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### THE INDUSTRIAL DISPUTES INVESTIGATION ACT OF CANADA.<sup>1</sup>

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#### INTRODUCTION.

Omitting administrative details, the essential features of the Canadian Industrial Disputes Investigation Act may be set forth in a statement of purpose and scope. As expressed in complete title, the act is intended to "aid in the prevention and settlement of strikes and lockouts in mines and industries connected with public utilities."<sup>2</sup> Although the title thus disclaims restriction of the right to strike or lock out and limits the scope to disputes in industries affecting directly the public welfare, the act provides that a strike or lockout in these industries is illegal until the dispute has been reported on by a board of conciliation and investigation and, further, that industries other than those specified may be brought within the scope of the act by agreement of both parties to the dispute, the right to strike or lock out being suspended during an investigation. This restriction upon the right to strike or lock out pending an investigation has caused the act to be known generally as the "Compulsory investigation act."

It should be noted that the act applies only to disputes involving 10 or more employees in which the controversy has reached a stage that, "failing an adjustment of the dispute or a reference thereof by the minister to a board, \* \* \* a lockout or strike will be declared \* \* \* and that the necessary authority to declare such lockout or strike has been obtained." It is provided further that the violation of privileges, rights, and duties of employers or employees does not constitute a dispute in the meaning of the act if such violation is in itself an indictable offense. Subject to these limitations and to the provision that for disputes in industries not specified in the act both parties must concur in the application, it is possible for disputes in all industries to be referred for adjustment.

<sup>1</sup> A complete report, of which the present article is a summary, will appear later as a bulletin of the Bureau of Labor Statistics of the U. S. Department of Labor.

<sup>2</sup> Scope extended Mar. 23, 1916, by order of the Governor General in Council to include munitions of war industries.

The Canadian Industrial Disputes Investigation Act has been in operation since March 22, 1907.<sup>1</sup> It need hardly be observed that the people of the United States have been keenly interested in the results of its administration. Several State legislatures have considered measures embodying similar provisions and in one State, Colorado, a law patterned closely after the Canadian act has been in operation since 1915. Moreover, the principle of compulsory investigation has been proposed as a means of adjusting disputes on railways engaged in interstate commerce. With the industries of the country taxed to the utmost during the continuance of the present war emergency, it seems inevitable that there will be industrial unrest and that State and National legislative measures seeking to avoid interruption to industry will be enacted. It is timely, therefore, to inquire frankly as to the effectiveness of those provisions which serve to characterize the Canadian act.

Numerous reports dealing with the operation of the Canadian act have appeared as a result of official and personal inquiries. For the most part these reports have dealt with the disputes referred to boards for adjustment and, while directing attention to occasional violations and to disputes in which strikes or lockouts were not averted by reference to a board, have not been concerned in large measure with the question of illegal strikes and lockouts or the enforcement of the penal provisions. In the report summarized herewith attention is directed primarily to the effectiveness of the compulsory investigation provisions of the act. To this end an analysis has been made of the following:

1. Strikes and lockouts in industries within the scope of the act.
2. Disputes referred for adjustment under the act:
  - a. Strikes and lockouts.
  - b. Disputes within the scope of the act, not resulting in strike or lockout but in which statutory declaration of intent to take such action was made.
  - c. Disputes not within the scope of the act referred for adjustment by the concurrence of both parties to the dispute under section 63, or in which application was made for reference.
3. Strikes and lockouts in all industries during the period 1901-1916.
4. Prosecutions for violations of the restrictive provisions of the act.

In the preparation of the report access was had to the files of the Canadian Department of Labor containing correspondence incident to the applications for and establishment of boards of concili-

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<sup>1</sup> Amended May 4, 1910.



ation and investigation, and the operation of the act was discussed with the minister and deputy minister of labor and with other officials concerned with its administration. The following publications of the Canadian Department of Labor were used as sources in the compilation of disputes:

1. Annual reports of the Minister of Labor.
2. Annual reports of the Registrar of Boards of Conciliation and Investigation.
3. The Labor Gazette (Monthly Bulletin of the Department of Labor).
4. Reports on Strikes and Lockouts in Canada, 1901-1912.

It is axiomatic that social and economic conditions make for industrial peace or unrest irrespective of antistrike or lockout legislation. Any attempt, therefore, to compare, without correlation with other factors, the number of trade disputes resulting in strikes or lockouts during a period prior to the passage of measures for their adjustment, with strikes and lockouts during a subsequent period, is open to serious objection. Moreover, it is impossible to estimate the salutary effect of antistrike or lockout legislation in making for voluntary negotiations and in preventing precipitate action whether or not the aid of such legislation is directly invoked. It is idle to speculate as to how many strikes or lockouts might have occurred in Canadian industries since the inception of the Industrial Disputes Investigation Act had that act not been passed. It is incorrect to assume that every dispute referred under the act would have resulted in a strike or lockout but for such reference even though a statutory declaration of intent to strike or lock out is required before a board can be constituted.

**DISPUTES IN INDUSTRIES WITHIN THE SCOPE OF AND PROCEEDINGS UNDER THE CANADIAN ACT.**

Interpreting the compulsory investigation provisions of the act strictly, any strike or lockout occurring in industries within its scope before an investigation and report of a legally constituted board is a violation of the act. In a sense, however, for those strikes and lockouts commencing prior to an application for reference but terminating prior to the completion of the board, the matters in dispute being held in abeyance pending an investigation and report, the offense is palliated somewhat by the fact that after the act was recognized in a formal application the disputants became law-abiding. Strikes and lockouts occurring in industries within the scope of and without reference to the act are plainly flagrant violations. Strikes and lockouts commencing prior to an application for a board and continuing after the board is created, as well as strikes and lockouts commencing after an application for a board but before its report,

are indications not only of a disregard of the penal provisions but as well a lack of confidence in the act as a conciliatory measure. Even those strikes and lockouts which occur after the investigation and report of a board, and are therefore legal, should be charged to the discredit of the act since the sole purpose of the compulsory investigation feature is to avoid interruption to industry.

During the period March 22, 1907, to December 31, 1916, there have occurred within the scope of the act 222 disputes resulting in strikes and lockouts, affecting 100,608 employees, whose time loss was 4,838,647 working days. In 44 of these, involving 44,086 employees and a time loss of 3,665,969 days, application was made for reference under the act. Of this number, 18 disputes, affecting 20,330 employees and occasioning a time loss of 1,822,805 days, did not result in strike or lockout until after the investigation and report of a board and consequently were legal. Thus there have been 204 illegal strikes or lockouts, affecting 80,278 employees whose time loss was 3,015,844 days. Of this number, 178 strikes, involving 56,522 employees and a time loss of 1,172,678 days, occurred without either party to the dispute seeking to invoke the aid of the act.

A further analysis of the strikes and lockouts referred under the act shows that 9 strikes, involving 4,606 employees and a time loss of 38,070 days, began prior to the application for a board but terminated prior to the completion of the board and pending its investigation and report; 5 strikes, affecting 3,950 employees whose time loss was 46,650 days, began prior to the application for a board and were adjusted before a board was constituted; 5 strikes, affecting 11,034 employees whose time loss was 1,625,456 days, began prior to the application for a board and continued after the board was constituted; 7 strikes, affecting 4,166 employees and resulting in a time loss of 134,990 days, began after the application for a board but before its report.

In addition to the 44 strikes and lockouts in the adjudication of which the act was invoked, 173 disputes affecting 141,295 employees, not resulting in strike or lockout but in which statutory declaration of intent to take such action was made, were referred to boards of conciliation and investigation under the act, or application was made for such reference and action taken by the Department of Labor contemplating the establishment of such a board. In 36 of these disputes, affecting 34,145 employees, a settlement was reported before a board was constituted; in 137 disputes, affecting 107,150 employees, boards were constituted. How many of these 137 disputes would have resulted in strikes or lockouts but for reference under the act is problematical. It will be interesting, however, to examine those disputes in which application was made for reference, such applica-

tion being accompanied by the statutory declaration that, failing an adjustment or a reference, a strike or lockout would result, but for which boards were not constituted.

Of the cases in which boards were not constituted, only those are reported in the official proceedings under the act in which action was taken by the Department of Labor looking to the establishment of a board. Of those reported, reference has been made to 5 strikes affecting 3,950 employees and to 36 disputes not resulting in strike or lockout, affecting 34,145 employees, in which boards were not constituted. Of the 5 strikes all began prior to the applications for boards and could not have been precipitated by a failure of reference. Of the cases not reported officially, 14 disputes affecting 8,247 employees were in industries not within the scope of the act, and for which the department was unable to grant boards owing to the lack of concurrence of both parties to the disputes. Of these 14 disputes, 6 disputes, affecting 6,465 employees, resulted in strikes prior to the applications for boards, consequently the inability of the department to apply the act could not be advanced as a reason for the strikes. One strike, affecting 96 employees, commenced the same day the application was received and presumably not until the other party to the dispute had refused to concur in the request for a board.

