}{r} 15.50 \\ 15.50 \\ 9.68 \end{array}$ | $\begin{array}{r} 15.50 \\ 15.50 \\ 9.68 \end{array}$ |
| Chestnut |  |  |  |  |  |
| Bituminous |  |  |  |  |  |
| Rochester, N. Y.: <br> Pennsylvania anthracite- Stove |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Chestnut |  |  | 14.15 | 14.15 | 14. 15 |
| St. Louis, Mo.: |  |  |  |  |  |
| Pennsylvania anthracite |  |  |  |  |  |
| Stove..... | $\begin{aligned} & 8.44 \\ & 8.68 \\ & 3.36 \end{aligned}$ | $\begin{aligned} & 7.74 \\ & 7.99 \\ & 3.04 \end{aligned}$ | $\begin{array}{r} 17.33 \\ 17.08 \\ 7.19 \end{array}$ | $\begin{array}{r} 16.90 \\ 16.50 \\ 7.41 \end{array}$ | 16.9016.457.29 |
| Bituminous |  |  |  |  |  |
| St. Paul, Minn.: <br> Pennsylvania anthracite <br> Stove. |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Chestnut | $\begin{aligned} & 9.45 \\ & 6.07 \end{aligned}$ | $\begin{aligned} & 9.30 \\ & 6.04 \end{aligned}$ | $\begin{aligned} & 17.95 \\ & 12.00 \end{aligned}$ | $\begin{aligned} & 17.70 \\ & 11.96 \end{aligned}$ | 17.7011.98 |
| Salt Lake City, Utah: <br> Colorado anthracite- |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Furnace, 1 and 2 mixed | $\begin{array}{r} 11.00 \\ 11.00 \\ 5.64 \end{array}$ | $\begin{array}{r} 11.50 \\ 11.50 \\ 5.46 \end{array}$ | $\begin{array}{r} 18.00 \\ 18.00 \\ 8.46 \end{array}$ | $\begin{array}{r} 18.00 \\ 18.00 \\ 8.34 \end{array}$ | 18.0018.008.34 |
| Stove, 3 and 5 mixed Bituminous |  |  |  |  |  |
| Bituminous .-.-. |  |  |  |  |  |
| San Francisco, Calif.: <br> New Mexico anthracite - |  |  |  |  |  |
|  | 17.00 | 17.00 | 25. 50 | 25. 50 | 25. 50 |
| Colorado anthracite - |  |  | $\begin{aligned} & 25.00 \\ & 16.67 \end{aligned}$ |  |  |
| Egg.-.-. | $\begin{aligned} & 17.00 \\ & 12.00 \end{aligned}$ | $\begin{aligned} & 17.00 \\ & 12.00 \end{aligned}$ |  | $\begin{aligned} & 25.00 \\ & 16.63 \end{aligned}$ | $\begin{aligned} & 25.00 \\ & 16.63 \end{aligned}$ |
| Bituminous Savannah, Ga.: |  |  |  |  |  |
| Savannah, Ga.: <br> Bituminous |  |  |  |  |  |
| Scranton, Pa.: <br> Pennsylvania anthracite- |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Stove.... | $\begin{aligned} & \text { 4. } 25 \\ & 4.50 \end{aligned}$ | $\begin{aligned} & \text { 4. } 31 \\ & 4.56 \end{aligned}$ | $\begin{aligned} & 11.00 \\ & 10.67 \end{aligned}$ | $\begin{aligned} & 10.75 \\ & 10.50 \end{aligned}$ | $\begin{aligned} & 10.75 \\ & 10.50 \end{aligned}$ |
| Seattle, Wash.: |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Springfield, Ill.: <br> Bituminous |  |  |  |  |  |
| W ashington, D. C.: <br> Pennsylvania anthracite- |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 17.50 \\ & 17.65 \end{aligned}$ | $\begin{aligned} & 17.38 \\ & 17.53 \end{aligned}$ | $\begin{aligned} & { }^{1} 15.95 \\ & { }^{1} 15.59 \end{aligned}$ | $\begin{aligned} & 115.51 \\ & { }^{1} 14.99 \end{aligned}$ | $\begin{aligned} & 115.51 \\ & { }^{1} 14.99 \end{aligned}$ |
| Chestnut |  |  |  |  |  |
|  |  |  |  |  |  |
| Prepared sizes, high volat |  |  | 113.3319.5019.06 | $\begin{array}{r} 111.08 \\ 19.00 \\ { }^{1} 7.88 \end{array}$ | $\begin{array}{r} 111.08 \\ \\ 19.00 \\ 17.88 \end{array}$ |
| Run of mine, mixed.... |  |  |  |  |  |

${ }_{1}^{1}$ Per ton of 2,240 pounds.
${ }_{4}^{3}$ Per 25-bushel lot (1,900 pounds).
${ }^{4}$ The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.
${ }^{5}$ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

## Index Numbers of Wholesale Prices in November, 1927

A
SLIGHT reaction from the recent upward movement of wholesale prices is shown for November by information collected in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's revised index number, computed on prices in the year 1926 as the base and including 550 commodities or price series, stands at 96.7 for November as compared with 97.0 for the month before, a decline of nearly onethird of 1 per cent. Compared with November, 1926, with an index number of 98.4 , a decrease of $13 / 4$ per cent is shown.
Farm products again showed a slight decline from the preceding month, due mainly to decreases in corn, hogs, lambs, calves, cows, cotton, peanuts; and onions. Beef steers, eggs, and wool, on the other hand, averaged higher than in the preceding month.

Foodstuffs rose slightly in price, with minor increases reported also for hides and leather products, chemicals and drugs, and housefurnishing goods. No change in the general price level is shown for the group of miscellaneous commodities, while small decreases took place among textile products, fuel and lighting materials, metal products, and building materials.

Of the 550 commodities or price series for which comparable information for October and November was collected, increases were shown in 157 instances and decreases in 154 instances. In 239 instances no change in price was reported.


Comparing prices in November with those of a year ago, as measured by changes in the index numbers, it is seen that farm products and hides and leather products were considerably higher, while foods and textile products were slightly higher. Decreases are shown for all other groups of commodities, ranging from less than one-fourth of 1 per cent in the case of house-furnishing goods to $93 / 4$ per cent in the case of building materials, and over 19 per cent in the case of fuel and lighting.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

| Group and subgroup | $\begin{aligned} & \text { Novem- } \\ & \text { ber, } \\ & 1926 \end{aligned}$ | 1927 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | October | November | Purchasing power of the 1926 dollar in November |
| Farm products | 94.7 | 105.0 | 104.3 | Cents 95.9 |
|  | 93.6 | 105.0 99.2 | 104.3 99.6 | 95.9 100.4 |
| Livestock and poultry | 93.3 | 105. 5 | 100.8 | 99.2 |
| Foods Other farm products. | 96.2 100.5 | 106.7 | 108.3 | 92.3 |
| Butter, cheese, and milk | 104.5 | 100.0 107.2 | 101.5 | 98.5 92.3 |
| Meats...... | 99.0 | 100.0 | 100.9 | 99.1 |
| Other foods........... | 99.9 | 97.2 | 99.1 | 100.9 |
| Hides and leather products | 100.4 | 113. 0 | 114.3 | 87.5 |
| Hides and skins. | 103.2 99.4 | 128.0 | 131. 6 | 76.0 |
| Boots and shoes. | 99.4 99.8 | 116.5 105.6 | 117.1 | 85.4 |
| Other leather products | 190.0 | 105. 6 | 106.3 109.2 | 94.1 91.6 |
| Textile products............ | 96.3 | 108.9 | 109.2 | 91.6 |
| Cotton goods. | 95.4 | 106. 0 | 104.6 | 95.6 |
| Silk and rayon. | 94.7 | 85.4 | 83. 6 | 119.6 |
| Woolen and worsted goods | 98.5 | 98.0 | 98.1 | 101.9 |
| Other textile products...-- | 98.1 | 95.7 | 94.9 | 105.4 |
| Fuel and lighting --....... | 102.5 | 83.8 | 82.9 | 120.6 |
| Anthracite coal | 92.8 | 96.0 | 96.9 | 103. 2 |
| Bituminous coal | 116.8 | 99.6 | 97.8 | 102. 2 |
| Coke --.-...--...- | 106.2 | 93.9 | 92.7 | 107.9 |
| Manufactured gas. | 99.0 | 97.5 |  |  |
| Petroleum products | 94.1 | 67.5 | 66.6 | 150.2 |
| Metals and metal products | 100.8 | 97.1 | 97.0 | 103. 1 |
| Iron and steel Nonferrous metals. | 100.2 98.8 | 94.0 89.9 | 93.5 | 107. 0 |
| Agricultural implements. | 98.8 100.0 | 89.9 98.9 | 90.3 98.9 | 110. 7 |
| Automobiles_-..---...-- | 102.3 |  | 98.9 102.2 | 101.1 97.8 |
| Other metal products | 99.4 | 100.7 | 102.2 100.7 | 97.8 99.3 |
| Building materials......- | 100.1 | 101.6 | 100.7 90.2 | 110. 9 |
| Lumber.-. | 100.2 | 91.2 | 89.2 | 112. 1 |
| Brick | 97.5 | 93.3 | 91.3 | 109.5 |
| Structural steel | 99.4 102.1 | 96.5 | 96.5 89.4 | 103.6 |
| Paint materials .---------- | 100.5 | 91.9 87.0 | 89.4 85.7 | 111.9 |
| Other building materials | 100.6 | 81.0 91.7 | 85.7 91.2 | 116.7 109.6 |
| Chemicals and drugs.-.-. | 108.6 | 97.1 | 97.4 | 109. 7 |
| Chemicals | 97.9 | 101.8 | 102.3 | 197.8 |
| Drugs and pharmaceuticals Fertilizer materials..-.-. | 101.0 | 86.2 | 85.2 | 117.4 |
| Fertilizers <br> materials | 98.0 100.0 | 94.1 | 94.9 | 105.4 |
| House-furnishing goods | 100.0 | 92.5 | 92.9 98.9 | 107.6 |
| Furniture.......... | 99.5 | 98.5 97.0 | 98.9 97.2 | 101.1 |
| Furnishings | 98.9 | 99.4 | 100.0 | 100.0 |
| Miscellaneous. | 90.8 | 88.3 | 18.3 | 113.3 |
| Cattle feed....- | 97. 6 | 116.7 | 122.4 | 81.7 |
| Paper and pulp | 92.1 | 91.6 | 91.3 | 109.5 |
| Rubber----.-- | 82.0 | 70.5 | 77.8 | 128.5 |
| Automobile tires.... | 83.6 | 74.9 | 71.2 | 140.4 |
| Other miscellaneous | 99.6 | 99.9 | 99.1 | 100.9 |
| All commodities. | 98.4 | צ7. 0 | 96.7 | 103.4 |

${ }^{1}$ Data not yet available.

Sources and Frequency of Price Quotations Used in Constructing Revised Index Numbers of Wholesale Prices

THE annual bulletin on wholesale prices published by the Bureau of Labor Statistics contains a statement showing the sources of the latest price quotations used in the preparation of the report, together with a tabulation showing whether prices are weekly, monthly, or averages for the month. To meet the demand for this information in advance of the appearance of the next annual bulletin, there is presented herewith such a statement for the 550 commodities or price series included in the revised series of index numbers recently computed by the bureau. There are certain duplications in the figures shown in this statement, due to the inclusion of some commod.. ities in two different groups. Duplications have been omitted, however, from the last column of the table.

TABLE 1.-SOURCES OF PRICE QUOTATIONS

| Source | Farm products | Foods | $\begin{aligned} & \text { Hides } \\ & \text { and } \\ & \text { leath- } \\ & \text { er } \\ & \text { prod- } \\ & \text { urts } \end{aligned}$ | Textile products | Fuel and lighting | $\begin{aligned} & \text { Metals } \\ & \text { and } \\ & \text { metal } \\ & \text { prod- } \\ & \text { ucts } \end{aligned}$ | $\begin{gathered} \text { Build- } \\ \text { ing } \\ \text { mate- } \\ \text { rials } \end{gathered}$ | Chemicals and drugs | $\begin{aligned} & \text { House- } \\ & \text { fur- } \\ & \text { nish- } \\ & \text { ing } \\ & \text { goods } \end{aligned}$ | Mis-cel- <br> lane- <br> ous | All commodities |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | With dupli-cations | Without dupli-cations |
| Standard trade journals | 52 | 91 | 14 | 12 | 16 | 36 | 35 | 71 |  | 13 | 340 | 314 |
| Manufacturers or sales agents. $\qquad$ | 4 | 14 | 26 | 57 | 16 7 | 36 | 19 | 71 6 | 38 | 12 | 219 | 314 205 |
| Boards of trade, associations, etc | 7 | 11 |  | 6 |  |  | 3 |  |  |  | 27 | 23 |
| Federal or State bureaus. | $4$ | 5 |  |  |  | 1 |  |  |  |  | 10 | 8 |
| Total | 67 | ${ }^{1} 121$ | 40 | 75 | 23 | 73 | ${ }^{2} 57$ | ${ }^{3} 77$ | ${ }^{4} 38$ | 25 | 596 | 550 |

${ }^{1}$ Includes 22 commodities classified also with farm products.
${ }_{2}$ Includes 10 commodities classified also with metals and metal products.
${ }^{3}$ Includes 4 commodities classified also with foods.
4 Includes 5 commodities classified also with textile products and 5 commodities classified also with metals and metal products.