Summarizing the figures of the preceding paragraph, it will be observed that there have been 55 disputes, affecting 46,342 employees, in which application was made for reference but boards not constituted.<sup>1</sup> In 11 of these disputes, affecting 10,415 employees, a strike occurred prior to the application for reference. In 44 disputes, affecting 35,927 employees, a strike did not occur prior to the application for reference and of these, 43, or 97.7 per cent of the disputes, affecting 35,831, or 99.7 per cent of the employees, were adjusted without the occurrence of a strike or lockout. It is recognized, however, that the formal action of applying for a board may in itself make for a resumption of negotiations between the parties to a dispute and, too, that after the application is received the department is in a favorable position to serve as a conciliatory or mediatory agency and may aid in securing a settlement before a board is completed. It is recognized, too, that these disputes settled without boards and without strikes or lockouts may not have presented the same degree of difficulty in adjustment as the disputes referred to boards. To the extent, however, that the statutory declaration of intent to strike or lock out indicates the seriousness of the controversy, all disputes are on a parity. Measured thus, it is apparent that of the 137 disputes not resulting in strikes or lockouts, referred to boards under

<sup>1</sup> Other applications for reference, not reported officially, in which boards were refused for technical or other reasons, or in which settlements were effected before action was taken by the department, are not considered in this analysis.

the act, a considerable number even though not referred to boards would have been adjusted without the occurrence of strikes or lockouts.

Viewed strictly as a conciliatory measure, the usefulness of the act should be reflected in the applications for reference under section 63, whereby disputes outside specified industries may be brought within the scope of the act by the concurrence of both disputants. During the period under consideration there were 26 applications under section 63, in disputes affecting 13,781 employees. In 12 of these disputes, affecting 5,534 employees, boards were constituted. As previously stated, in 14 disputes, affecting 8,247 employees, the department was unable to constitute boards because it did not have the joint consent of the disputants. During the same period there occurred a total of 691 strikes and lockouts, affecting 149,812 employees whose time loss was 3,254,332 working days, in industries not within the scope of the act but which might have been brought within its scope by agreement of both parties to the disputes.

For the purpose of reflecting the development of public opinion for or against the act, the period March 22, 1907, to December 31, 1916, may be conveniently divided into two periods of approximately five years each. Whether there were fewer or more disputes resulting in strikes or lockouts or in which the intent to take such action was declared, in one period than in the other, is not in itself conclusive. It might be expected, however, that greater familiarity with the purpose, scope, and operation of the act would lead to its application in a greater percentage of disputes arising in industries within its scope. It might also be expected that, with the greater undesirability of interruption to industry arising out of participation in the European conflict, the relative importance of a governmental agency for the adjudication of labor disputes would be augmented. It should be fruitful, therefore, to compare the periods 1907-1911 and 1912-1916 as to the proportion the disputes referred are of the disputes within the scope of the Industrial Disputes Investigation Act.

During the period March 22, 1907, to December 31, 1911, 118 strikes and lockouts, affecting 62,344 employees whose time loss was 3,620,346 working days, occurred in industries within the scope of the act. For the same period there were 92 statutory declarations of intent to strike or lock out, involving 70,175 employees, but in which such strike or lockout did not occur. During the period January 1, 1912, to December 31, 1916, there were 104 strikes and lockouts, affecting 38,264 employees and occasioning a time loss of 1,218,301 working days, and 81 statutory declarations of intent to strike or lock out not resulting in such action, affecting 71,120 employees, in industries within the scope of the act. Boards were constituted for

49.1 per cent of the disputes during the first period, as against 39.5 per cent during the second period. On the basis of employees affected, boards were constituted for 72.4 per cent during the first period, as against 47 per cent during the second period. Of the strikes and lockouts within the scope of the act, boards were constituted for 22.9 per cent of such strikes and lockouts, 56.5 per cent of the employees affected, and 93.7 per cent of the working days lost during the first period, as against 11.5 per cent of the strikes and lockouts, 12.9 per cent of the employees affected, and 18.5 per cent of the working days lost during the second period. Relatively, then, a much smaller percentage of disputes within the scope of the act have been referred to boards during the period 1912-1916 than during the period 1907-1911.

An analysis of disputes in the mining industry shows that of all mining disputes boards were constituted for 56.2 per cent during the first period, as against 30.5 per cent during the second period, and 69.2 per cent of the employees affected as against 23.3 per cent. If only strikes and lockouts are considered, the per cent is 39.1, as against 17.2 for such strikes and lockouts; 57.5, as against 8.3 for employees affected; and 96.8, as against 16.8 for working days lost.

The act is conceded to have been most successful in its application to railway disputes, yet boards were constituted for 55.3 per cent of the railway disputes during the first period, as against 36 per cent during the second period, and 78.9 per cent of the employees affected, as against 52.7 per cent. Of all railway strikes and lockouts, boards were constituted for 23.4 per cent during the period 1907-1911, as against 12.5 per cent during the period 1912-1916, 71.2 per cent of employees affected, as against 20.7 per cent, and 87.7 per cent of the working days lost, as against 51.8 per cent.

A comparison of illegal strikes and lockouts for the two periods shows that for the first period 90 per cent of the strikes and lockouts, affecting 71.2 per cent of the employees and occasioning 53.7 per cent of the total time loss, in industries within the scope of the act, were illegal as against 93.3 per cent of the strikes and lockouts, 93.7 per cent of the employees affected and 86.8 per cent of the total time loss of the second period. A similar analysis for mining shows that 84.8 per cent of strikes and lockouts, affecting 82 per cent of the employees and occasioning 60.2 per cent of the time loss, in mining were illegal during the first period, as against 89.7 per cent of strikes and lockouts, affecting 92.5 per cent of the employees and occasioning 85.1 per cent of the time loss during the second period. In railways, 90 per cent of the strikes and lockouts, affecting 37.2 per cent of the employees and occasioning 17.5 per cent of the time loss, in railways



were illegal during the first period, as against 93.7 per cent of the strikes and lockouts, affecting 94.5 per cent of the employees and occasioning 95.8 per cent of the time loss, of the second period.

**STRIKES AND LOCKOUTS IN CANADIAN INDUSTRIES, 1901-1916.**

Any consideration of the effects of the Canadian act leads naturally to a comparison as between periods of time prior to and subsequent to its inception. It can not be overemphasized, however, that strike and lockout figures, uncorrelated with other factors, are inconclusive and may be misleading in estimating the effect of legislative measures designed to avoid strikes and lockouts. The tide of industrial unrest is by no means regular in its ebb and flow and observation over a much longer period of time than that under consideration would be necessary in order to establish a trend. It is apparent that accelerating influences in some industries have served to discredit the value of the Canadian act, whereas in other industries retarding influences have tended measurably to decrease the number of strikes and lockouts and give undue credit to its restrictive provisions. Thus the growth of unionism in the coal-mining industry has led to concerted strike action for the establishment of union principles, approximately 50 per cent of the time lost in mining strikes during the period 1907-1916 occurring in strikes for union recognition, for the principle of the closed shop, or for the reinstatement of discharged union employees. In industries connected with the operation and maintenance of steam railways, on the other hand, unionism is more generally recognized and the principle of the working agreement more generally accepted. Measured solely by the number of strikes or lockouts, the number of employees affected or the time lost, it is probable that any legislation would have evidenced merit in the prevention of railway strikes, and failure in the prevention of mining strikes. As previously stated, no degree of refinement of strike and lockout figures would show concretely the number of strikes and lockouts that might have occurred had the act not been passed, or the number of voluntary negotiations that have been entered into as a result of its passage.

The periods 1901-1906 and 1907-1912 represent approximately six years before and six years after the inception of the act and are selected for purposes of comparison. It is apparent that such a comparison should take into account the number of workers as well as the number of strikers, and the number of potential working days as well as the number of working days lost in strike or lockout.

It may be estimated that the number of yearly workers in all industries during the period 1901-1906 were 12,108,204.<sup>1</sup> Of this num-

<sup>1</sup> Based on Canadian censuses of 1901 and 1911. Annual increment in number of workers is calculated at one-tenth the increase of 1911 over 1901.

ber, 203,520 were miners<sup>1</sup> and 689,715 were transport workers. For the same period employees affected by strikes and lockouts aggregated 149,146. Of this number 33,503 were miners and 21,148 were transport workers.

The potential working time for the period may be estimated at 3,632,410,200 working days.<sup>2</sup> Of this number, 61,056,000 may be credited to mining and 206,914,500 to transport. The time loss during the six-year period due to strikes and lockouts in all industries was 2,821,796 days of which 818,262 were in mining and 428,475 were in industries connected with general transport.

A similar analysis for the period 1907-1912 shows an aggregate of 15,495,084 workers of which 300,546 were in mining and 1,182,154 were in transport. During this period there were 171,134 employees on strike, of which number 42,052 were miners and 28,250 were transport workers. The potential working time for the period may be estimated at 4,648,525,200 days for all industries. Of this number, 90,163,800 days were in mining and 354,646,200 were in transport. The time loss during the period due to strikes and lockouts in all industries was 6,038,675 days, of which number 2,989,582 were in mining and 725,192 were in transport.

In the following table, the figures shown above are reduced to percentages to show the ratio of workers in specific industries to workers in all industries and of employees affected in strike and lockout to all workers and to workers in specific industries. A similar comparison is shown between potential working time and time lost in strikes and lockouts during each period.