TABLE 2.-FREQUENCY OF PRICE QUOTATIONS

| Frequency | Farm products | Foods | $\begin{aligned} & \text { Hides } \\ & \text { and } \\ & \text { leath- } \\ & \text { er } \\ & \text { prod- } \\ & \text { ucts } \end{aligned}$ | Textile products | Fuel and light ing | Metals and metal products | Build ing materials | Chemicals and drugs | $\begin{gathered} \text { House- } \\ \text { fur- } \\ \text { nish- } \\ \text { ing } \\ \text { goods } \end{gathered}$ | Mis-cel-laneous | All commodities |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | With dupli-cations | Without dupli-cations |
| Weekly | 56 | 105 | 8 | 19 | 22 | 34 | 23 | 71 |  | 13 | 351 | 324 |
| Biweekly | 1 |  |  |  |  |  | 8 |  |  |  | 9 | 9 |
| Monthly | 4 | 6 | 5 | 4 |  | 2 | 12 |  |  | 1 | 34 | 32 |
| Average for month | 6 | 10 | 27 | 52 | 1 | 37 | 14 | 6 | 38 | 11 | 202 | 185 |
| Total | 67 | ${ }^{1} 121$ | 40 | 75 | 23 | 73 | ${ }^{2} 57$ | ${ }^{3} 77$ | ${ }^{4} 38$ | 25 | 596 | 550 |

${ }^{1}$ Includes 22 commodities classified also with farm products.
${ }_{2}$ Includes 10 commodities classified also with metals and metal products.
${ }^{3}$ Includes 4 commodities classified also with foods.
${ }^{4}$ Includes 5 commodities classified also with textile products and 5 commodities classified also with metals and metal products.

## Comparison of Retail-Price Changes in the United States and in Foreign Countries

THE principal index numbers of retail prices published by foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced in most cases to a common base, namely, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers of retail prices compiled by the bureau, because of the fact that in numerous instances satisfactory information for 1913 was not available. Some of the countries shown in the table now publish index numbers of retail prices on the July, 1914, base. In such cases, therefore, the index numbers are reproduced as published. For other countries the index numbers here shown have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto as published in the original sources. As stated in the table, the number of articles included in the index numbers for the different countries differs widely. These results, which are designed merely to show price trends and not actual differences in the several countries, should not, therefore, be considered as closely comparable with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included on successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND IN OTHER
COUNTRIES


INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND IN OTHER COUNTRIES-Continued

| Country -- | Italy | Netherlands | Norway | Sweden | Switzerland | United Kingdom | South Africa | India (Bombay) | Australia | New Zealand |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of localities. | 47 | 6 | 31 | 49 | 33 | 630 | 9 | 1 | 30 | 25 |
| $\begin{aligned} & \text { Commodi- } \\ & \text { ties in- } \\ & \text { cluded. } \end{aligned}$ | 20 foods and charcoal | $\begin{aligned} & 29(27 \\ & \text { foods) } \end{aligned}$ | Foods | $\begin{aligned} & 50(43 \\ & \text { foods, } 7 \\ & \text { fuel and } \\ & \text { light }) \end{aligned}$ | Foods | 21 foods | 24 foods | 17 foods | 46 foods and groceries | 59 foods |
| $\begin{aligned} & \text { Comput- } \\ & \text { ing } \\ & \text { agency.- } \end{aligned}$ | $\begin{gathered} \hline \text { Ministry } \\ \text { of Na- } \\ \text { tional } \\ \text { Econo- } \\ \text { my } \end{gathered}$ | Central Bureau of Statisties | Central Bureau of Statisties | Social <br> Board | Labor Office (revised) | $\begin{gathered} \text { Ministry } \\ \text { of } \\ \text { Labor } \end{gathered}$ | Office of Census and Statistics | Labor Office (revised) | Bureau of Census and Statistics | Census and Statistics Office |
| Base $=100$. | 1913 | JanuaryJune, 1914 | July, 1914 | July, 1914 | July, 1914 | July, <br> 1914 | 1914 | July, 1914 | July, 1914 | July, 1914 |
| Year and month 1923 |  |  |  |  |  |  |  |  |  |  |
|  | 542 | 148 | 214 | 166 | 160 | 175 | 117 | 151 | 145 | 139 |
| Feb-....-- | 527 | 149 | 214 | 165 | 158 | 173 | 117 | 150 | 144 | 140 |
| Mar | 524 | 149 | 214 | 166 | 159 | 171 | 117 | 149 | 145 | 141 |
| Apr | 530 | 149 | 212 | 163 | 161 | 168 | 117 | 150 | 152 | 142 |
| May | 535 | 147 | 214 | 161 | 164 | 162 | 118 | 148 | 156 | 143 |
| June. | 532 | 145 | 213 | 161 | 166 | 160 | 118 | 146 | 162 | 142 |
| July - | 518 | 145 | 218 | 160 | 166 | 162 | 116 | 148 | 164 | 142 |
| Aug- | 512 | 143 | 220 | 161 | 166 | 165 | 115 | 149 | 165 | 143 |
| Sept. | 514 | 142 | 218 | 165 | 167 | 168 | 115 | 149 | 161 | 145 |
| Oct | 517 | 145 | 217 | 165 | 167 | 172 | 117 | 147 | 157 | 146 |
| Nov.... | 526 | 149 | 221 | 164 | 171 | 173 | 120 | 147 | 157 | 147 |
| Dec. 1924 | 528 | 149 | 226 | 164 | 172 | 176 | 118 | 152 | 156 | 147 |
| Jan......- | 527 | 150 | 230 | 163 | 173 | 175 | 120 | 154 | 155 | 150 |
| Feb-.....- | 529 | 151 | 234 | 162 | 172 | 177 | 122 | 151 | 153 | 149 |
| Mar.... | 523 | 152 | 241 | 162 | 171 | 176 | 122 | 147 | 152 | 150 |
| Apr.... | 527 | 152 | 240 | 159 | 169 | 167 | 122 | 143 | 150 | 150 |
| May | 530 | 151 | 241 | 159 | 169 | 163 | 122 | 143 | 151 | 150 |
| June. | 543 | 151 | 240 | 158 | 170 | 160 | 120 | 147 | 149 | 150 |
| July | 538 | 150 | 248 | 159 | 170 | 162 | 117 | 151 | 148 | 148 |
| Aug. | 534 | 150 | 257 | 163 | 170 | 164 | 117 | 156 | 147 | 146 |
| Sept | 538 | 152 | 261 | 165 | 170 | 166 | 117 | 156 | 146 | 145 |
| Oet. | 556 | 154 | 264 | 172 | 174 | 172 | 120 | 156 | 146 | 145 |
| Nov. | 583 | 156 | 269 | 172 | 175 | 179 | 122 | 157 | 147 | 148 |
| Dec <br> 1925 | 601 | 157 | 274 | 172 | 175 | 180 | 121 | 156 | 148 | 150 |
| Jan. | 609 | 156 | 277 | 170 | 172 | 178 | 120 | 152 | 148 | 147 |
| Feb. | 609 | 157 | 283 | 170 | 172 | 176 | 120 | 152 | 149 | 146 |
| Mar | 610 | 157 | 284 | 171 | 171 | 176 | 121 | 155 | 151 | 149 |
| Apr | 606 | 155 | 276 | 170 | 169 | 170 | 124 | 153 | 152 | 149 |
| May | 600 | 154 | 265 | 169 | 168 | 167 | 123 | 151 | 154 | 150 |
| June...... | 602 | 152 | 261 | 169 | 169 | 166 | 122 | 149 | 155 | 149 |
| July .....-- | 605 | 152 | 260 | 169 | 169 | 167 | 120 | 152 | 156 | 151 |
| Aug | 619 | 152 | 254 | 170 | 169 | 168 | 119 | 147 | 156 | 152 |
| Sept | 642 | 152 | 241 | 168 | 170 | 170 | 118 | 146 | 156 | 153 |
| Oct. | 645 | 149 | 228 | 166 | 168 | 172 | 119 | 148 | 157 | 155 |
| Nov...... | 652 | 149 | 223 | 165 | 168 | 172 | 117 | 149 | 156 | 156 |
| Dec 1926 | 653 | 148 | 221 | 164 | 167 | 174 | 116 | 151 | 155 | 154 |
| $\mathrm{Jan}$ | 658 | 148 | 216 | 162 | 165 | 171 | 116 | 151 | 155 | 154 |
| Feb | 649 | 147 | 212 | 160 | 163 | 168 | 117 | 150 | 154 | 153 |
| Mar | 636 | 147 | 205 | 159 | 161 | 165 | 118 | 151 | 159 | 152 |
| Apr.......- | 633 | 146 | 198 | 158 | 161 | 159 | 119 | 150 | 163 | 151 |
| May-....- | 643 | 146 | 195 | 157 | 159 | 158 | 119 | 150 | 163 | 151 |
| June. | 647 | 146 | 194 | 157 | 159 | 158 | 118 | 152 | 162 | 151 |
| July .-...- | 645 | 146 | 198 | 156 | 159 | 161 | 117 | 155 | 159 | 149 |
| Aug......-- | 648 | 146 | 196 | 156 | 157 | 161 | 117 | 153 | 157 | 150 |
| Sept......- | 656 | 149 | 193 | 157 | 158 | 162 | 117 | 153 | 155 | 148 |
| Oct .......- | 662 | 148 | 191 | 157 | 160 | 163 | 120 | 153 | 153 | 147 |
| Nov....-. | 655 | 148 | 186 | 158 | 159 | 169 | 119 | 152 | 155 | 146 |
| $\text { Dec }{ }_{1927}$ | 622 | 146 | 184 | 157 | 159 | 169 | 117 | 154 | 158 | 149 |
| Jan......-- | 629 | 147 | 180 | 156 | 158 | 167 | 116 | 155 | 158 | 148 |
| Feb. | 615 | 146 | 177 | 153 | 157 | 164 | 117 | 152 | 153 | 146 |
| Mar | 610 | 146 | 173 | 151 | 156 | 162 | 118 | 152 | 151 | 146 |
| A pr | 606 | 145 | 169 | 151 | 156 | 155 | 119 | 151 | 151 | 145 |
| May | 599 | 145 | 169 | 150 | 156 | 154 | 121 | 150 | 152. | 145 |
| June......- | 558 | 145 | 172 | 151 | 157 | 154 | 120 | 151 | 153 | 144 |
| July ......- | 540 | 144 | 175 | 151 | 157 | 159 | 119 | 154 | 152 | 144 |
| Aug.......- | 532 | 143 | 175 | 152 | 157 | 156 | 118 | 155 | 155 | 143 |
| Sept......- | 525 | 143 | 174 | 156 | 159 | 157 | 117 | 151 | 157 | 143 |

## COST OF LIVING

## Study of Family Budgets in Amsterdam, 1923-24 ${ }^{1}$

THE municipal statistical office of Amsterdam has recently completed a cost-of-living study covering the period from October 1, 1923, to September 30, 1924, which was based on family budgets for 212 families. The classes of families covered by the investigation included those of officials, civil service employees, commercial employees, teachers, and manual workers in the city services and in private enterprises. There were 89 workers' families and 123 families of clerical workers and officials covered by the survey. Complete records were kept for the entire year in all but 11 cases. In these cases there was a break in the accounting for a short time owing to some misfortune in the family such as sickness or death, but as the data in these cases were complete except for this short period they were included for the time for which the accounts were kept and the income was given for the entire year.