It will be observed that mining workers were 1.9 per cent of all workers during the period 1907-1912 as against 1.7 per cent during 1901-1906 and that transport workers were 7.6 per cent of all workers during the second period as against 5.7 per cent during the first period. In both mining and transport, however, the percentage of employees affected by strike or lockout was less during the period 1907-1912 than during the period 1901-1906. Thus while mining and transport have grown in importance, in comparison with other industries, a smaller proportion of mining and transport workers have been affected in strike and lockout. In point of time lost, however, both mining and transport show an increase during the second period in the ratio of such time to the potential working time in all industries. But of the potential working time in transport, only 0.20 per cent was lost in 1907-1912 as against 0.21 per cent in 1901-1906.

The relative importance of mining and transport strikes is apparent from the fact that in the second period the time lost in mining

<sup>1</sup> Exclusive of quarry and oil and salt well workers.

<sup>2</sup> Number of working days per year per worker is estimated at 300.

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strikes was 49.5 per cent of the time lost in all industries whereas the time lost in transport was but 12 per cent of the time lost in all industries.

RATIO OF EMPLOYEES AFFECTED IN STRIKE OR LOCKOUT TO TOTAL WORKERS, AND WORKING TIME LOST TO POTENTIAL WORKING TIME DURING THE PERIODS 1901-1906 AND 1907-1912.

Items.	1901-1906	1907-1912
All workers in all industries.....	100.0	100.0
a. Mining.....	1.7	1.9
b. Transport.....	5.7	7.6
Workers affected in strikes and lockouts:		
a. All industries.....	1.23	1.10
b. Mining.....	.28	.27
c. Transport.....	.17	.18
Percentage of mine workers affected in strike and lockout.....	16.5	14.0
Percentage of transport workers affected in strike and lockout.....	3.1	2.4
Employees affected in strikes and lockouts in all industries.....	100.0	100.0
a. Mining.....	22.5	24.6
b. Transport.....	14.2	16.5
Days lost in strikes and lockouts in all industries.....	100.0	100.0
a. Mining.....	29.0	49.5
b. Transport.....	15.2	12.0
Potential working time in all industries.....	100.0	100.0
Time lost in strikes and lockouts:		
a. All industries.....	.08	.13
b. Mining.....	.02	.06
c. Transport.....	.01	.02
Percentage of potential working time in mining lost in mining strikes and lockouts.....	1.3	3.2
Percentage of potential working time in transport lost in transport strikes and lockouts.....	.21	.20

Using the period 1901-1905 as a base, the relative increase or decrease in employees on strike and days lost in comparison with the increase in workers for all industries and for mining and transport is shown in the following table:

	1901-1906	1907-1912
All workers:		
a. All industries.....	100.0	128.0
b. Mining.....	100.0	147.6
c. Transport.....	100.0	171.4
Employees affected in strikes and lockouts:		
a. All industries.....	100.0	114.7
b. Mining.....	100.0	125.5
c. Transport.....	100.0	133.6
Days lost in strikes and lockouts:		
a. All industries.....	100.0	214.0
b. Mining.....	100.0	365.4
c. Transport.....	100.0	169.2

It will be observed that the increase in employees affected in strikes and lockouts has not kept pace with the increase in the number of workers. The increase in working time lost, however, exceeds the increase in the number of workers except in industries connected with general transport.

## PENAL PROVISIONS.

It may be repeated that the chief interest in the act is not in its administration as a conciliatory measure, but in those restrictive provisions which have served to characterize it as the "Compulsory investigation act."

Although it is impossible to measure the influence of the penal provisions of the act in restraining employers and employees from illegally interrupting industry or others from inciting such action, a comparison of prosecutions with violations will indicate the attempt made to enforce these provisions and the importance attached to them. During the period March 22, 1907, to December 31, 1916, there have been 11 prosecutions. Of these, one was to test the constitutionality of the act and to restrain a board of conciliation and investigation from proceeding; one was to enforce an agreement entered into as a consequence of the recommendations of a board; seven were prosecutions for illegal strikes or for inciting such action; two were for illegal lockouts. In all, charges have been laid against nine employees for violating the provisions of section 60 in the encouragement of strikes, and against eleven employees for violating the provisions of section 56 in going on strike illegally. Charges have been laid against three employers for violating the provisions of section 56 in illegal lockouts. In the cases of eleven employees the charges were either dismissed or withdrawn; in the cases of nine employees the charges were sustained. Charges against two employers were sustained; charges against one employer were dismissed. The aggregate of fines imposed, exclusive of costs, was \$1,660.

As stated previously, there have been for the same period 204 illegal strikes and lockouts, affecting 80,278 employees whose time loss was 3,015,844 days. Of this number two disputes, affecting 95 employees whose time loss was 390 days, may be considered lockouts. Undoubtedly there have been violations of section 60 in addition to those prosecuted. Assuming the minimum penalty of \$10 per day per striking employee, it will be seen that more than \$30,000,000 in uncollected fines have accumulated during the period stated. If the maximum penalty is assumed, the amount exceeds \$150,000,000.

In the face of this record of prosecutions and violations during a period of nearly 10 years it does not seem probable that a wholesome respect has been fostered for such provisions, nor that a fear of the imposition of penalties serves in any considerable degree as a restraining influence. On the contrary, there is a strong indication that whatever success has attended the administration of the act has been due to the conciliatory efforts of the Department of Labor through its fair-wage officers and its boards of conciliation and investigation; to the dislike for publicity rather than to the fear of fine or imprisonment; to the existence of a means of negotiation rather than a means of restriction.

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## CONFLICTS BETWEEN FEDERAL AND STATE JURISDICTIONS IN COMMERCE CASES.<sup>1</sup>

BY A. J. PILLSBURY, CHAIRMAN OF INDUSTRIAL ACCIDENT COMMISSION OF CALIFORNIA.

### SYNOPSIS.

The interest of the Federal Government in, and responsibility for, employees injured while in the service of commerce is incidental, indirect, and relatively immaterial, whereas that of the States in which they and their families reside is proximate, immediate, and vital to the social welfare of each Commonwealth.

Our 48 free and independent State sovereignties differ one from another in spirit, habits, customs, standards of living and ways of viewing questions of domestic policy, and a compensation law that may fit comfortably in one State might chafe or gall in another. No one law could serve acceptably for all.

The Federal Government is huge. Upon the National Capital focus the hundred thousand interests of a hundred million people, and it is impossible that such a government can legislate to fit the individual needs of the several States.

All compensation laws are still in a state of flux and evolution, and needed amendments that, in any State, may be effected at any session of a legislature might conceivably involve 10 years of effort if dependent upon Congress.

The crux of the issue has been missed by both sides to the controversy. That crux is that compensation for industrial injuries, however and wherever suffered, has, and should have, no essential constitutional connection with commerce, either interstate or intrastate, but is one department of, and belongs to, a general scheme of local, domestic, social insurance against the hazards of poverty, with which the Federal Government should have only an incidental concern.

Therefore it is neither feasible nor desirable that there be uniformity of compensation legislation throughout the United States in relation to injuries sustained while in the service of transportation by railroad or by water.

Federal jurisdiction over injuries sustained in the service of transportation by railroad can, without amendment of the Federal Constitution, and by right ought to be relinquished to the States, and the same principle holds equally true of service in transportation by water if it can be legally effected.

There are no practical difficulties in the way of such relinquishment. The hindrances are all technical, artificial, legalistic.

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<sup>1</sup> Substance of a paper read at meeting of International Association of Industrial Accident Boards and Commissions at Boston, August, 1917.



## TWO FIELDS OF CONFLICT INSTEAD OF ONE.

In a paper presented a year ago upon the subject of conflicts between Federal and State jurisdictions in commerce cases I confined myself wholly to such conflicts as arose out of transportation by railroad.<sup>1</sup> At that time it seemed to me to be altogether unlikely that the jurisdictions of the several States over injuries happening upon their own navigable waters would be seriously interfered with. The fact that the doctrine that the jurisdiction of a State over its own ships follows them wherever they go on the high seas was also well established led me to the conclusion that the whole field was fairly covered by State jurisdiction. When, on February 3, 1917, the Supreme Court of California, in a very able opinion, sustained the jurisdiction of our commission in unequivocal terms, I felt that our assumption of jurisdiction was doubly assured.

I had left the Supreme Court of the United States out of my reckoning. Its recent decision in the case of *Southern Pacific Co. v. Jensen* precipitated chaos where order was evolving.

A fundamental necessity before any remedial action can be taken is to ascertain precisely the existing state of the law governing transportation by rail and by water, respectively.

## THE LAW REGARDING TRANSPORTATION BY RAILROAD.

The recent decisions of the Supreme Court of the United States in the two *Winfield* cases<sup>2</sup> did not materially alter the status relating to transportation by railroad, but only cleared up a few not very doubtful points. The Federal statute is exclusive where, at the instant of the happening of an injury, the employee is engaged in an act of interstate commerce or one so closely connected with it as not to be separable from it. Where negligence can not be imputed no liability exists. The risks of the employment all rest upon the employees.