The families were divided into six groups according to income, ranging from those having an income of less than 1,800 florins ${ }^{2}$ per year to those having 7,500 florins and more. The lowest income reported was 732 florins and the highest 19,231.44 florins. The total number in the households at the beginning of the year was 922 persons, and at the close 943 . The size of the family was adjusted to a unit of consumption equivalent to an adult male, and on this basis the households averaged 3.6 units. The average for the 123 families representing the higher salaried employees was 3.4 , and for the 89 workers' families 3.89 units. Servants were not included in computing the number of units in the household, but the cost of food for them was considered to be equivalent to 0.9 of a unit, or the food requirement of an adult female.

The study showed, as in similar studies, that the proportion of the income spent for food decreased in direct relation to increased income. Thus, in the group of families having incomes of less than 1,800 florins a year, the average proportion of the total expenditures which was spent for food amounted to 46.3 per cent, while in the highest income group only 15.9 per cent was spent for this item of the budget.

A classification of the incomes according to source shows that salaries or wages are, of course, the principal source of revenue, although as the wages or salaries increase a growing amount is derived from returns on investments, while as the size of the family increases there is a corresponding increase in the number of children who work and whose earnings add to the total income. On the other hand, in the small families the wife was more often employed than when the family was large. In the families of salaried employees the earnings of the husband represented 86.8 per cent of the total family income;

[^42]the earnings of the wife, 1.2 per cent, and the earnings of the children, 3.3 per cent, while 8.7 per cent of the income was derived from other sources. In the workers' families the earnings of the husband amounted to 91.1 per cent of the total; of the wife, to 1.4 per cent; of the children, to 4.2 per cent, and the income from other sources amounted to only 3.3 per cent of the total income.

Considerable deficits were shown in the lower income groups. The first group, which was made up entirely of workers' families, had an average income of $1,504.43$ florins and an average expenditure of $1,673.98$ florins. The following table shows the number of households in which there was a deficit, calculated in percentages of the total income:

TAble 1.-NUMBER OF WORKERS' FAMILIES HAVING A DEFICIT, SHOWN AS PER CENT OF TOTAL INCOME

| Income group | Number of families having a deficit of - |  |  |  |  |  | Total <br> fam- <br> ilies |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Less } \\ \text { than 2 } \\ \text { per cent } \end{gathered}$ | $\left\lvert\, \begin{gathered} 2 \text { to } 5 \\ \text { per cent } \end{gathered}\right.$ | $\begin{gathered} 5 \text { to } 10 \\ \text { per cent } \end{gathered}$ | 10 to 20 per cent | $\begin{aligned} & 20 \text { to } 30 \\ & \text { per } \\ & \text { cent } \end{aligned}$ | 30 per cent and over |  |
| Less than 1,800 florins.. <br> 1,800 to 2,400 florins <br> 1,400 to 3,600 florins..... | 3 9 1 | 1 2 1 | 5 <br> 4 <br> 2 | 3 6 1 | 1 | 4 1 | 17 22 6 |

The total deficit in the 45 workers' families amounted to $8,851.55$ florins, or an average of 196.70 florins per family. The principal causes of the arrears in this group were expenses incidental to sickness, birth, and death, moving, repayments of loans, and the payment of back taxes. For all the groups of both classes combined there were found to be larger deficits in families in which there were a large number of children.

In contrast to the 45 workers' families which had a deficit, the remaining 44 showed some surplus. This amounted to an average of only 115.87 florins, however, and was found principally among families in which the income was over 2,400 florins.

Table 2 shows the average incomes and expenditures for the different income groups and the distribution of expenditures among the different items of the budget, and Table 3 shows the percentage distribution of total food cost in each class of households for the different kinds of food.

Table 2.-AVERAGE INCOME AND EXPENDITURE OF 212 FAMILIES IN AMSTERDAM, AND PER CENT EXPENDED FOR DIFFERENT ITEMS OF THE BUDGET, BY INCOME GROUP
[Florin at par $=40.2$ cents; average exchange rate in 1924 was 38.2 cents]

| Item | Households having a total annual income of- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Under } \\ & 1,800 \\ & \text { florins } \end{aligned}$ | $\begin{aligned} & 1,800 \text { to } \\ & 2,400 \\ & \text { fiorins } \end{aligned}$ | $\begin{gathered} 2,400 \text { to } \\ 3,600 \\ \text { florins } \end{gathered}$ | $\begin{aligned} & 3,600 \text { to } \\ & 5,000 \\ & \text { florins } \end{aligned}$ | $\begin{aligned} & 5,000 \text { to } \\ & 7,500 \\ & \text { florins } \end{aligned}$ | 7,500 florins and over |
| Average income (florins) | 1,504. 43 | 2, 105. 63 | 2, 911. 79 | 4, 243.23 | 6, 153.80 | 11, 486. 53 |
| Average expenditure (florins).- | 1, 673.98 | 2, 099.04 | 2, 875.85 | 4, 012.78 | 6,194.05 | 10, 104. 24 |
| Per cent expended for each item: Food | 46.3 | 40.4 | 36.0 | 30.8 | 23.2 | 15.9 |
| Rent | 14.3 | 12. 9 | 11.1 | 9.6 | 8.9 | 9.1 |
| Heat and light | 6.9 | 6.2 | 5.1 | 4.3 | 3.4 | 3.2 |
| Clothing...... | 9.8 | 11.0 | 12.7 | 14.1 | 14.1 | 12.7 |
| Furniture. | 3.2 | 4.6 | 5. 5 | 6.8 | 5.1 | 5.3 |
| Taxes .-. | 2. 5 | 4. 5 | 7.0 | 8.0 | 13.9 | 19.3 |
| Sickness and insurance | 5.1 | 5.3 | 4.7 | 4.6 | 4.6 | 3.7 |
| Trade-unions ......-. | 2.2 | 2.5 | 1.4 | +. 9 | +. 7 | . 6 |
| Culture.-. | 1. 6 | 2.4 | 2.8 | 3. 5 | 4.1 | 5. 6 |
| A musements | 2. 6 | 4.6 | 5.4 | 6.9 | 6. 6 | 8.8 |
| Charity. | . 5 | . 9 | . 9 | 1. 5 | . 3 | 1.2 |
| Assistance in the household | . 04 | . 5 | 1. 6 | 3. 7 | 8. 6 | 8.9 |
| Miscellaneous..--......-- | 4.3 | 3.6 | 4.9 | 4.6 | 5. 6 | 4.7 |

TABLE 3.-PERCENTAGE DISTRIBUTION OF TOTAL FOOD COST AMONG DIFFERENT ARTICLES OF FOOD, BY INCOME GROUP
[Florin at par $=40.2$ cents; average exchange rate in 1924 was 38.2 cents]

| Item | Per cent expended for each article of food in households having an income of - |  |  |  |  |  | Total, all households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under <br> 1,800 <br> florins | 1,800 to <br> 2,400 <br> florins | $\begin{aligned} & 2,400 \text { to } \\ & 3,600 \\ & \text { florins } \end{aligned}$ | $\begin{aligned} & 3,600 \text { to } \\ & 5,000 \\ & \text { florins } \end{aligned}$ | $\begin{gathered} 5,000 \text { to } \\ 7,500 \\ \text { florins } \end{gathered}$ | 7,500 florins and over |  |
| Bread, biscuit, cake | 17.2 | 14.9 | 13.4 | 14.0 | 9. 4 | 7.5 | 13.5 |
| Pastries.- | 3.4 | 4.3 | 4.6 | 5. 9 | 6. 3 | 6.2 | 4.8 |
| Flour. | 2.6 | 2.6 | 2.3 | 2.4 | 1.3 | 1.7 | 2.4 |
| Milk | 13.4 | 12.5 | 12.6 | 10.9 | 11.7 | 10.6 | 12.3 |
| Cheese | 1.7 | 2.2 | 2.5 | 2. 6 | 3. 4 | 2.2 | 2.4 |
| Eggs. | 2.2 | 2.4 | 2.8 | 2.9 | 3.9 | 4.1 | 2.8 |
| Meat | 13.3 | 15.1 | 16.0 | 16.3 | 19.6 | 20. 5 | 16.1 |
| Fish. | 1.7 | 2.2 | 2.3 | 2.3 | 2.1 | 2.9 | 2.3 |
| Fats | 13.6 | 14.3 | 13.8 | 13.4 | 12.1 | 12.1 | 13.6 |
| Tea, coffee, cocoa | 5.7 | 5. 0 | 4. 4 | 4. 0 | 3. 3 | 3.3 | 4.5 |
| Sugar ...... | 6. 3 | 5.9 | 5. 7 | 5. 8 | 4. 2 | 3. 5 | 5.6 |
| Other condiments | . 9 | 1.1 | 1.4 | 1.4 | 1.8 | 3.2 | 1.4 |
| Potatoes. | 8.7 | 6. 6 | 6. 2 | 5.8 | 4.1 | 3.2 | 6.1 |
| Vegetables. | 5.8 | 5.4 | 5. 4 | 5. 0 | 5. 2 | 6.8 | 5.4 |
| Fruits | 2.9 | 3.9 | 4.0 | 4.9 | 5.9 | 6.8 | 4.3 |
| Drinks | . 6 | 1.6 | 2. 6 | 2.4 | 5.7 | 5.4 | 2.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## LABOR AWARDS AND DECISIONS

Awards and Decisions<br>Ferryboatmen-California Railway Lines

AWAGE dispute between the Ferryboatmen's Union of California and various railroad lines centering at San Franciscoviz, the Atchison, Topeka \& Santa Fe, Northwestern Pacific, Southern Pacific, and Western Pacific Railroad Cos., was settled by an award of a board of arbitration consisting of Charles D. Marx, W. R. K. Young, Louis Bloch, James L. Dunn, F. L. Burckhalter, and J. A. Christie, October 31, 1927, and reads as follows:

Rule 2. Passenger and car ferries and tugs towing car floats: Firemen, $\$ 146.35$ per month; deck hands, $\$ 139.40$ per month; cabin watchmen, $\$ 139.40$ per month; night watchmen, $\$ 120$ per month; matrons, $\$ 85$ per month.

Fire boats: Firemen, $\$ 97.57$ per month; deck hands, $\$ 92.94$ per month.
Rule 6. Assigned crews will work on the basis of 8 hours or less on watch each day for six consecutive days.

Exceptions:
(1) On boats with two crews, watches may be separated by an interval of time.
(2) Extra crews may be used on any day it is found necessary to operate one or two crewed boats beyond assigned hours of regular crews.
(3) Where three crews are used, watches may be as long as 8 hours and 40 minutes, provided the combined watches do not exceed 16 hours and no crew works over 48 hours in six consecutive days.
(4) Where two crews are used, watches may be as long as 8 hours and 40 minutes, provided the combined watches do not exceed 16 hours and no crew works over 48 hours in six consecutive days.
(5) On boats operating out of Vallejo Junction crews may be assigned 12 hours per day and not to exceed 48 hours per week.
(6) On one and two crewed tugs towing car floats crews may be worked not to exceed 9 hours and 20 minutes per watch.
(7) On three-crewed tugs towing car floats and car ferries, except on Carquinez Straits, crews may be assigned 12 hours on watch with 24 hours off watch, provided such assigned watches average 48 hours per week within the time required to bring it about.
(3) On fire boats crews will work 24 hours on and then 24 hours off without pay for time off.
(9) Limit anywhere provided on length of watches does not apply in emergency or when necessary to make extra trips to handle heavy volume of traffic which can not be handled on schedule trips.
(10) Watches on three-crewed boats shall not begin or terminate between 1 a. m . and $6 \mathrm{a} . \mathrm{m}$.
(11) Employees required to operate boats to and from yard shall be paid regular run rates.
(12) Night watchmen may be assigned on 12 -hour watches four days per week.

Rule 8 . The monthly salary now paid the employees covered by this agreement shall cover the present recognized straight-time assignment. All service hourage in excess of the present recognized straight-time assignment shall be paid for in addition to the monthly salary at the pro rata rate.
A dissenting opinion was filed by the last-named two arbitrators, representing the railroad, from which the following extracts are taken:

The increase in pay, together with changes in hours of service, as provided for by the majority award, will exceed $\$ 250,000$ per year, a large portion of which must fall upon service that is already being operated at a loss. It is common knowledge that a substantial burden of operating cost added to any class of service must sooner or later fall upon the public, either in increased rates or in reduced service, or both.

The present wage rates of the employees involved were fixed by the United States Railroad Labor Board as of December 1, 1923, since which date there has been no change in the cost of living or other controlling conditions such as would justify the excessive increases here allowed. The cost of living now closely approximates that which prevailed at the time the present wage rates were established, and for some time past the trend has been downward.

No evidence is now presented that, in our judgment, warrants the elimination of the " 12 hours on and 24 hours off" assignments in passenger service and the other changes in freight service provided for by the majority award.

Money is constantly required for expansion of service and additional equipment; additional and unnecessary operating costs can not fail to hamper or prevent the securing of such funds.

The necessary limitations of this dissent forbid an analysis of the voluminous testimony and exhibits; we must therefore be content with expressing our conviction that there is no justification therein for the majority award.

## Railroads-Decisions of Train Service Boards of Adjustment

## Eastern Region

IN DOCKET No. 378, dated November 28, 1927, the Train Service
Board of Adjustment for the Eastern Region disposed of a case involving the engineers, firemen, conductors, and trainmen with the New York Central Railroad-Ohio Central Lines. The facts in the case are as follows:

During the early part of March, 1926, the management contracted with the Walsh Construction Co. to perform construction work which consisted in extending some 15 passing tracks between Ridgeway and Toledo and the building of a new yard at Toledo along the side of other yards and also adding new tracks along the running track leading to the dock tracks:

In extending the passing tracks on the western division between Ridgeway and Toledo, a distance of 80 miles, cuts were made on the hill north of Kenton and also at North Findlay and the dirt hauled in both directions to the passing tracks that were being lengthened, for filling-in purposes, and this dirt was handled over the main track for distances up to 25 miles straightaway.

In building the new yard at Toledo the slag for filling was delivered to Toledo yards by road crews, and the Walsh construction crews would go into the yards and get the material and at times actually switch the material out of storage tracks where other cars were stored and take to the new yards a distance of from 1 to $11 / 2$ miles over yard tracks.

In building the tracks leading to the dock yards the dirt for filling was hauled from a point west of Moline, a distance of approximately 6 miles, using at times both main track and yard running tracks.
On March 13 bulletins were posted at Toledo and Columbus for conductors for pilots for the Walsh Construction Co. crews. Two crews were used on the western division and from one to five crews were used in Toledo yard work.

The committee contended that this action violated several articles in the various agreements with the employees named.

The carrier in stating its position in the matter said that the various rules quoted and referred to "cover only the regular operation and maintenance of the railroad" and "come into play only when service is performed by the railroad company. They contain no obligation upon the railroad company to man construction trains with railroad employees."

The management has taken the position that the work referred to was heavy construction, chargeable to capital account, and was entirely foreign to the ordinary operation and maintenance work which is covered by the agreements. It was necessary to provide these new facilities at the earliest possible date in order to expedite the handling of anticipated heavy movement of coal for lake shipment, and as our regular maintenance forces are not equipped to undertake such a
large amount of new construction, it was necessary to secure the services of a construction company with the necessary organization, equipment, and personnel to do the work and carry it to a prompt completion. This was in the interest of efficient and economical operation. Contractors who make contracts for a piece of work include in the cost the use of their equipment and personnel, and if these can not be used, a carrying charge for such equipment and personnel must be added to the cost of the work, thereby increasing the expense to the railroad.

The present case appears to be an attempt to secure a new rule, apparently prompted by disputes which have arisen on other railroads and given publicity through decisions of the Railroad Labor Board.

The decision of the board, in part, was as follows:
The present practice of many railroads warrants an opinion that all extended or exclusive main-track movements should be made by train and engine employees in the service of the railroad. This should not prevent contractors' employees from using main track for short distances for purpose of getting material and supplies, coal or water, or going to tie-up point.

## Western Region

Deadheading

THE Train Service Board of Adjustment for the Western Region rendered a decision September 23, 1927, No. 2444, relative to pay for deadheading. A fireman on the Atchison stub of the Chicago, Burlington \& Quincy Railroad laid off on January 1. On notification the division headquarters at St. Joseph deadheaded a fireman to Atchison on the first train leaving after the request for a substitute had been received. As he did not arrive on time, the roundhouse foreman used a roundhouse employee to fire the engine and refused to permit the substitute to go to work on his arrival, but told him to deadhead back to St. Joseph and permitted the roundhouse employee to continue work for the rest of the day. The carrier refused to pay the substitute for work because none had been performed. The committee, however, said he was ordered to deadhead to Atchison and should have been permitted to relieve the roundhouse employee on his arrival at Atchison and under the circumstances was entitled to the pay provided for the stub run and deadheading from and to St. Joseph.

Claim sustained.

## Deadheading and Seniority

Decision No. 2471 of the Train Service Board of Adjustment for the Western Region, made September 28, 1927, also related to pay for deadheading. The rules allow no pay for deadheading when in the exercise of seniority. A fireman on the La Crosse division of the Chicago, Burlington \& Quincy Railroad was, because of increase of business, promoted to position of engineer and went to Daytons Bluff to assume his duties at that point. He put in a claim for deadheading on the ground that he was promoted, not in the exercise of seniority but because of the increase of business, and that the deadheading was therefore by order of the company.

The board sustained his claim.

## Physical Reexamination

The Train Service Board of Adjustment for the Western Region rendered a decision September 1, 1927, in Case No. 2437, relative to physical reexamination of engineers and fireman on the Chicago \&

North Western Railway. An engineer on the Black Hills division of that road was directed on September 18, 1926, to report to a certain local surgeon for physical examination. He reported September 20, passed a satisfactory examination, but was not allowed to return to work until September 27 when his division office had received approval of the examination from Chicago, which was received 7 days later. He laid claim for 9 days' pay, under Rule 17 (a) of the engineers' schedule, reading as follows:

Engineers on assigned runs who have not been given an opportunity to go out in their turn, provided they have not been displaced under other provisions of this agreement and have had sufficient rest, will be paid for all time or mileage lost.

The carrier refused payment on the ground that the rule had "never been applied in cases where an engineer was held out of service pending physical reexamination," and was not intended to cover such a condition.

The board, however, sustained the claim.

> Pay for Two Classes of Service

A question of pay for two classes of service was raised in decision No. 2460, decided by the Train Service Board of Adjustment for the Western Region September 27, 1927. A hostler helper at Hastings, Nebr., on the Lincoln division of the Chicago, Burlington \& Quincy Railroad, worked a regular shift from $4 \mathrm{p} . \mathrm{m}$. to midnight. One night by order he relieved a switch-engine fireman from $10 \mathrm{p} . \mathrm{m}$. to 12.10 a . m. For this he claimed pay for two separate days, as rule 28 did not permit combining hostling service and yard service.

The claim was sustained.

## Railway Clerks-Chicago \& North Western Railway Co.

AWAGE dispute between the Brotherhood of Railway and Steamship Clerks, Freight Handlers, and Statio Employees and the Chicago \& North Western Railway Co. was settled by an award made by a board consisting of William Walliser, C. H. Westbrook, George M. Harrison, George W. Eastty, Victor S. Clark, and Ralph E. Heilman, November 4, 1927. The award was as follows:

1. Add to the rates of pay in effect October 31, 1927, an increase of 7 per cent of the existing rates for all classes of labor coming within groups $8,9,10,11,14$, 83, 103, and 104 of the Interstate Commerce Commission classification.
2. Add to the rates of pay in effect October 31, 1927, an increase of 4 per cent of existing rates for all classes of labor coming within groups 31, 101, 105, and 106 of the Interstate Commerce Commission classification.
3. The increase of rates of pay herein provided for shall be effective as of November 1, 1927.
4. The sum of the increases granted the employees by this award may be distributed by a joint action and agreement of the parties to this arbitration in such manner as to bring about an adjustment of the inequalities in rates of employees covered by this award, provided, that in the event of the parties to this arbitration failing to agree as to said distribution within a period of 30 days from this award, the award shall be applied as though this paragraph were not a part thereof.

The first named two members of the board, representing the carrier, filed a dissenting opinion, using the following words:

The primary objection to the majority award is the burden which the increased wage cost places upon railway transportation in the territory served by this railway, thus impairing the efficient and economical operation of its service. Further, because of the fact that an abundance of labor of the classes here involved is available at less than the wages now being paid, the fact that its employees are now earning more than they could earn in other lines of work and more than like labor is receiving in agricultural and other industry, the conceded fact that changes in cost of living do not justify any wage increase and that there is no other economic justification for such an increase, we dissent from the award of the majority.

## Railway Clerks-Wabash Railway Co.

UNDER date of August 17, 1927, an arbitration board consisting of Fred L. Williams, George M. Harrison, and S. E. Cotter rendered a decision in a dispute between the Brotherhood of Railway and Steamship Clerks, Freight Handlers, and Station Employees and the Wabash Railway Co. relative to an increase in wages. A copy of this decision was printed in the Labor Review for October, 1927 (p. 209). Later a controversy arose between the parties as to the meaning and application of section 4 of the award. The board therefore reconvened November 21, 1927, stated that it was not its intention in the award to discriminate against similar employees in the employ of the carrier prior thereto, and after a hearing rewrote section 4, as follows:

Employees filling positions of clerks or machine operators who, prior to their employment by the Wabash were without previous clerical experience as a clerical worker and who shall not have served one whole year prior to the effective date of this award- to wit, August 16, 1927-shall after the end of one year's service in such position or positions be paid for future services the established full rate of pay for the position occupied; and for any unexpired portion of any said first year remaining after the going into effect of this award, shall be paid as follows: For any remaining portion of the first six months of said employment occurring after August 16, 1927, shall be paid at the rate of $\$ 2.35$ per day; for any remaining portion or whole of the second six months of their employment occurring after August 16, 1927, shall be paid at the rate of $\$ 3.191 / 4$ per day; and all such empleyees entering the service and filling such positions after August 16, 1927, shall be paid as follows: $\$ 2.35$ per day for the first six months and $\$ 3.191 / 4$ per day for the second six months, and thereafter the established full rate of pay for the position occupied.
S. E. Cotter, representing the carrier, declined to concur in the new decision, holding that the section as written "is plain and conclusive and not subject to interpretation, as would be clearly apparent if the majority had inserted the original section 4 in the so-called interpretation thereof, and that the board, or a majority thereof, is without authority to make an amended award establishing conditions which change or vary from the original award, as a majority of the board have attempted to do."

## Signalmen-Louisville \& Nashville Railroad

AN ARBITRATION board consisting of Perry B. Miller, L. W. Givan, and L. L. Morton handed down a decision, November 12, 1927, in a wage dispute between the Brotherhood of Railway

Signalmen of America and the Louisville \& Nashville Railroad. The old and the new rates for the various workers are as follows:


Rates of signal laborers were increased 2 cents per hour.
Assistant signalmen and assistant maintainers start at 51 cents per hour, as before, but the increases from first to eighth period are 3 cents a period instead of 2 cents.
L. W. Givan filed a supplementary opinion, from which the following extracts are taken:

The increases provided for in the award are entirely inadequate, and I am of the sincere belief that the evidence fully justifies granting of at least the full amount of increases asked for by the brotherhood. The result of this award allows a condition of unjust discrimination and inequality to continue, which in my judgment will be detrimental to both the morale of the employees and the efficient operation of the railroad.

The request of the brotherhood in this arbitration case is that the peak rates of pay which existed in the year of 1920 be restored to the signal department employees of the Louisville \& Nashville Railroad. The record shows without contradiction the following facts, which in my opinion justify full compliance with the request to reestablish these rates:
(a) Union wage scales throughout the entire United States are not substantially higher than they were during the peak period of 1920 . This fact was proved without question and no attempt made by the railroad to deny it.
(b) The present rates of pay of a great majority of other classes of employees on the Louisville \& Nashville Railroad have either been recently established above their former peak rates or at a point equaling those peak rates. Through arbitration the train dispatchers have just been granted rates $\$ 15$ per month above their 1920 peak. The many classes of trainmen and conductors now enjoy rates in excess of their 1920 peak rates. The locomotive firemen and enginemen, through the process of arbitration, have received rates in excess of their 1920 peak. The telegraphers have been granted wage increases which restore the rates which existed for that class in 1920. The clerical forces have received wage advances so that present wages practically equal their 1920 level.
(c) It was shown that the general wage level of all workers in the United States at the present time is substantially higher than during the 1920 peak period.
(d) It was shown that in the United States the average income per family at present is far in excess of the average income of 1920 and that the average income per person gainfully occupied is likewise much higher than in 1920.
L. L. Morton signed a dissenting opinion assigning the following specific reasons for his belief that the increases were unwarranted.
(1) The wage scale of these employees was adjusted by the United States Labor Board in 1921 and 1922 by awards presumptively fair and reasonable after consideration of all relevant facts, and this scale was further voluntarily modified and the rates increased by the railroad company in 1926, since which awards, both above mentioned, there has been no substantial change in economic conditions, such as cost of living and continuity of employment, that would justify disturbing the established wage scale. On the contrary, the trend in wholesale prices for the past two years has been distinctly downward, which condition must inevitably result in a reduction in retail prices also, and consequently in an increased purchasing power of the dollar.
(2) The railroad company submitted uncontroverted evidence proving-
(a) That it is paying to these signal mechanics of the maintenance-of-way department wages substantially equal to those paid by other carriers in the southeastern region. Under the award above the company is required to pay more than the current scale of any railroad in the southeastern region.
(b) That these mechanics are now paid wages that compare favorably with the wages of other skilled mechanics in the maintenance-of-way and maintenance-of-equipment departments of the company.
(c) That, as compared with the pre-war period, the increase in wages of these employees has far outstripped the increase in costs of living, their increase in hourly rates from 1913 to 1927 being approximately 140 per cent and the similar increase in monthly compensation being about 100 per cent for the principal classes affected, while the cost of living has only increased about 75 per cent during the same period, this cost of living automatically reflecting also the increased standard of living.
(d) That the existing wage scale is attractive and satisfactory to these mechanics as proven by the low labor turnover for many years past.
(3) While often asserted it was not proven in this case that these signal mechanics are entitled to wages higher than other railroad mechanics by virtue of any superior knowledge, skill, responsibility, or reliability.
(4) The award in this case imposes an unfair and unjustifiable burden upon the employer which ultimately must be shared by the public, that is, the shippers and travelers who buy railroad transportation service; it may and doubtless will adversely affect the wage scales of other carriers of our territory; and it will unquestionably have a tendency to promote dissatisfaction and lower morale among other classes of employees.