On the other hand, where, at the instant of the happening of the injury, the employee is engaged in an act of intrastate commerce, or an act clearly separable from interstate commerce, the jurisdiction of the State is exclusive and plenary and Federal authority can not take cognizance of such injuries unless the Constitution of the United States is so amended as to permit it, which is so unlikely as to be well nigh unthinkable, or the United States Supreme Court reverses

<sup>1</sup> At the meeting of the International Association of Industrial Accident Boards and Commissions, held at Columbus, Ohio, Apr. 25-28, 1916. Paper reprinted in Bulletin 210 of the U. S. Bureau of Labor Statistics, pp. 33-55.

<sup>2</sup> *New York Central R. R. Co. v. Winfield*, and *Erie R. R. Co. v. Winfield*, May, 1917. In these cases, the Supreme Court, with two justices dissenting, held that when an employee engaged in interstate commerce was injured, his only right to recover arose from the provision of the Federal employers' liability act. The power of the States to supplement such legislation was denied.

a long line of its own decisions, which is also extremely unlikely to happen.

Therefore, while, in theory, all conflict between Federal and State jurisdictions is cleared up and a plain line of demarcation established, in practice it is frequently, if not usually, necessary to try each case in order to ascertain whether or not the tribunal undertaking to hear and determine the controversy has jurisdiction over the parties to the proceeding. The situation is absurd. Roughly speaking it may be said, however, that injuries to trainmen, and men employed upon maintenance of way, will fall under Federal authority, while shopmen and office employees may be under the protection of State laws—with abundant exceptions to all such general rules for predetermining jurisdiction.

#### THE LAW REGARDING TRANSPORTATION BY WATER.

In only one particular did the Jensen decision<sup>1</sup> make clear and conclusive the exclusive character of Federal jurisdiction in water transportation, and that is with reference to injuries happening upon the high seas and navigable waters. Even then it concedes that the general body of maritime law may, to some extent, be changed, modified or affected by State legislation, but does not attempt to tell how far.

Up to the time of the decision of the Jensen case the principle had been regarded as well established in admiralty law that jurisdiction over contracts depended upon the subject matter of the contract, regardless of the locality of the transaction. It had been equally well established that jurisdiction over torts depended wholly upon the locality where the tort was committed, to wit, upon the high seas or navigable waters.

<sup>1</sup> *Southern Pacific Co. v. Jensen*, May, 1917, four justices dissenting. The plaintiff in this case was the widow of a stevedore engaged in unloading a steamship in New York harbor. The vessel was owned by a railroad company, which also operates a steamship line plying between the ports of New York and Galveston. An award in the claimant's favor had been made by the State workmen's compensation commission in October, 1914, and was approved by the various courts of the State. (*Jensen v. Southern Pacific Co.*, 215 N. Y. 514, 109 N. E. 600; see Bul. 189, pp. 221-224.) The New York courts had held that the case was not covered by the Federal statute governing interstate carriers by railroad, and as no statute had been enacted by Congress governing carriage by water, there was no Federal legislation applicable to the case. The decision of the Supreme Court was identical so far as the application of the Federal liability law was concerned, but an objection raised by the company to the decision of the court below that the compensation law was "unconstitutional in that it violates Article III, section 2, of the Constitution, conferring admiralty jurisdiction upon the courts of the United States," was upheld by the Supreme Court as regards the particular portion applying the law to maritime injuries.

See MONTHLY REVIEW of the Bureau of Labor Statistics for July, 1917 (p. 101), for further account of this case.

Are proceedings under a workmen's compensation act founded in contract or in tort? If in contract, then, under an elective law, at all events, the employment of a stevedore would, in the language of Mr. Justice McReynolds, be, "maritime in its nature," and jurisdiction would vest in admiralty courts whether the injury happened on ship or on dock; but if founded in tort, admiralty jurisdiction exists only when the injury happens on ship and not on dock. Personally I am of the opinion that, at least in States where compensation is compulsory, claims therefor arise out of neither contract nor tort, but out of status, i. e., out of a condition which the law creates at the behest of the police power of government.

If, as seems possible under this decision although not finally determined, a sailor or stevedore, injured upon a wharf, can not bring suit in admiralty for tort, because the injury did not happen on navigable waters, and also can not claim compensation because the "work of a stevedore is maritime in its nature," what can the man do? He is in a no-man's land with no right of redress in any court or commission.

In the Jensen case the accident happened upon a ship and, therefore, it was not indispensably necessary to a decision of the case at bar that the court indicate what would have been its decision if the accident had happened on the dock, and the point was passed without at all considering that important difference.

It can not have been the intention of the Supreme Court of the United States to create a twilight zone in which no right or remedy exists. Such a condition is as repugnant to law as a vacuum to nature. It would seem, therefore, that, in future decisions the court must do one of two things:

1. Decide that admiralty jurisdiction does extend to cover all injuries to sailors or stevedores without regard to whether the right be founded in contract, tort, or status, and without regard to whether the injury happens on ship, dock, dry-dock, or elsewhere, so that it be while in the performance of a service in transportation by water; or
2. It can define admiralty jurisdiction as extending to injuries happening on shipboard or gangplank, leaving to the compensation or negligence laws of the several States the jurisdiction over all such injuries not so happening.

It is not incumbent upon me at this time to venture any conjecture as to what attitude the Supreme Court will take when the point arises. It is sufficient for the present to point out that a conflict of jurisdiction between Federal and State Governments as certainly exists relative to injuries sustained by employees engaged in transportation by water as by rail and entails great hardship upon

labor engaged in this dangerous occupation. The question for us to deal with at this time is, What are we going to do about it?

#### A STOP-GAP ARRANGEMENT.

In California employers and their employees engaged in transportation by water have tried our compensation law and like it. We claim jurisdiction, extraterritorial and all, and until the Jensen case upset us we had made it stick. Both sides wish to continue under the act. Our commission tendered its good offices to both sides in an effort to bring about an agreement whereby the parties may contract that, in the event of injury, the injured employee will accept and the employer will pay compensation in accordance with the terms of our act just as though they were under it, they also mutually agreeing that in the event of controversy the issue shall be put up to the industrial accident commission for determination as heretofore, and that both sides will abide by the result.

It is not doubted that such a contract can be enforced, and that any court of admiralty would recognize it, for there is in admiralty no prohibition against "contracting out," as there is in the Federal employers' liability act. The only trouble is that in the event of death by injury the deceased employee can not, in his lifetime, bar the right of a dependent to sue in admiralty. This is not causing employers much uneasiness, inasmuch as whenever a sailor or stevedore loses his life as a result of injury the plight of his dependents is so serious that compensation in hand is far more attractive to them than an action for damages upon which nothing can be realized for years to come.

I am hopeful that the arrangement here outlined may very generally be effected throughout the State of California, although we are just now in the throes of getting together. If it succeeds, other States may profit by our example. However, this device is intended to last only until order shall have been brought out of this chaos either through Federal legislation or judicial reinterpretation.

#### WHO IS THE PROXIMATE PARTY IN INTEREST?

The very theory upon which free states federate in the formation of a nation is that the federal authority shall be supreme in all those functions of government which proximately concern the welfare of a nation as a whole, and that all other functions of government are reserved to and reside in the states severally and their subdivisions.

Where, then, vests the proximate, immediate, and vital interest in the welfare of employees engaged in transportation, whether by rail or water? A freight train loaded with oriental commerce pulls out of the Oakland yard bound for markets in the Middle West or East.

There is a washout, the locomotive goes into the ditch and with the locomotive engineer. Is there any way by which the Federal Government can be made responsible for or render aid to that engineer if crippled, or to his family if he is killed? Who must see to the education of his children and, if poverty plunges them first into delinquency and afterward into criminality, is it the State or the Nation that proximately suffers?

A ship steams out through the Golden Gate bound for the Alaska fisheries. A steam pipe bursts and a marine engineer is scalded. Is his dependent family within the keeping of the Nation or the State? Who pays the wife her widow's pension that she may keep her family together? Who supports the orphanages that care for her children if she can not?

These questions all answer themselves. The interest of the Federal Government in the welfare of those engaged in transportation, whether by rail or ship, is but incidental and remote in comparison with the interest of the State and its subdivisions, which is immediate and proximate and vital.

#### UNIFORMITY NOT DESIRABLE.

Upon reflection I have concluded that uniformity in compensation legislation throughout the United States touching transportation either by rail or water is neither necessary nor desirable. The Federal Government is huge. The concerns of a hundred million people with a million conflicting interests focus upon Washington. Federal legislation is difficult and costly. Compensation laws are in a state of evolution. No adequate law could be enacted at this time even if Congress were minded to take the issue in hand. Courts, in striving to make all new measures fit into old molds make holes in our acts which need to be plugged. We, in California, have had the major portion of our compensation law revised and reenacted, partly because of what the courts had done to it and partly because of what we were afraid they might do. This revision comprised the plugging of 11 holes which judicial interpretation had punched, the patching of 35 flaws developed by experience in the administration of the law and the taking of 23 forward steps in State policy regarding compensation. Such a revision of a Federal act might easily involve 10 years of agitation and continuous effort. We accomplished it in three months.