## IMMIGRATION AND EMIGRATION

## Statistics of Immigration for October, 1927

By J. J. Kunna, Chief Statistician United States Bureau of Immigration

A
LIENS admitted to the United States in October, 1927, numbered 53,297 . This is 5,487 above the average admitted during the previous six months. There was, however, a small outward movement of alien passengers in October last, as evidenced by the departure of 22,826 aliens.

Aliens deported from the United States under warrant proceedings numbered 932 . Some of the principal causes for these deportations were entering without immigration visa (457), criminal and immoral classes (147), mental or physical defective (93), unable to read when over 16 years of age (60), and likely to become a public charge (45). During the same month of October, 1927, a total of 1,567 aliens were debarred from entering the country, 1,334 having been turned back at points along the international land boundaries and 233 at the seaports of entry. The principal cause for debarment this month was failure to present a proper visa under the immigration act of 1924, nearly 96 per cent, or 1,501 , of the total debarred having been rejected for this reason.

Canada, Germany, Mexico, the Irish Free State, Great Britain, Italy, the Scandinavian countries, and Poland, in the order named, were the principal countries from which the immigrant aliens came during October, 1927, over five-sixths of the total immigration this month coming from these eight countries.

Less than one-third $(17,315)$ of the 53,297 aliens entering the United States in October last were of the class charged to thequota. The bulk of the remainder came in as natives of nonquota countries $(11,367)$, as returning residents $(12,995)$, or as visitors $(5,716)$.

TABLE 1.-INWARD AND OUTWARD PASSENGER MOVEMENT DURING JULY, AUGUST, SEPTEMBER, AND OCTOBER, 1927

| Period | Inward |  |  |  |  | Aliens debarred from entering ${ }^{1}$ | Outward |  |  |  |  | Aliens deported after landing ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aliens admitted |  |  | United States citizens arrived | Total |  | Aliens departed |  |  | United States citizens departed | Total |  |
|  | Immigrant | Non-immigrant | Total |  |  |  | $\begin{aligned} & \text { Emi- } \\ & \text { grant } \end{aligned}$ | Non-emigrant ${ }^{2}$ | Total ${ }^{2}$ |  |  |  |
| $\begin{array}{r} 1927 \\ \text { July } \end{array}$ | 23, 420 | 15,973 | 39, 393 |  | 69,328 | 2, 002 | 9, 230 | 18,509 | 27, 739 | 65,686 | 93, 425 | 700 |
| August | 28, 418 | 19,011 | 47, 429 | 57, 701 | 105, 130 | 1, 574 | 6,322 | 17, 014 | 23, 336 | 43, 039 | 66, 375 | 1,346 |
| September | 31, 000 | 25, 619 | 56, 619 | 75, 557 | 132, 176 | 1, 600 | 7,625 | 16, 885 | 24, 510 | 39,748 | 64, 258 | 901 |
| October- | 31, 719 | 21,578 | 53, 297 | 50, 254 | 103, 551 | 1,567 | 6, 402 | 16, 424 | 22, 826 | 24, 396 | 47, 222 | 932 |
| Total | 114, 557 | 82, 181 | 196, 738 | 213, 447 | 410, 185 | 6,743 | 29,579 | 68, 832 | 98, 411 | 172, 869 | 271, 280 | 3, 879 |

[^43]TABLE 2.-LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND INTENDED FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, DURING OCTOBER, 1927, AND FROM JULY 1 TO OCTOBER 31, 1927, BY COUNTRIES
[Residence for a year or more is regarded as permanent residence]

| Country | Immigrant |  | Emigrant |  |
| :---: | :---: | :---: | :---: | :---: |
|  | October, 1927 | July to October, 1927 | October, 1927 | July to October, 1927 |
| Albania | 22 | 120 | 7 | 37 |
| Austria | 151 | 422 | 39 | 215 |
| Belgium | 65 | 256 | 46 | 229 |
| Bulgaria. | 19 | 83 | 10 | 50 |
| Czechoslovakia | 150 | 1,028 | 146 | 771 |
| Danzig, Free City of | 56 | 150 | 1 | 1 |
| Denmark | 241 | 784 | 41 | 219 |
| Estonia | 13 | 95 |  | 3 |
| Finland | 44 | 179 | 33 | 230 |
| France, including Corsica | 483 | 1,540 | 150 | 952 |
|  |  |  |  |  |
| Great Britain and Northern Irela | 741 | 2, 738 | 311 | 2,467 |
| Northern Ireland | 21 | 2, 73 | 311 | 2,467 |
| Scotiand .-... | 1,883 | 4,125 | 95 | 669 |
| Wales | 164 | 607 | 8 | 18 |
| Greece. | 269 | 930 | 169 | 937 |
| Hungary | 76 | 328 | 107 | 349 |
| Irish Free State. | 3, 557 | 8,459 | 53 | 518 |
| Italy, including sicily and Sardin | 1,739 | 6, 201 | 1,924 | 6,830 |
| Latvia....--............. | 34 | 91 | 3 | 14 |
| Lithuania | 42 | 180 | 7 | 157 |
| Luxemburg. | 17 | 32 | 1 | 6 |
| Netherlands. | 228 | 582 | 39 | 176 |
| Norway. | 690 | 2,045 | 135 | 466 |
|  |  |  |  |  |
|  | 86 | 230 | 11 | 428 |
| Rumania | 103 | 440 | 95 | 386 |
| Russia. | 121 | - 493 | 19 | 132 |
| Spain, including Canary and Bale | 51 | 174 | 89 | 758 |
| Sweden .-..-.-.-.-....... | 713 | 2, 388 | 86 | 404 |
| Switzerland | 282 | 738 | 47 | 289 |
| Turkey in Europe | 38 | 138 | 19 | 26 |
| Yugoslavia | 163 | 490 | 149 | 767 |
|  |  |  |  |  |
| Total, Europe | 18,096 | 52,643 | 4,431 | 22, 263 |
| Armenia | 5 | 11 | 3 | 8 |
| China | 129 | 644 | 632 | 1,877 |
| India | 5 | 44 | 31 | 73 |
| Japan | 56 | 238 | 132 | 418 |
| Palestine | 47 | 187 | 6 | 34 |
| Persia | 12 | 30 | 4 | 12 |
| Syria | 61 | 201 | 35 | 105 |
| Turkey in Asia | 3 | 25 | 1 | 32 |
| Other Asia | 12 | 97 | 7 | 26 |
| Total, Asia | 330 | 1,477 | 851 | 2,585 |
| Canada.- | 7,641 | 32,494 | 195 | 1,047 |
| Newfoundland | 323 | 960 | 75 | , 260 |
| Mexico. | 4,301 | 22, 058 | 325 | 1,250 |
| Cuba-- | 261 | 1,491 | 128 | 594 |
| Other West Indies. | 139 | - 487 | 172 | 533 |
| British Honduras...... |  | 21 | 1 | 6 |
| Other Central America. | 122 | 841 | 59 | 283 |
| Brazil | 102 | , 371 | 16 | 28 |
| Other South America | 315 | 1,254 | 109 | 536 |
| Other America...- | 2 | 4 |  |  |
| Total, Ame | 13, 206 | 59,981 | 1, 080 | 4,537 |
| Egypt | 20 28 | 91 118 | 4 12 | 4 56 |
| Australia. | 17 | 118 | 15 | ${ }_{9} 95$ |
| New ZealandOther Pacific | 17 | 75 | 7 | 36 |
|  | 5 | 20 | 2 | 3 |
|  | 87 | 456 | 40 | 194 |
| Grand total, all countries | 31, 719 | 114, 557 | 6,402 | 29,579 |

TABLE 3.-IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING OCTOBER, 1927, AND FROM JULY 1 TO OCTOBER 31, 1927, BY RACE OR PEOPLE, SEX, AND AGE PERIODS

| Race or people | Immigrant |  | Emigrant |  |
| :---: | :---: | :---: | :---: | :---: |
|  | October, 1927 | July to October, 1927 | $\begin{aligned} & \text { October, } \\ & 1927 \end{aligned}$ | July to October, 1927 |
| African (black) | 105124101 | 382 426 | $\begin{array}{r} 43 \\ 5 \end{array}$ | 212 19 |
| Armenian_-.and Moravian (Cuech) |  | 426 |  | 451 <br> 588 |
| Bohemian and Moravian (Czech) Bulgarian, Serbian, and Montenegr | 1016373 | 464 | $\begin{array}{r} 96 \\ 139 \end{array}$ |  |
| Chinese... |  | ${ }_{453}^{230}$ | 61820 | 1, 848 |
| Croatian and Slovenian | 73 109 | 31411,071 |  |  |
| Cuban | 168 |  | $\stackrel{20}{84}$ | 407 |
| Dalmatian, Bosnian, and Herzogov | 11323 | $\begin{array}{r} 1,0 \\ 1,056 \end{array}$ | 15 | 60 |
| Dutch and Flemish. |  |  | $\begin{array}{r}193 \\ 28 \\ 28 \\ 577 \\ \hline\end{array}$ | 42646 |
| English...- |  | 14,646 |  |  |
| Finnish- | 2,086 |  | $\begin{array}{r} 577 \\ 35 \end{array}$ | 3, ${ }_{254}$ |
| French. |  | 8,302 | 143 | 8692,761 |
| German. | 6,078 | 16,341 | 493 |  |
| Greek.-. |  | 1,132 | $\begin{array}{r}175 \\ 24 \\ \hline\end{array}$ | 2,761 |
| Hebrew | 855 | 4,311 |  | 111 |
| Irish.- | 5,030260 | 14,081923 | $\begin{array}{r}79 \\ 93 \\ \hline 9\end{array}$ | 657782 |
| Italian (north) |  |  |  |  |
| Italian (south) | 1,628 | 5,672 | 1,840 | 6, 397 |
| Japanese |  | 2299 | 1271 |  |
| Korean. | 52 |  |  | 392 15 |
| Lithurnian | 39 | 123 | ${ }_{6}^{1}$ | 172 395 |
| Magyar | 4,195 | 21,614 | 117 292 | 1,171 |
| Pacific Islander |  | 1,330 |  | 1, 565 |
| Polish. |  |  | 206 |  |
| Portuguese | 94 <br> 39 | $\begin{array}{r}1,293 \\ .136 \\ \hline 181\end{array}$ | 23 79 | 1, 450 |
| Rumanian |  | 136471 | 44 | ${ }_{234}$ |
| Russian...... | 130 |  |  |  |
| Scandinavian (Norwegians, Danes, | 1,857 | 6,096 | 295 | 33 1,183 |
| Scotch .-..... | 2, ${ }_{268}$ | 9,299829 |  | $\begin{array}{r}1989 \\ 295 \\ \hline 105\end{array}$ |
| Slovak |  |  | 150 44 |  |
| Spanish | 268 90 | 516 | 180 | 1,032 |
| Spanish American. | 346 79 | 1,536 | 11429 | 111 |
| Syrian | 79 |  |  |  |
| Turkish | $\begin{array}{r}3 \\ 192 \\ \hline\end{array}$ | 74 | 21 | 70 |
| Welsh | $\begin{aligned} & 47 \\ & 31 \end{aligned}$ | $\begin{aligned} & 675 \\ & 211 \\ & 195 \end{aligned}$ | $\begin{aligned} & 14 \\ & 36 \end{aligned}$ | 12471 |
| West Indian (except Cuban) Other peoples.............. |  |  |  |  |
| Total | 31,719 | 114, 557 | 6,402 | 29,579 |
| Male | $\begin{aligned} & 15,943 \\ & 15,776 \end{aligned}$ | $\begin{aligned} & 60,331 \\ & 54,226 \\ & \end{aligned}$ | $\begin{aligned} & 4,819 \\ & 1,583 \end{aligned}$ | $\begin{array}{r} 20,270 \\ 9,309 \end{array}$ |
|  |  |  |  |  |
| Under 16 years. | $\begin{array}{r} 5,403 \\ 23,441 \\ 2,875 \end{array}$ | $\begin{aligned} & 19,555 \\ & 84,427 \\ & 10,575 \end{aligned}$ | $\begin{array}{r} 265 \\ 4,480 \\ 1,657 \end{array}$ | $\begin{array}{r} 1,388 \\ 20,689 \\ 7,502 \end{array}$ |
| 16 to 44 years |  |  |  |  |
| 45 years and over |  |  |  |  |

TABLE 4.-ALIENS ADMITTED DURING OCTOBER, 1927, AND FROM JULY 1 TO OCTOBER 31, 1927, SHOWING PRINCIPAL CLASSES UNDER THE IMMIGRATION ACT OF 1924, BY PRINCIPAL PLACES OF BIRTH, AS SPECIFIED

[201]

TABLE 5.-ALIENS ADMITTED DURING OCTOBER, 1927, AND FROM JULY 1 TO OCTOBER 31, 1927, BY CLASSES UNDER THE IMMIGRATION ACT OF 1924 [The number of immigrants appearing in this table and in Table 4 is not comparable with the number of statistical immigrant aliens shown in the other tables, by ports of entry, race or people, ete.]

| Class | October, 1927 | $\begin{aligned} & \text { July to } \\ & \text { October, } \\ & 1927 \end{aligned}$ |
| :---: | :---: | :---: |
| Nonimmigrants: |  |  |
| Government officials, their families, attendants, servants, and employees. | 693 | 2,645 |
| Temporary visitors for business or pleasure - .-.....-.-.-.- | 5,716 | 24, 608 |
| In continuous passage through the United States | 2, 082 | 9,496 |
| To carry on trade under existing treaty .- | 152 | 521 |
| Total. | 8,643 | 37, 270 |
| Nonquota immigrants: |  |  |
| Wives and children of United States citizens 1 | 2, 578 | 9,359 |
| Returning residents .-....-.-.- | 12,995 | 45, 040 |
| Wives and children of natives of nonquota countries i | 11,367 | 53, 192 |
| Ministers of religious denominations and their wives and children |  | ${ }_{563}$ |
| Professors of colleges, academies, seminaries, or universities, and their wives |  |  |
| and children. | 14 | 130 |
| Veterans of the World War and their wives | 181 | 1,153 |
| Spanish subjects admitted to Porto Rico. | 7 | 14 |
| Total | 27,339 | 109,901 |
| Quota immigrants (charged to quota). | 17,315 | 49,567 |
| Grand total admitted. | 53, 297 | 196,738 |

${ }^{1}$ Wives, and unmarried children under 18 years of age, born in quota countries.
${ }_{2}$ Does not include aliens born in nonquota countries, who were admitted under the act as Government officials, visitors, returning residents, etc.

## Labor Representatives' Agreement on Restriction of Mexican Emigration ${ }^{1}$

THE recent Los Angeles convention of the American Federation of Labor ratified an agreement drawn up at Washington by representatives of the American Federation of Labor and the Mexican Federation of Labor on August 6, 1927, by the terms of which the Mexican Government is to be petitioned to adopt a restrictive emigration policy. It is hoped that the Government of Mexico will regulate emigration so that the number of immigrants coming from Mexico will not exceed the number that would be allowed if the quota provisions of the immigration law of the United States were applicable.

Representatives of the Mexican Federation of Labor are to urge their general committee to make every possible effort to discourage Mexican workers from emigrating to the United States and Canada. They reported that although the Mexican Department of the Interior has already perfected plans with this end in view, the Mexican Federation of Labor will encourage still further the policy of restricting Mexican emigration.
When this agreement was ratified at the American Federation of Labor convention it was over the protest of the delegates from California and other Southwestern States, who claimed that such a gentleman's agreement would be a futile and ineffective substitute for exclusion by law. They urged that Mexico should be placed under the quota system along with the various European nations. It was estimated that southern California alone had a Mexican population in excess of 250,000 , and that besides California, Arizona and Texas have also been virtually swamped with Mexican immigrants during the last few years.

[^44]
## ACTIVITIES OF STATE LABOR BUREAUS

$\mathrm{A}^{\mathrm{N}}$MONG the labor activities of the State bureaus, the following, reported either directly by the bureaus themselves or through the medium of their printed reports, are noted in the present issue of the Labor Review:

California.-Report on changes in volume of employment and pay roll in 793 industrial establishments in the State, page 145.

Hawaii.-Report of operations under the State workmen's compensation act, page 92 .

Illinois.-Study of accidents to employed minors, page 64; and report on changes in employment and earnings in Illinois factories, page 147.

Iowa.-Changes in working force in specified industries, page 149.
Maryland.-Report on statistics of employment in certain industries of the State, page 150.

Massachusetts.-Report on unemployment among organized build-ing-trades workers, page 143; and changes in employment in industrial establishments, page 151.

Nevada.-Report of operations under the State workmen's compensation act, page 92.

New Jersey.-Report on changes in volume of employment and in amount of pay roll in 847 industrial establishments, page 152.

New York.-Report of study of hours and earnings of women in laundries in the State, page 61; findings as to prevalence of married women in industry in Binghamton, page 62; report of industrial accidents in 1926-27, page 81 ; study of the carbon monoxide hazard in commercial garages and automobile repair shops, page 89; earnings of office workers, page 128; and report on changes in nuumber of employees and in weekly pay rolls in some 600 factories, page 153.
Pennsylvania.-Analysis of compensated accidents to working children, page 64, and data as to employment in that State, page 155.

Tennessee.-Report of operations under the State workmen's compensation act, page 93 .

Texas.-Report of operations under the State workmen's compensation act, page 94.

Vermont.-Report of operations under the State workmen's compensation act, page 94.

Wisconsin.-Report on volume of employment and total pay roll in various industries in Wisconsin, page 157.

## PUBLICATIONS RELATING TO LABOR

## Official-United States

Illinois.-Department of Labor. Bureau of Labor Statistics. Bulletin No. 1: Accidents to employed minors in Illinois, by Miriam Noll. Chicago, 1927. iii, 52 pp .
Data from this bulletin appear on page 64 of this issue.
Nevada.-Industrial Commission. Biennial report, reviewing the administration of the Nevada Industrial Insurance Act for period July 1, 1924, to June 30, 1926. Carson City, 1927. 27 pp.

Reviewed on page 92 of this issue.
New York.-Department of Labor. Special bulletin No. 153: Hours and earnings of women employed in power laundries in New York State, prepared by Bureau of Women in Industry. Albany, 1927. 72 pp .
Data from this bulletin are given on page 61 of this issue.
Pennsylvania.-Department of Labor and Industry. Special bulletin No. 17: An analysis of compensated accidents to minors for the year 1924. Harrisburg, 1926. 125 pp.

Reviewed on page 64 of this issue.
Texas.-Industrial Accident Board. Report for the two years September 1, 192 4, to August 31, 1926. Austin [1926?]. 5 pp.
Reviewed on page 94 of this issue.
Vermont.-Commissioner of Industries. Biennial report, for the two years ending June 30, 1926. [Rutland, 1926?] 30 pp.
Data on workmen's compensation, taken from this report, are published on page 94 of this issue.
Unitwd States.-Board of Mediation. Annual report for the fiscal year ended June 30, 1927. Washington, 1927. v, 48 pp.
Contains an account of the creation of the board and its organization together with the text of the act creating it. A tabular presentation lists, case by case, the disputes submitted to the board during the year, showing the parties involved and the number of employees affected, when conferences began, and how and when the cases were settled.

A number of the cases discussed were included in an article on the arbitration work of the board which appeared in the Labor Review for October, 1927 (p.5).

- Department of Commerce. Fifteenth annual repart of the Secretary of Commerce, for the fiscal year ended June S0, 1927. Washington, 1927. xlii, 310 pp .; map.
Data on indexes of the economic progress of the United States, 1922 to 1927, taken from this report, are given on page 48 of this issue.
- Department of Labor. Fifteenth annual report of the Secretary of Labor, for the fiscal year ended June 30, 1927. Washington, 1927. 211 pp .
Reviewed on page 44 of this issue.
- 1997 Bureau of Immigration. Annual report, fiscal year ended June s0, 1927. W ashington, 1927. vii, 236 pp.
- Bureau of Labor Statistics. Bulletin No. 452: Wages and hours of labor in the hosiery and underwear industries, 1907 to 1926. Washington, 1927. iii, 72 pp.

An advance summary of the most important data contained in this bulletin was published in the Labor Review for May, 1927 (pp. 156-164).

United States.-Department of Labor. Bureau of Naturalization. Annual report, fiscal year ended June 30, 1927. Washington, 1927. 43 pp .
-- Children's Bureau. Fifteenth annual report, fiscal year ended June 30, 1927. Washington, 1927. iiii, 42 pp .
1997. Women's Bureau. Ninth annual report, fiscal year ended June 30, 1927. Washington, 1927. iii, 20 pp .
-Department of the Interior. Bureau of Education. Bulletin, 1927, No. 29: Industrial education in 1924-1926, by Maris M. Proffitt. Washington, 1927. 29 pp. (Advance sheets from the Biennial Survey of Education, 1924-1926.)
Reviewed on page 103 of this issue.

- Federal Board for Vocational Education. Bulletin No. 120: Vocational rehabilitation in the United States. The evolution, scope, organization, and administration of the program of vocational rehabilitation of disabled persons. Washington, June, 1927. v, 98 pp., illus. (Civilian vocational rehabilitation series No. 13.)
A nontechnical report prepared to meet a widespread demand for information on the subject with which it deals.
-Laws, statutes, etc. Longshoremen's and harbor workers' compensation act Opinions approved by the United States Employees' Compensation Commission, Washington, D. C. Opinions Nos. 1-20, August 12 to October 26, 1927. Washington, 1927. 29 pp .

1927. 61 pp.

## Official-Foreign Countries

Australia (Queensland).-Department of Labor. Fourth annual report on operations under the unemployed workers' insurance act of 1922. Brisbane, 1927. 16 pp.; charts.

Reviewed on page 100 of this issue.

- Report of the director of labor and chief inspector of factories and shops for the year ending June S0, 1927. Brisbane, 1927. 46 pp.
As compared with the preceding year, unemployment was severe throughout the State. Original registrations at the State labor exchanges numbered 68,851 , while applications for employees reached only 10,563 ; employment was found for 10,529 . The female labor exchange in Brisbane was more successful than the State exchanges in general, having placed 4,143 , or 77.8 per cent, of the 5,324 who registered for employment.
- Public Service Commissioner. Seventh annual report, for the year ended June 30, 1927. Brisbane, 1927. 52 pp.
Includes data on the basic wage, etc., of public service employees.
Denmark. - Ministry for Foreign Affairs and the Statistical Department. Denmark, 1927. Copenhagen, 1927. 279 pp., illus. (In English.)
In addition to general information about the country and its people, industries, institutions, etc., this handbook on Denmark contains data on the cooperative movement, number of establishments and employees in various industries, prices and cost of living, and social conditions.
Finland.-[Socialministeriet.] Statistiska Centralbyrån. Olycksfallen $i$ arbetet, air 1923. Helsingfors, 1927. 94 pp . Finlands officiella statistik XXVI, Arbetsstatistik A, 20.
Report of the Central Statistical Bureau of Finland on accidents to workers in that country in 1923.


## MONTHLY LABOR REVIEW

France.-Ministère du Travail, de l'Hygiène, de l'Assistance et de la Prévoyance sociales. Conseil supérieur du Travail. Vingt-neuvième session, Novembre 1925. Paris, 1926. xix, 255 pp . Trentième session, Novembre 1926. Paris, 1927. xix, 145 pp .