Our 48 States of the Union constitute 48 differing civilizations, animated by differing spirits, habits, customs, standards of living, wages, and ways of looking at things. A compensation law that fits comfortably and works well in one State might not fit as comfortably or work as well in any other.



For three and a half years I have helped to administer a compensation law that assumed jurisdiction over maritime injuries and, until the Jensen case introduced conflict into that jurisdiction, all went well. If it was a California ship our jurisdiction over it followed it wherever it went. If it was not a California ship and was not manned in our ports, and any other State claimed jurisdiction, we did not. By the application of similar simple rules all conflict between the 48 sister States may easily be avoided. It is only the assertion of Federal jurisdiction over industrial injuries that produces perplexity, contentiousness, and wrong.

#### THE WRONG FOOT FIRST.

The truth is that the cause of compensation for industrial injuries got off on the wrong foot first. There is nothing strange about this, inasmuch as human progress is always directed toward and seldom starts from correct principles. Compensation for industrial injuries is but one factor in a scheme of social insurance, and social insurance is a State problem rather than a Federal, although Federal authority might conceivably foster and encourage it among the States. Social insurance bears only an incidental and unimportant relation to commerce, either by rail or by water, interstate or intrastate, and its relation to master and servant is almost equally incidental. The obligation of the employer runs to the State to carry this insurance, not merely for the benefit of the employee, but primarily for the protection of the State against the menace of poverty.

#### FEDERAL JURISDICTION SHOULD BE RELINQUISHED.

Federal jurisdiction over industrial injuries out of the way, our problem becomes easy of solution and the burden light. The States will take care of it in due season. There are backward States in this Union. There are States in which labor has few rights and ambulance-chasing attorneys thrive. Shall all of the States be held back from doing justice and showing mercy because of these?

The way is now clear whereby Congress may at least exempt injury sustained in interstate commerce by railroad from its interstate character when it happens in any State desiring to enjoy such exemption for the benefit of its citizens. The Webb-Kenyon Act, which divests liquors of their interstate character as commerce when they reach the boundaries of a prohibition State, has had its constitutionality affirmed by the Supreme Court of the United States. If it be so with liquors why not with industrial injuries? The power of Congress so to do is, it seems to me, no longer questionable.

## WHAT ARE WE GOING TO DO ABOUT IT?

The existing chaotic condition in relation to conflicts between State and Federal jurisdictions over injuries sustained in transportation, whether by water or rail, is intolerable. What is the remedy?

An article in the July REVIEW of the United States Bureau of Labor Statistics suggests the following possible solutions of the problem:

1. An amendment to the Constitution of the United States giving Congress jurisdiction over intrastate as well as interstate commerce, preparatory, it may be inferred, to enacting a comprehensive Federal compensation law covering all railroad employees.

2. The repeal of the employers' liability law of 1908, 1910, relegating the whole problem, so far as the railroads are concerned, to the States.

3. The enactment of a Federal compensation law to be effective only in States not having such a law of standard type.

The first remedy suggested might require a generation for its accomplishment; the second would leave the railroad men in the backward States in worse plight than they are at present; the third has more to recommend it, but, for reasons already explained, Congress has not been minded to pass any compensation law at all in relation to interstate commerce.

Mr. Justice Brandeis, in his dissenting opinion in one of the Winfield cases, suggested that, "It would obviously have been possible for Congress to provide in terms that wherever such injuries or death result from the railroad's negligence, the remedy should be sought by action for damages; and whenever injury or death results from causes other than the railroad's negligence, compensation may be sought under the workmen's compensation laws of the States."

While this solution would doubtless be acceptable to the railroad employees, the railroad companies would oppose such a measure, notwithstanding the fact that in Great Britain every injured workman may take his compensation or sue for damages as he may elect, and notwithstanding the further fact that, whichever remedy the injured employee elects, he almost uniformly secures about what the compensation statute would have given him. Juries, knowing no other scale by which to measure damages, choose the one furnished by the compensation law with which they are familiar.

Another method has been suggested to me: Let Congress, if it will, enact a compensation law covering interstate injuries and then confer upon industrial accident boards and commissions of the several States the administration of the act. If this can not be done directly the United States district courts could be authorized to refer all such cases to such boards or commissions for determination of the facts,

unless a jury were demanded, as such courts now refer such issues to special commissions or referees. Then, when a case comes before such commission, if the facts prove the injury to have been suffered in interstate commerce apply the Federal law, if in intrastate then apply the State compensation law. The suggestion is not without persuasive force.

#### WHAT ABOUT THE CONFLICT IN ADMIRALTY JURISDICTION?

The remedy that does not resolve this conflict upon water as well as upon railroad will prove but half a remedy. What about that?

The writer in the MONTHLY REVIEW, above referred to, affirms that, "Only Congress can legislate as to injuries on high seas and navigable waters of the country." It has been as stoutly affirmed that Congress itself can neither add to nor take away from the jurisdiction of the United States district courts over admiralty cases. If both of these propositions be true, and it is also true that admiralty jurisdiction does not extend to injuries happening upon the docks, then the conflict of jurisdiction between State and Federal authority over injuries happening in commerce by water is even more hopeless of remedy than by railroad, for no Webb-Kenyon statute has been enacted and judicially upheld which can divest a maritime injury of its admiralty jurisdiction even when it happens in a State having an adequate compensation law.

There are two sources of maritime law, the statutes of Congress and the general, judge-made, law maritime. Congress has enacted no employers' liability law covering injuries suffered in the business of transportation by water, and the general law maritime, although far more liberal toward injured men than the old common-law liability doctrine, allows indemnity for injuries only where negligence can be established and none at all in cases where the injuries result in death. Congress can enact a compensation law covering all maritime injuries, and the courts may hold that dock and dry-dock injuries are maritime, but if such a law were administered by the United States district courts the cost of it would consume the benefits and hoped-for relief would not result.

Suppose that one of the five justices who voted for the Jensen decision had voted the other way what would have been the status of those engaged in commerce by water?

That decision committed the court to two doctrines:

1. That the procedure followed by the Industrial Commission of New York did not constitute a common-law remedy within the meaning of section 9 of the act of 1789, and
2. That the compensation law of New York is, in substance, in contravention of the general body of admiralty law.

If one other justice had voted with the dissenting four the procedures of industrial accident boards and commissions would have constituted common-law remedies and, in pursuance of the act of 1789, would have been "saved to suitors," and it would also have been held that such compensation laws were not in contravention of the general maritime law which itself would have been made subordinate to the common-law remedy.

Under such a decision the shipping interests would speedily place themselves under the protection of the compensation laws of the States having such laws and all would soon be well with the larger share of men who toil in commerce by water. So important is this decision that I should like to see the issue go back to the court from the dock side of it and shall do my best to see that such a case gets there. Our commission proposes to assume jurisdiction over accidents happening on the docks.

#### A PRACTICAL SOLUTION SOUGHT.

A Federal compensation law governing transportation by railroad is not, in my opinion, practicable, because inelastic, not readily susceptible to amendment, can cover interstate injuries only, would attempt to deal with what is essentially a State problem, and, anyhow, can not be enacted without great difficulty.

Concerted pressure should, in my judgment, be brought upon Congress by all compensation States to relinquish the whole subject of injuries sustained in interstate commerce by railroad in States having adequate compensation laws and fixing a standard of adequacy therefor, retaining the employers' liability law in full force and effect in States falling below such a standard or having none at all. Such a measure could probably be put through Congress at this time.

With reference to commerce by water, it may be found advisable not to attempt Federal legislation at this time, but to bring new and more fully argued cases before the Supreme Court of the United States. Meantime, push along the California idea of getting seafaring employers and their employees to accept the compensation acts of the several maritime States, supplementing the acceptance with a waiver of the right to sue in admiralty where a basis of negligence might be laid. There is no statute prohibiting contracting out from under admiralty jurisdiction and there is every reason in the world why men who toil in shipping should wish to contract out from a law that does not afford them protection and under a law that does. Such a contract would bind all except the dependents of deceased employees and they would have nothing to sue for anyway except in States that have given a right of action in death cases. The general maritime law gives no such right nor does any Federal statute.

## A TENTATIVE STANDARD.

I have spoken of a standard of adequacy to be imposed by the Federal Government as a condition precedent to relinquishing its authority over injuries happening in interstate commerce in States having compensation laws conferring equalized benefits approximating to the standard imposed.

At a venture I took the statute affording "compensation for injuries to civil employees of the United States," approved September 7, 1916, and find that it affords the highest benefits of any compensation statute in the United States. If this were taken as the standard the law of no State would be adequate. The compensation laws of New York and Ohio would fall about 10 per cent lower. The compensation laws of California, West Virginia, and Wisconsin would fall about 20 per cent lower, Illinois would be 30 per cent lower, and Maryland, Nebraska, and Oklahoma from 30 to 40 per cent lower. The compensation afforded by the laws of Connecticut, Indiana, Iowa, Louisiana, Michigan, Minnesota, Montana, New Jersey, and Rhode Island would be between 40 and 50 per cent lower, and those of Vermont and Colorado would be more than 50 per cent lower. I did not continue the investigation further.