The proceedings of the twenty-ninth and thirtieth sessions of the French Superior Labor Council. The questions dealt with by the council were: Legislation relating to home work; the individual labor contract; age of admission of children into commercial and transportation enterprises; compulsory declaration of intention to open industrial or commercial establishments, this declaration being designed to prevent the establishment of a hazardous enterprise without proper safeguards; and representation of intellectual workers on the Labor Council.
Great Britain.-Mines Department. Miners' Welfare Fund. Fifth report of the committee appointed by the Board of Trade to allocate the Fund 1926. London, 1927. 88 pp., illus.
Reviewed on page 58 of this issue.

- Ministry of Labor. A dictionary of occupational terms, based on the classification of occupations used in the census of population, 1921. London, 1927. $v, 564 \mathrm{pp}$.
- International Labor Conference. Draft conventions and recommendation adopted by the conference at its tenth session, May 25-June 16, 1927. (Authentic texts.) London, 1927. 17 pp. (Cmd. 2961.)
-- Report of an inquiry into apprenticeship and training for the skilled occupations in Great Britain and Northern Ireland, 1925-26. I.-Printing and allied industries. London, 1927. 118 pp.
Some data from this report are given on page 104 of this issue.
- Registry of Friendly Societies. Report for the year 1925. Part 2.Friendly societies. London, 192\%. iv, 44 pp.
The data given in this report relate to 1924, during which year information was received relating to 3,517 friendly societies, with a membership of $3,902,673$ and total funds amounting to $£ 41,154,272$.
Netherlands (Amsterdam).-Bureau van Statistiek. Huishoudrekeningen van 212 gezinnen uit verschillende kringen der bevolking (October 1, 1923-September 30, 1924). Amsterdam, 1927. x, 153 pp.; charts.
A summary of this study of family budgets in Amsterdam is given on page 189 of this issue.
SWEDEN.-[Socialdepartementet.] Riksförsäkringsanstalten. [Beråttelse] air 1926. Stockholm, 1927. 29 pp.
Report on the activities in 1926 of the State Insurance Institute of Sweden.


## - Socialstyrelsen. Arbeisinställelser och kollektivavtal samt förliknings-

 männens verksamhet àr 1926. Stockholm, 1927. 174 pp.Report, by the Swedish Social Board, on labor disputes, collective agreements, and activities of the conciliators in Sweden in 1926. There were 206 labor disputes in Sweden in 1926 as compared with 239 in 1925, a reduction of 33 . The number of employers affected in these disputes was 504 and of employees, 52,891 , as against 1,577 and 145,778, respectively, in 1925.
pp., illus.
Report on factory inspection in Sweden in 1926.
Switzerland.-Bureau fédéral de Statistique. Annuaire statistique de la Suisse. Berne, 1927. xx, 370 pp.
This collection of statistical data on various subjects includes a table giving annual expenses of a normal family in the 12 months of 1926 and also wages of industrial-accident victims, 1913 to 1925.

Switzerland.-Département fédéral de l'Économie publique. La Suisse économique et sociale. Première partie: Exposé historique et systématique. Deuxième partie: Texte des lois et ordonnances. Einsiedeln, Part I, 1927, Part II, 1926. [Various paging.]
This study of social and economic conditions in Switzerland contains in the first part an account of general economic conditions, including the division of the population according to occupations and social conditions; the natural production of the country-mines, agriculture, forestry; manufactures; transportation; banking; and insurance; with a historical summary of the development of each of these branches of industry. The second part contains the texts of Federal and cantonal laws and ordinances relating to the regulation of labor conditions and to sickness and accident insurance.

## Unofficial

Abel, Gustave, et Lagasse, Paul. Code industriel belge. Tome I. Brussels, Etablissements Émile Bruylant, [1926?]. xxx, 636 pp. (Nouvelle édition refondue, publiée sous les auspices du Comité central industriel de Belgique.)
This is the first volume of a new edition of the social legislation enacted in Belgium which is of interest to industry, analyzed in the light of ministerial decrees and judicial decisions. This volume contains the text of laws and decrees relating to the regulation of labor; health and safety of workers; factory inspection; dangerous and unhealthful industries; and associations and tradeunions.
American Association for Adult Education. Annual report of the executive director for the year 1926-27. New York, 41 East Forty-second Sireet, 1927. 28 pp .
The association serves as a national clearing house for information on adult education and endeavors to cooperate with the "predominantly cultural" elements in various adult education movements. Study, research, and a certain amount of experimentation have also been sponsored by the organization through its recommendations to the Carnegie Corporation of New York.
American Country Life Association. Farm youth: Proceedings of the ninth National Country Life Conference, Washington, D. C., 1926. New York, 1849 Grand Central Terminal, 1927. [7], 153 pp., illus.
American Enginetring Standards Committee. The status of the national safety codes. New York, 29 West Thirty-ninth Street, September 15, 1927. 12 pp .
Gives the status of 44 national safety codes, of which 22 have been completed under the rules of procedure of the committee. Mining codes are not included. American Federation of Labor. Research series No. 1: Organized labor's modern wage policy. Washington, 1927. 31 pp .
The substance of this pamphlet was reproduced in the Labor Review for October, 1927 (pp. 129-134).
-Research series No. 2: Wages and labor's share, by Jürgen Kuczynski and Marguerite Steinfeld. Washington, 1927. 62 pp.

- Railway Employees' Department. The cooperative policy. [Washington, 1927?] 35 pp .
Brief accounts of union-management cooperation in the railroad industry were published in the November, 1926 (p. 41), and July, 1927 (p. 30), issues of the Review.
American Public Health Association. A catalogue of health books [with prices], being a bibliography on public health and allied topics. New York, 370 Seventh Avenue, 1927. 16 pp.
Includes a section on industrial hygiene publications.

Bloch, Marcel. L'organisation du travail dans les grands ateliers de locomotives de la Campagnie du Chemin de fer de Paris à Orléans. Paris, Dunod [1925?]. 88 pp.; charts. (Extrait de la Revue Générale des Chemins de fer, Avril, Mai et Juin 1925.)
An exposition of the measures taken to secure the maximum productivity in the large locomotive workshops of the Paris-Orleans Railroad Company.
Burgess, Robert Wilbur. Introduction to the mathematics of statistics. Boston, Houghton Miffin Co., 1927. ix, 304 pp.; maps, charts.
Chamber of Commerce of the United States. Department of Manufacture. Employee representation or works councils. Washington, 1927. 43 pp.; charts.
This pamphlet gives a brief review of the history, objects, types, and results of employee representation plans or works councils, with some data on plans in actual operation.

-     - Payment of wages by check. Washington, 1927. 52 pp .

The report shows that the practice of paying wages by check is growing. Of 39 companies reporting on the reason for instituting this system of payment, it appeared that the majority were inspired by the safety element and that in most of these cases the safety of employees handling pay rolls was the main consideration.
Cole, G. D. H. A short history of the British working class movement, 1789-1927. Vol. III, 1900-1927. London, George Allen \& Unwin (Ltd.) and The Labor Publishing Co. (Ltd.), 1927. 237 pp.
Consumers' League of Cincinnati. A study of industrial injuries to working children in Cincinnati during 1926, by Frances R. Whitney and Nellie J. Rechenbach. Cincinnati, 1927. 40 pp., illus.
The study deals with 100 accidents to minors under 18 , in which 1 boy 17 years of age was killed, and 8 boys of 16 and 17 were disabled for life, either slightly or seriously. Of the 100 minors, 48 were illegally employed, 40 having no working certificate and 8 being injured at jobs other than those for which they had received a certificate. Machinery caused 40 per cent of the accidents. Edwards, H. H., and Murrell, R. Staff pension schemes in theory and practice. London, Charles and Edwin Layton, 1927. 135 pp.
A discussion of industrial pension schemes, covering contributory and noncontributory plans, the provision through insurance companies of annuities to begin at a specified age, endowment schemes, and other variations of the pension idea. The different plans are described clearly, their advantages and disadvantages weighed, and details given as to methods of installing each. The authors urge the desirability of securing actuarial advice upon any plan, and stress the necessity of placing the whole scheme upon such a legal basis that the employee shall have a valid right to the pension, no matter what changes may occur in the business or in the views of the employer.
Ferguson, Lewis B. The trade disputes and trade-unions act, 1927. London, Butterworth \& Co. (Ltd.), 1927. xv, 99 pp.
The book contains four introductory chapters, giving a discussion of the development and legal status of trade-unions, trade disputes, picketing, and the legal position of strikes and lockouts prior to the passing of the present act. These are followed by the text of the act with notes discussing its terms, and giving legal interpretations of its provisions.
Gjöres, Axel. Cooperation in Sweden. Manchester [England], Cooperative Union (Ltd.), 1927. 125 pp. ; maps, charts, illustrations. (International cooperative series No. 5.)
To be reviewed in the February issue of the Labor Review.

Henderson, Arthur. Trade-unions and the law. London, Ernest Benn (Ltd.), 1927. 286 pp.

In addition to considering the legal rights and liabilities of trade-unions, especially as affected by the act of 1927, the author discusses national health insurance, unemployment insurance, conciliation and arbitration, workmen's compensation, the legal position of friendly societies, and similar developments in which the organized action of workers is defined, authorized, or limited by law, or in which their rights and privileges, as a body, are subject to legal regulation. Hoffman, Frederick L. Some factors of sickness in industry. Newark, N. J., Prudential Press, 1927. 16 pp.
An address reviewing some of the principal causes of sickness among industrial workers, which was delivered before a recent industrial insurers' conference held in St. Louis.
International Association for the Study and Improvement of Human Relations and Conditions in Industry. Report of summer school held at Baveno (Italy), June, 1927, on the subject of the elimination of unnecessary fatigue in industry. The Hague, 66 Javastraat [1927]. 129 pp.; charts.
This publication contains a summary of the proceedings of the international summer school which dealt with both the psychological and physiological aspects of industrial fatigue.
Jaeggi, Bernhard. Rapports entre les coopératives de consommation et les coopératives agricoles. Basel, Union Suisse des Sociétés de Consommation, 1927. 25 pp.
Reprint of speech delivered by Mr. Jaeggi at the Twelfth International Cooperative Congress, on the relations between consumers' cooperative societies and agricultural cooperative associations. For an account of other proceedings at the congress, see Labor Review, December, 1927 (p. 99).
Leigh, Robert D. Federal health administration in the United States. New York, Harper \& Bros., 1927. [19], 687 pp.
The author has given a comprehensive account of the organization and functions of Federal public health agencies both in relation to the central organization and to the smaller local and State units, and the legal powers of the Federal departments under various acts and their relationship to each other in the national administrative structure are deflned. There is also an account of the recent attempts at reorganization of the Federal health services so as to secure better coordination of the public health work.
Metcalf, Henry C. The psychological foundations of management. Chicago, A. W. Shaw Co., 1927. vii, 309 pp.

Michigan, University of. Michigan business studies, vol. 1, No. 3: Suggestions from employees, by Z. Clarlo Dickinson. Ann Arbor, 1927. 60 pp .
Reviewed on page 54 of this issue.
Mitchell, Wesley C. Business cycles-the problem and its setting. New York, National Bureau of Economic Research (Inc.), 1927. xxii, 489 pp.; charts.
NAsH, Jay B. The organization and administration of playgrounds and recreation. New York, A. S. Barnes \& Co., 1927. xii, 547 pp.; diagrams, illustrations.
The author deals in this book primarily with the problems of administration of organized recreation activities but there is considerable information also relative to recreation programs and to the equipment and supplies required for different types of recreation. The need for playgrounds and other recreation facilities and for city planning with a view to meeting the requirements of the people along these lines is also discussed. A bibliography follows each chapter.

National Industrial Conference Board (Inc.). Industrial progress and regulatory legislation in New York State. New York, 247 Park Avenue, 1927. xiv, 148 pp .; charts.
A rearrangement and amplification of the study submitted to the New York State Industrial Survey Commission in January, 1927.

- Night work in industry. New York, 247 Park Avenue, 1927. ix, 45 pp.

This report presents the results of an investigation made "to compile the general experience of manufacturing companies with night work and its effectiveness under various plans of night work organization; to analyze the experience in labor recruiting and note the relative stability of day and night forces; to determine what special incentives or inducements were offered to night workers; to consider the health factors involved in night work; to compare relative costs of operation between day and night work; and finally to summarize the experience of plants with night work with a view to its evaluation as a force in industry." The study is based upon information furnished by 243 private manufacturing establishments having $1,174,947$ employees. In the plants reporting both the total number of employees and the number of night workers, there were 928,794 persons employed of whom 91,429 were night workers.
National Safety Council. Chemical Section. Final report of the committee on spray coating. Chicago, 108 East Ohio Street, 1927. 53 pp.; diagrams, illustrations.
Reviewed on page 84 of this issue.
Newsholme, Sir Arthur. "Healih problems in organized society: Studies in the social aspect of public health. London, P. S. King \& Son (Lid.), 1927. xi, 253 pp.
A collection of addresses and lectures on the development of the preventive idea in medicine and in public health work and on control of various social ills. There is a chapter on compulsory insurance, including old-age and invalidity and unemployment insurance.
Patmison, H. A., M. D., and Jacobs, Philip P. Sheltered employment for the tuberculous in the United States. New York, National Tuberculosis Association, 370 Seventh Ave., 1927. 80 pp . (Technical series No. 7.)
This pamphlet contains an account of several of the best-known experiments in sheltered employment for the tuberculous, which have been developed in this country.
Peddie, J. Taylor. Capitalism is socialism with economic adjustments: An industrial system of political economy. New York, Longmans, Green \& Co. (Ltd.), 1926. xxii, 336 pp .
Platt, Rutherford H., Editor. The book of opportunities: What 3,000 American occupations have to o.ffer. New York, G. P. Putnam's Sons, 1927. xi, 477 pp., illus.
The occupations defined in this book have been arranged under six general headings-industry, transportation, business, the professions, personal service, and public service. Under each general heading the occupations are classified and to each group is appended a list of publications suggested for reading. In some cases a list of institutions which give training in the particular occupations of a group is also given.
Princeton University. Industrial Relations Section. Group insurance. [Princeton, 1927.] 21 pp., mimeographed.
The different types of group insurance plans are described and there is some discussion of the advantages and disadvantages of this form of insurance. A short bibliography is appended.
Russell Sage Foundation. Library. Bulletin No. 85: Credit unions-a selected bibliography, compiled by Rolf Nugent. New York, 103 E. 22d St., October, 1927. \& pp.

Selekman, Ben M. Postponing strikes: A study of the Industrial Disputes Investigation Act of Canada. New York, Russell Sage Foundation, 1927. 405 pp .; map, charts.
Reviewed on page 48 of this issue.
Shanghat Women's Organizations, Joint Committee of. Bulletin No. 1: Statement of the work of the committee directed toward the regulation of child labor in Shanghai, 1921-1926. Shanghai, 1927. [6], 64 pp .
A historical account of the effort to secure some regulation of the conditions under which children may be employed, and of the peculiar difficulties involved in the city's form of government which prevented the success of the effort.
Switchmen's Union of North America. Convention proceedings, seventeenth national session, fourth triennial convention, held at Buffalo, N. Y., June, 1927. Buffalo, 1927. 88 pp .
Among the resolutions adopted was one vigorously denouncing the WatsonParker Railway Act as a conspiracy against the railway workers' best interests and a menace to the labor movement as a whole. The convention favored the principle of nationalization of the railways combined with workers' control.
Trades and Labor Congress of Canada. Report of the proceedings of the forty-third annual convention, held at the city of Edmonton, Alberta, August 22 to August 26 (inclusive), 1927. Ottawa, 1927. 178 pp.
A résumé of this convention was published in the November, 1927, issue of the Labor Review (p. 125).
Vernon, Lord. Coal and industry-the way to peace. London, Ernest Benn, (Ltd), 1927. 40 pp .
A plea for the stabilization of the value of money as a means of preventing those labor troubles which spring from the effort to maintain a standard of living in the face of the fluctuations of real wages due to changing price levels.
Young Women's Christian Association. National Board. Industrial Department. The Young Women's Christien Association and industry: A résumé of the change in status of women in industry and an historical resume of the work of the Y.W.C. A. among industrial girls. New York, 600 Lexington Avenue, 1927. S2 pp.


[^0]:    ${ }^{1}$ The right of a union to make this requirement and to expel any member who refuses to comply has been upheld by the court.

[^1]:    $28 \$ 500$ after Jan. 1, 1928.

[^2]:    ${ }^{2}$ Variously termed also funeral benefit, burial benefit, mortuary benefit, widows' and orphans' benefit.

[^3]:    ${ }^{3}$ A variation of this has been adopted by the employees of the New York City post office, who have a olan of endowing hospital beds. This, however, is not a union activity, although many of the contributing plan of endowing hospital Feds. who died early in 1925 . From donations from all classes of employees in the post office, sufficient funds were obtained to endow four beds "for the use of employees in perpetuity." The demands upon the service were so great that a permanent association was formed to which practically the entire force of some 18,000 persons belong, each donating 10 cents every semimonthly pay day, and four additional beds in another hospital were secured. In addition approximately $\$ 8,000$ has been expended for hospital care in nonendowed beds and for various services in connection therewith. More than 2,000 cases have been taken care of in this way,

[^4]:    1 Kentucky and Louisiana.
    ${ }_{2}$ Alabama, Arizona, Georgia, Missouri, Montana, New Hampshire, Ohio, Oklahoma, Porto. Rico Utah, and West Virginia. This does not include special or extra sessions, if any, except Virginia.
    ${ }^{5}$ Arkansas, Mississippi, Florida, North Carolina, and South Carolina.

    - 14 U. S. Stat. at Large, p. 1424.
    ${ }^{5}$ Alaska and Kansas.
    - Including the United States.

[^5]:    ${ }^{1}$ Estimated.

[^6]:    a Now numbering about 300 . The form of average used is the unweighted median of company rates, except for the total separation rate, which is the sum of the median rates for voluntary quits, layoffs and discharges.
    ${ }^{b}$ Arithmetic sum of last three columns.
    c Preliminary figures, subject to revision.

[^7]:    ${ }^{1}$ See Labor Review, for November, 1927, p. 130.
    ${ }^{2}$ Earlier figures were published in the Labor Review for March, 1927, pp. 12, 13.

[^8]:    ${ }^{1}$ This amendment put the responsibility of applying for a board on the party proposing the changes in wages or hours of work which became the subject of dispute. The law was further amended so that the penalties which formerly applied only in case of an illegal strike or lockout apply now also when a disputed change in working conditions has been actually introduced before the completion of an investigation under the eat.

[^9]:    1 University of Michigan. Michigan Business Studies, Vol. I, No. 3: Suggestions from employees, by
    Z. Clark Diekinson. Ann Arbor, 1927.

[^10]:    ${ }^{2}$ Labor Review, July, 1927, pp. 30-33.

[^11]:    ${ }^{1}$ Pound at par $=\$ 4.8665$; exchange rate for 1926 was about par.

[^12]:    ${ }^{1}$ Address delivered before the Eleventh New York Industrial Safety Congress and Exhibit, held at Buffalo, N. Y., Nov. 28 to Dee. 1, 1927.

[^13]:    ${ }^{1}$ Amputation between knee and ankle or between elbow and wrist is considered as loss of a foot or a hand; at or above knee or elbow as loss of a leg or an arm. Loss of a phalanx, permanent malformation, or permanent stiffness of a joint is regarded as loss of the member.

[^14]:    ${ }^{1}$ Amputation between knee and ankle or between elbow and wrist is considered as loss of a foot or a hand; at or above knee or elbow as loss of a leg or an arm. Loss of a phalanx permanent malformation, or permanent stifiness of a joint is regarded as loss of member.
    ${ }^{2}$ Less than 0.005 .

[^15]:    ${ }^{1}$ National Safety Council. Chemical Section. Final report of the committee on spray coating. Chi cago, 108 East Ohio Street, September, 1927.

[^16]:    ${ }^{2}$ Labor Review, September, 1926, pp. 39-44,
    ${ }^{8}$ Idem, September, 1927, pp. 59-61.

[^17]:    ${ }^{1}$ New York. Department of Labor. Bureau of Industrial Hygiene. Industrial Hygiene Bulletin, November, 1927.

[^18]:    ${ }^{1}$ International Labor Office. Industrial and Labor Information, Geneva, Sept. 19, 1927, p. 386.

[^19]:    ${ }_{1}$ Report from Consul General Claude Dawson, at Rio de Janeiro, dated July 15, 1927.
    ${ }_{2}^{2}$ Reprinted from International Labor Office, International Labor Review, November, 1927, pp. 693-698. The recently established unemployment insurance system is not included in this survey. (See Monthly Labor Review, October, 1927, p. 67.)
    ${ }^{3}$ Cf. Amtliche Nachrichtungen des Reichsversicherungsamtes, February, 1926.

[^20]:    4 Gold mark $=23.8$ cents.

[^21]:    ${ }^{1}$ Australia (Queensland). Department of Labor. Fourth annual report on operations under the unemployed workers' insurance act of 1922. Brisbane, 1927.

[^22]:    ${ }^{2}$ At par, pound $=\$ 4.8665$, shilling $=24.33$ cents; exchange rate about par.

[^23]:    ${ }_{1}$ United States. Department of the Interior. Bureau of Education. Bulletin, 1927, No. 29: Industrial education in 1924-1926, by Maris M. Proffitt. Washington, 1927.

[^24]:    ${ }^{1}$ Great Britain. Ministry of Labor. Report of an inquiry into apprenticeship and training for skilled occupations in Great Britain and Northern Ireland, 1925-1026. Part I.-Printing and allied industries. London, 1927.
    ${ }^{2}$ At par, pound sterling $=\$ 4.8665$, shilling $=24.33$ cents, penny $=2.03$ cents; exchange rate about par.

[^25]:    ${ }^{1}$ Chile, Direccion General del Trabajo, Las Leyes del Trabajo y de Prevision Social de Chile, pp. 134-147; and International Labor Office, Industrial and Labor Information, Geneva, Oct. 17, 1027, p. 75.
    ${ }_{2}$ E1 Mercurio, Santiago, Sept. 20, 1927; and International Labor Office, Industrial and Labor Information, Geneva, Nov. 14, 1927, p. 210.
    ${ }^{3}$ L'Information Sociale, Paris, Aug. 8, 1927; La Voix du Peuple, Paris, July, 1927, pp. 401-412.

[^26]:    4 The term "rationalization" covers production methods known in this country as "scientific manage-
    ment."

[^27]:    ${ }^{1}$ Preliminary figures subject to revision.

[^28]:    ${ }_{2}^{1}$ Argentina. Ministerio del Interior. Cronica Informativa, Buenos Aires, January, 1927, pp. 69, 70. ${ }^{2}$ El Universal, Mexico City, Aug. 20, 1927, and International Labor Office, Industrial and Labor Information, Geneva, Oct. 31, 1927, p. 135.

[^29]:    ${ }^{1}$ La Gaceta de Madrid, Sept. 29, 1927.

[^30]:    1 The per cent of change has n ot been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.
    ${ }_{2}$ Less than one-tenth of 1 per cent.

[^31]:    1 No change.

[^32]:    ${ }^{1}$ Average for 11 months.

[^33]:    - Not the exact sum of the items, but as given in the report.

[^34]:    International Labor Office. Industrial and Labor Information, Geneva, Oct. 31, 1927, pp. $156,157$.
    2 Average exchange rate of peso in $1926=12.08$ cents.

[^35]:    ${ }^{1} 15-16$ ounce can.
    ${ }_{2} 8$-ounce package.
    ${ }^{3}$ 28-ounce package.
    ${ }^{4}$ No. 2 can.
    s Beginning with January, 1921, the index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, ziee, coffee, and tea.

[^36]:    ${ }^{2}$ For index numbers of each month, January, 1913, to December, 1925, see Bulletin No. 396, pp. 44-61, and Bulletin No. 418, pp. 38-51.

[^37]:    The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

[^38]:    ${ }_{1}$ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities

[^39]:    1 The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

[^40]:    ${ }^{3}$ For list of articles see note 5, p. 161.
    ${ }^{4}$ The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review for March, 1921, p. 26.

[^41]:    ${ }^{a}$ Prices of coal were formerly secured semiannually and published in the Marc, and September issues. Since July, 1920, these prices have been secured and published monthly.

[^42]:    ${ }^{1}$ Netherlands (Amsterdam), Bureau van Statistiek. Huishoudrekeningen van 212 gezinnen uit verschillende kringender bevolking (October 1, 1923-September 30, 1924). Amsterdam, 1927
    ${ }^{2}$ Florin at par $=40.2$ cents; average exchange rate in 1924 was 38.2 cents.

[^43]:    ${ }^{1}$ Not included among inward numbers, as they were not permitted to enter the United States.
    ${ }^{2}$ Deported aliens are included among the emigrant or the nonemigrant aliens.

[^44]:    ${ }^{1}$ American Federation of Labor. Report of the Executive Council to the Forty-seventh Annual Convention, Los Angeles, Oct. 3, 1927, pp. 77-80, and the Seamen's Journal, Nov. 1927, pp. 331, 332.