In my judgment, those States affording compensation in excess of 30 per cent lower than the Federal compensation act above designated could reasonably be held to fall below the standard of adequacy.

These figures were all computed according to the differentials employed by insurance actuaries in determining the relative benefits conferred by the several States as compared with the Massachusetts act of 1911. The rule is applied by all of the insurance carriers of the United States in determining rates in the several States and, I think, is accurate.



## PREVAILING HOURS OF LABOR IN THE UNITED STATES.

A presentation is here made of the prevailing hours of labor in the United States. The primary purpose of this article is to show the extent of the 8-hour day. The three sources of information available covering the country are: The Abstract of the Census of Manufactures, 1914, published by the United States Census Office; Bulletin 214 of the United States Bureau of Labor Statistics relating to union scale of wages and hours of labor; and clippings from labor journals and newspapers.

The sources of data have not been exhausted. Good material is published by several States, but lack of space prevents the inclusion of this material in this article.

### UNITED STATES CENSUS FIGURES, 1914 AND 1909.

The following census figures apply only to the manufacturing industries and do not cover agriculture, building construction, mining, domestic and personal service, etc.

No attempt was made at the censuses of 1914 or 1909 to ascertain exactly the number of employees in manufacturing industries working a given number of hours per week. The schedule, however, contained an inquiry calling for the number of hours normally worked by wage earners, the instructions being to enter under this heading the prevailing practice followed during the year in each establishment. Occasional variations in hours in an establishment from one period to another were necessarily disregarded. Moreover, no attention was or could be given to the fact that a limited number of employees might have hours differing from those of the majority.

In the tables the average number of wage earners employed during the year in each establishment is classified as a total according to the hours prevailing in that establishment, even though some employees worked a greater or a smaller number of hours. In most establishments, however, all or practically all the employees work the same number of hours, so that the figure for a given group does show substantially the number customarily working the specified number of hours per week.

The data as to prevailing hours of labor in 1914 and 1909 for the United States as a whole are summarized in the following table. Statistics of this character are not available for prior censuses.

## 24 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

NUMBER AND PER CENT OF WAGE EARNERS WORKING EACH SPECIFIED  
NUMBER OF HOURS PER WEEK IN 1914 AND 1909.

Prevailing hours of labor per week.	Wage earners in establishments with specified number of hours.			
	Average number.		Per cent of total.	
	1914	1909	1914	1909
Total.....	7,036,337	6,615,046	100.0	100.0
48 and under.....	833,330	523,652	11.8	7.9
Between 48 and 54.....	945,735	481,157	13.4	7.3
54.....	1,818,390	1,019,438	25.8	15.4
Between 54 and 60.....	1,543,018	1,999,307	22.1	30.2
60.....	1,487,891	2,017,280	21.1	30.5
Between 60 and 72.....	247,798	344,011	3.5	5.2
72.....	104,294	116,083	1.5	1.8
Over 72.....	55,881	114,118	.8	1.7

The figures in this table indicate a growing tendency toward shorter hours of employment. In 1914 the establishments where the prevailing hours per week were less than 54 gave employment to 25.2 per cent of the wage earners reported for all establishments as compared with 15.2 per cent in 1909, while the establishments in which more than 60 hours prevailed reported 5.8 per cent of the employees in 1914 and 8.7 per cent in 1909.

Generally a 48-hour week means an 8-hour day, but in some instances it may not. An establishment may be in operation more than 8 hours on a full working day, yet because of a Saturday half holiday the total hours per week may be 48 or less. This should be considered in attempting to convert hours per week into daily hours.

The table on pages 26 to 32 shows for 1914, for the 340 industries for which separate statistics can be presented, the average number of wage earners in the United States classified according to the prevailing hours of labor in the establishments where they were employed.

In 25 industries the greatest number of wage earners were employed 48 hours or less per week; in 35 they were employed over 48 hours but less than 54 hours; in 93 they were employed 54 hours. In 103 industries the prevailing hours were over 54 but less than 60 per week, and in 71 industries 60 hours per week. Only 13 industries show the greatest number of wage earners in establishments operating more than 60 hours per week.

The table on pages 32 and 33 shows for all industries combined in each State, for 1914, and for each geographic division for 1914 and 1909, the number of wage earners classified according to the prevailing hours of labor in the establishments in which they were employed.

At the census of 1914 the establishments in the New England and Middle Atlantic States reported that the greatest number of wage earners were employed 54 hours per week. At the census of 1909 the greatest number reported for these States were employed in estab-

lishments operated over 54 and less than 60 hours per week. In the East North Central division the prevailing hours of work were over 54 but less than 60 in 1914, while in 1909 the largest number of wage earners was reported for establishments operated 60 hours per week. In the West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific divisions, at both censuses the largest number was reported for establishments operating 60 hours per week.

From the table on pages 32 and 33, relating to States and geographical divisions, a table of percentages has been prepared and appears on pages 34 and 35. Considering the various State groups the highest percentage of employees having a week of 48 hours or less, 26 in 1914, was in the Pacific States. The lowest percentage, 19.1, was in the South Atlantic States. In these two groups of States the industries, of course, differ widely in character.

More than 50 per cent of the wage earners in the District of Columbia and Wyoming were in establishments working 48 hours per week or less, and in four other States, California, Colorado, Oklahoma, and Utah, over 25 per cent of the wage earners were in establishments working 48 hours or less.

# 26 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.							
	In establishments where prevailing hours of labor per week were—							
	Total.	48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	Over 72.
Aeroplanes and parts.....	168	2	22	51	77	16	—	—
Agricultural implements.....	48,459	4,461	2,632	4,559	25,258	11,539	9	1
Aluminum ware.....	4,614	3	131	235	2,374	1,871	—	—
Ammunition.....	11,493	195	287	1,879	8,613	519	—	—
Artificial flowers.....	4,808	714	2,239	1,685	112	39	19	—
Artificial limbs.....	488	80	81	222	47	55	3	—
Artificial stone products.....	10,255	1,684	485	2,825	1,054	4,191	14	2
Artists' materials.....	604	60	72	183	187	93	9	—
Asbestos products, not includ- ing steam packing.....	962	130	28	3	171	608	22	—
Automobile bodies and parts.....	47,785	1,284	8,030	7,909	25,771	5,678	13	—
Automobile repairing.....	12,562	1,607	1,050	5,830	1,220	2,477	368	6
Automobiles.....	79,307	13,033	19,963	10,782	28,573	6,936	20	4
Awnings, tents, and sails.....	5,073	943	722	2,252	489	667	—	—
Babbitt metal and solder.....	1,035	39	117	110	553	216	—	—
Bags, other than paper.....	9,358	101	1,478	3,520	2,730	1,529	—	—
Bags, paper, not including bags made in paper mills.....	3,505	229	374	2,246	460	99	97	—
Baking powders and yeast.....	2,270	295	717	163	506	456	—	133
Baskets, and rattan and willow- ware.....	4,574	475	214	937	1,487	1,458	2	1
Bells.....	445	—	57	33	153	202	—	—
Belting and hose, rubber.....	5,115	—	—	1,091	2,822	1,202	—	—
Belting and hose, woven.....	952	91	73	476	236	76	—	—
Belting, leather.....	2,951	245	528	495	1,558	122	3	—
Billiard tables and materials.....	1,453	23	279	990	120	41	—	—
Blacking, stains, and dressings..	1,766	318	489	531	87	341	—	—
Bluing.....	254	100	31	80	5	38	—	—
Bone, carbon, and lamp black....	339	73	23	21	—	51	61	59
Bookbinding and blank-book making.....	21,693	9,195	5,814	5,053	1,593	38	—	—
Boot and shoe cut stock, exclu- sive of that produced in boot and shoe factories.....	7,819	106	1,246	2,383	3,847	211	26	—
Boot and shoe findings, exclu- sive of those produced in boot and shoe factories.....	6,714	392	646	2,257	3,252	166	—	1
Boots and shoes.....	191,555	4,966	23,263	79,699	77,854	5,773	—	—
Boots and shoes, rubber.....	18,687	—	338	14,859	3,490	—	—	—
Boxes, cigar.....	5,835	906	626	1,875	2,158	270	—	—
Boxes, fancy and paper.....	45,311	5,451	8,585	17,771	11,186	2,139	179	—
Boxes, wooden packing.....	38,548	858	3,155	5,251	15,421	13,511	352	—
Brass, bronze, and copper prod- ucts.....	40,306	1,851	6,680	7,545	17,401	6,669	160	—
Bread and other bakery products	124,052	14,556	6,887	48,579	10,334	37,365	4,508	1,084
Brick and tile, terra-cotta, and fire-clay products.....	100,182	10,883	4,489	18,186	13,844	51,046	1,457	169
Brooms.....	5,642	820	936	1,151	1,247	1,466	22	—
Brushes.....	7,213	263	1,188	3,340	2,109	310	—	3
Butter.....	14,149	1,334	243	1,859	1,131	6,106	3,085	206
Butter, reworking.....	304	30	10	17	6	232	—	185
Buttons.....	14,511	388	2,506	5,130	4,978	1,508	1	9
Candles.....	387	11	6	89	43	238	—	—
Canning and preserving, fish.....	9,069	1,826	82	2,702	196	3,937	320	6
Canning and preserving, fruits and vegetables.....	50,325	4,555	1,821	8,758	5,677	27,190	1,715	363
Canning and preserving, oysters.	2,087	615	233	192	165	872	—	246
Card cutting and designing.....	517	253	83	132	49	—	—	10
Cardboard, not made in paper mills.....	1,159	—	593	276	175	115	—	—
Carpets and rugs, other than rag.	31,309	23	2,099	23,235	5,685	267	—	—
Carpets, rag.....	2,130	320	245	540	644	380	1	—
Carriage and wagon materials....	11,087	471	514	1,272	5,265	3,510	2	53
Carriages and sleds, children's....	5,900	88	619	1,640	1,934	1,619	—	—
Carriages, wagons, and repairs....	41,304	2,738	4,846	8,508	15,721	9,448	25	18
Cars and general shop construc- tion and repairs by electric- railroad companies.....	26,384	1,665	1,638	6,160	6,640	6,040	3,857	23
Cars and general shop construc- tion and repairs by steam-rail- road companies.....	339,518	74,431	50,616	100,759	46,375	16,767	46,466	270
								3,834

AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914—Continued.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.							
	Total.	In establishments where prevailing hours of labor per week were—						
		48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	Over 72.
Cars, electric-railroad, not including operations of railroad companies.....	3,840	892	-----	403	2,103	442	-----	-----
Cars, steam-railroad, not including operations of railroad companies.....	54,288	341	5,294	19,291	16,885	12,477	-----	-----
Cash registers and calculating machines.....	8,956	435	457	7,271	792	1	-----	-----
Cement.....	27,916	24	3	73	1,536	7,790	8,139	5,409 4,942
Charcoal, not including production in the lumber and wood distillation industries.....	228	31	20	2	35	132	-----	-----
Cheese.....	2,908	208	75	235	325	874	987	24 180
Chemicals.....	32,311	947	303	1,586	12,912	5,553	6,598	2,101 2,311
China decorating, not including that done in potteries.....	295	122	34	41	93	5	-----	-----
Chocolate and cocoa products, not including confectionery.....	4,160	21	514	644	2,102	879	-----	-----
Cleansing and polishing preparations.....	1,239	286	168	380	235	170	-----	-----
Clocks.....	6,754	52	1,733	2,989	1,952	28	-----	-----
Cloth, sponging and refinishing.....	901	170	407	148	162	14	-----	-----
Clothing, horse.....	1,669	136	262	266	458	547	-----	-----
Clothing, men's.....	173,747	35,114	87,907	37,719	10,344	2,524	137	1 1
Clothing, men's, buttonholes.....	672	198	328	132	9	5	-----	-----
Clothing, women's.....	168,907	11,741	123,066	28,780	4,785	508	26	1
Coffee and spice, roasting and grinding.....	8,549	1,297	2,125	2,491	1,959	672	-----	4 1
Coffins, burial cases, and undertakers' goods.....	9,468	583	935	3,077	2,194	2,679	-----	-----
Coke, not including gas-house coke.....	21,107	1,582	86	6,637	1,809	4,762	1,770	1,290 3,171
Collars and cuffs, men's.....	10,100	90	758	8,180	233	839	-----	-----
Combs and hairpins, not made from metal or rubber.....	2,773	53	320	587	1,638	175	-----	-----
Condensed milk and milk products, other than butter and cheese.....	6,002	58	20	433	159	2,954	2,256	----- 122
Confectionery and ice cream.....	64,034	5,839	10,490	20,566	13,789	9,076	3,723	149 402
Copperage.....	17,128	2,867	1,999	2,595	3,865	5,782	9	5 6
Copper, tin, and sheet-iron work.....	28,714	14,308	2,500	5,840	3,624	2,441	1	-----
Cordage and twine.....	15,769	573	154	8,469	4,512	1,939	122	-----
Cordials and flavoring sirups.....	929	144	152	456	80	96	1	-----
Cork, cutting.....	3,454	25	320	2,101	431	577	-----	-----
Corsets.....	20,496	992	7,409	6,169	5,909	17	-----	-----
Cotton goods.....	379,366	1,075	1,572	149,157	68,842	157,034	1,686	-----
Cotton lace.....	7,440	1	1,039	4,591	1,809	-----	-----	-----
Cotton small wares.....	6,598	69	538	4,539	1,374	78	-----	-----
Crucibles.....	302	-----	8	7	264	23	-----	-----
Cutlery and edge tools.....	16,561	1,115	2,470	1,972	6,613	4,891	-----	-----
Dairymen's, poultrymen's, and apiarists' supplies.....	5,551	142	536	1,784	1,504	1,558	27	-----
Dental goods.....	3,080	468	681	1,324	562	43	-----	-----
Drug grinding.....	1,059	58	183	326	96	109	287	-----
Druggists' preparations.....	9,277	1,204	4,394	2,460	869	264	26	-----
Dyeing and finishing textiles, exclusive of that done in textile mills.....	48,467	557	2,769	16,186	23,695	5,226	34	-----
Dyestuffs and extracts.....	2,839	85	173	46	452	1,811	640	132
Electrical machinery, apparatus, and supplies.....	118,078	4,073	30,529	38,838	41,715	2,899	19	-----
Electroplating.....	2,584	307	582	665	856	172	2	-----
Emery and other abrasive wheels.....	2,387	8	37	939	1,297	106	-----	-----
Enameling.....	1,314	103	239	162	533	277	-----	-----
Engines, steam, gas, and water.....	29,657	1,982	1,075	8,862	14,789	2,917	32	-----
Engravers' materials.....	106	5	50	12	39	-----	-----	-----
Engraving and diesinking.....	1,536	326	385	558	261	3	-----	3
Engraving, steel and copper plate, including plate printing.....	6,859	4,694	1,727	327	47	55	9	-----
Engraving, wood.....	302	254	24	16	8	-----	-----	-----
Envelopes.....	6,970	271	1,837	3,746	1,116	-----	-----	-----
Explosives.....	6,306	635	1,399	1,288	1,272	1,024	83	-----



AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914—Continued.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.							
	In establishments where prevailing hours of labor per week were—							
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	Over 72.
Fancy articles, not elsewhere specified.....	7,399	1,221	1,810	2,513	1,455	397	3	.....
Feathers and plumes.....	4,483	783	2,444	1,252	2	2	.....	.....
Felt goods.....	4,035	5	96	1,239	1,767	917	11	.....
Fertilizers.....	22,815	281	500	2,656	3,061	14,282	1,312	596
Files.....	4,349	92	48	2,385	1,663	161	.....	.....
Firearms.....	7,064	.....	4	2,001	4,032	1,027	.....	.....
Fire extinguishers, chemical.....	256	12	11	41	175	17	.....	.....
Fireworks.....	1,324	50	24	429	350	465	.....	6
Flags and banners.....	1,495	356	541	347	248	3	.....	.....
Flavoring extracts.....	1,461	410	259	440	280	68	4	.....
Flax and hemp, dressed.....	116	24	5	42	.....	45	.....	.....
Flour-mill and gristmill products.....	39,718	3,414	355	2,949	1,331	22,714	4,601	4,261
Food preparations, not elsewhere specified.....	20,306	2,362	1,689	4,038	2,949	6,749	1,856	138
Foundry and machine-shop products.....	362,471	25,699	45,433	110,782	129,822	49,326	1,377	6
Foundry supplies.....	555	72	11	85	36	346	5	26
Fuel, manufactured.....	141	48	1	14	.....	50	28	.....
Fur goods.....	9,030	1,137	5,430	2,108	291	61	3	.....
Furnishing goods, men's.....	22,459	2,866	6,312	8,766	4,386	129	.....	.....
Furniture.....	127,881	10,599	12,351	28,837	35,412	40,444	238	.....
Furs, dressed.....	1,525	56	131	575	681	82	.....	.....
Galvanizing.....	1,580	73	10	55	1,071	338	15	18
Gas and electric fixtures.....	10,913	2,248	2,758	3,133	2,488	286	.....	.....
Gas, illuminating and heating.....	43,792	2,914	133	9,213	8,548	9,248	9,692	994
Gas machines and gas and water meters.....	4,972	57	830	985	3,026	74	.....	.....
Glass.....	74,502	12,205	27,975	11,394	7,458	10,743	2,550	439
Glass, cutting, staining, and ornamenting.....	8,067	899	2,440	1,469	2,609	650	.....	.....
Gloves and mittens, leather.....	10,668	1,030	2,229	4,063	3,044	301	1	.....
Glucose and starch.....	4,509	47	.....	9	16	2,903	790	131
Gum, not elsewhere specified.....	3,129	24	24	156	489	1,775	619	42
Gold and silver, leaf and foil.....	1,135	156	279	172	498	30	.....	.....
Gold and silver, reducing and refining, not from the ore.....	456	60	101	41	225	29	.....	.....
Graphite, ground and refined.....	250	.....	.....	.....	41	204	.....	5
Grease and tallow, not including lubricating greases.....	5,106	257	67	605	473	3,494	200	5
Grindstones.....	686	.....	7	.....	679	.....	.....	5
Haircloth.....	595	1	95	499	.....	.....	.....	.....
Hair work.....	1,193	364	303	490	24	12	.....	.....
Hammocks.....	285	10	14	144	97	20	.....	.....
Hand stamps.....	1,321	251	410	447	205	6	.....	.....
Hardware.....	41,213	3,465	4,471	7,512	21,459	4,279	26	1
Hardware, saddlery.....	2,511	124	249	306	1,634	198	.....	.....
Hat and cap materials.....	1,775	80	399	316	857	123	.....	.....
Hats and caps, other than felt, straw, and wool.....	7,322	634	4,258	1,633	728	69	.....	.....
Hats, fur-felt.....	21,318	3,511	12,377	3,615	1,560	255	.....	.....
Hats, straw.....	9,483	591	1,596	1,785	4,741	770	.....	.....
Hats, wool-felt.....	1,249	18	257	554	219	201	.....	.....
Hones and whetstones.....	170	4	1	16	39	110	.....	.....
Horseshoes, not made in steel works or rolling mills.....	588	106	16	179	220	67	.....	.....
Hosiery and knit goods.....	150,520	3,673	7,860	87,549	34,260	16,515	663	.....
House-furnishing goods, not elsewhere specified.....	6,935	654	2,284	1,222	2,343	371	61	.....
Ice, manufactured.....	23,011	548	58	664	2,181	3,741	5,286	2,492
Ink, printing.....	1,391	61	405	336	497	92	.....	8,041
Ink, writing.....	512	30	273	51	154	4	.....	.....
Instruments, professional and scientific.....	7,107	563	1,843	2,637	1,597	467	.....	.....
Iron and steel, blast furnaces.....	29,356	11	80	1,551	13	4,474	3,029	9,119
Iron and steel, steel works and rolling mills.....	248,716	19,972	19,084	25,565	45,996	77,820	25,714	34,089
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.....	10,658	2,462	168	1,522	5,665	841	.....	476
Iron and steel, cast-iron pipe.....	12,557	171	.....	1,303	3,026	8,057	.....	.....

AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914—Continued.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.							
	Total.	In establishments where prevailing hours of labor per week were—						
		48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
Iron and steel, doors and shutters	1,985	246	278	929	504	28	-----	-----
Iron and steel forgings, not made in steel works or rolling mills.	10,689	1,339	1,482	2,268	4,923	434	243	-----
Iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills.	2,644	481	121	958	866	218	-----	-----
Iron and steel, wrought pipe.	8,845	33	124	608	4,469	3,611	-----	-----
Ivory, shell, and bone work, not including combs and hairpins.	795	79	45	314	286	71	-----	-----
Japanning.	228	19	67	14	83	45	-----	-----
Jewelry.	28,289	3,275	5,041	9,635	9,837	465	34	2
Jewelry and instrument cases.	2,393	111	674	1,302	259	47	-----	-----
Jute goods.	7,987	6	59	6,153	1,409	341	19	-----
Labels and tags.	2,600	474	1,038	821	249	18	-----	-----
Lamps and reflectors.	7,134	413	1,659	3,091	251	62	-----	-----
Lapidary work.	584	253	241	46	44	-----	-----	-----
Lard, not made in slaughtering and meat-packing establish- ments.	19	-----	-----	3	2	14	-----	-----
Lasts.	2,094	8	101	1,066	804	115	-----	-----
Lead, bar, pipe, and sheet.	585	3	85	58	356	83	-----	-----
Leather goods, not elsewhere specified.	7,071	511	2,032	2,287	2,040	197	4	-----
Leather, tanned, curried, and finished.	55,936	909	3,241	10,355	22,205	19,209	15	2
Lime.	12,429	220	237	1,142	1,750	7,257	1,275	87
Linen goods.	3,567	90	-----	1,616	1,846	15	-----	461
Liquors, distilled.	6,295	775	243	1,605	309	2,398	677	250
Liquors, malt.	62,070	44,209	2,258	10,160	2,154	2,817	319	46
Liquors, vinous.	2,292	104	68	252	424	1,379	56	9
Lithographing.	15,171	12,622	1,910	528	20	91	-----	-----
Locomotives, not made by rail- road companies.	17,391	189	5,594	1,285	10,323	-----	-----	-----
Looking-glass and picture frames	4,787	360	547	1,153	1,463	1,260	4	-----
Lubricating greases.	476	78	96	44	177	75	6	-----
Lumber and timber products.	479,786	12,850	10,923	21,615	24,638	355,548	52,192	1,138
Lumber, planing-mill products, not including planing mills connected with sawmills.	96,214	14,173	11,349	25,402	16,605	28,213	400	9
Malt.	1,989	763	330	353	287	140	116	63
Marble and stone work.	54,981	24,728	8,566	7,956	4,764	8,288	679	-----
Matches.	3,800	725	30	2,105	718	222	-----	-----
Mats and matting, from cocoa fiber and grass.	869	19	-----	225	606	19	-----	-----
Mattresses and spring beds.	11,747	2,044	1,363	2,574	3,186	2,572	8	-----
Millinery and lace goods.	45,274	4,557	15,519	18,765	5,368	1,048	17	-----
Mineral and soda waters.	15,506	2,468	646	3,591	1,236	7,343	159	55
Minerals and earths, ground.	4,707	91	63	309	699	3,199	140	185
Mirrors, framed and unframed.	3,184	134	1,246	716	862	226	-----	21
Models and patterns, not includ- ing paper patterns.	4,274	725	1,489	821	1,057	180	2	-----
Motorcycles, bicycles, and parts.	6,680	42	444	1,722	4,404	66	2	-----
Mucilage and paste.	700	122	139	186	230	23	-----	-----
Musical instruments and mate- rials, not specified.	1,831	87	767	411	449	117	-----	-----
Musical instruments, organs.	3,063	104	197	1,129	698	935	-----	-----
Musical instruments, pianos.	23,877	1,305	2,974	13,043	4,320	1,965	270	-----
Musical instruments, piano and organ materials.	10,616	345	2,098	5,779	1,480	914	-----	-----
Needles, pins, and hooks and eyes	5,339	20	171	1,178	3,206	764	-----	-----
Nets and seines.	1,058	2	27	392	251	386	-----	-----
Oakum.	116	4	-----	5	4	103	-----	-----
Oil, cottonseed, and cake.	21,810	28	454	204	753	1,861	3,508	14,827
Oil, essential.	249	2	26	54	1	132	1	33
Oil, linseed.	1,488	1	-----	-----	78	220	399	732
Oil, not elsewhere specified.	2,049	169	150	400	390	825	115	-----
Oilcloth and linoleum, floor.	4,428	6	439	441	2,273	1,269	-----	58
Oilcloth, enameled.	1,223	-----	85	326	739	73	-----	-----
Oleomargarine.	917	113	-----	20	54	730	-----	-----
Optical goods.	7,919	437	2,894	3,197	1,281	109	1	-----
Pants.	13,349	547	1,646	3,788	4,692	1,665	861	150

## AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914—Continued.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.								
	In establishments where prevailing hours of labor per week were—								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
Paper and wood pulp.....	88,457	10,624	5,581	12,702	10,427	18,993	13,692	16,113	325
Paper goods, not elsewhere specified.....	13,495	507	3,236	3,185	3,859	2,039	598	71	.....
Paper patterns.....	1,073	1,009	41	23	.....	.....	.....	.....	.....
Patent medicines and compounds.....	13,328	4,223	4,251	2,241	1,565	1,008	20	19	1
Paving materials.....	19,540	1,390	876	3,193	2,053	11,522	506	.....	.....
Peanuts, grading, roasting, cleaning, and shelling.....	2,353	43	375	382	541	1,010	2	.....	.....
Pencils, lead.....	4,330	.....	35	2,017	2,101	177	.....	.....	.....
Pens, fountain and stylographic.....	1,154	36	174	548	396	.....	.....	.....	.....
Pens, gold.....	246	11	39	164	32	.....	.....	.....	.....
Pens, steel.....	573	.....	525	34	13	1	.....	.....	.....
Perfumery and cosmetics.....	2,897	886	1,249	471	256	35	.....	.....	.....
Petroleum, refining.....	25,366	1,241	848	12,621	56	2,502	6,502	92	1,504
Phonographs and graphophones.....	9,381	28	1,409	4,984	2,960	.....	.....	.....	.....
Photo-engraving, not done in printing establishments.....	6,211	5,156	794	192	60	9	.....	.....	.....
Photographic apparatus.....	2,016	595	641	351	414	15	.....	.....	.....
Photographic materials.....	6,658	117	5,670	218	604	49	.....	.....	.....
Pickles, preserves, and sauces.....	12,590	858	708	3,332	4,429	3,142	106	15	.....
Pipes, tobacco.....	2,354	29	1,615	217	480	13	.....	.....	.....
Plated ware.....	8,717	579	1,934	1,199	4,297	708	.....	.....	.....
Plumbers' supplies, not elsewhere specified.....	18,479	2,509	2,093	7,800	3,539	2,538	.....	.....	.....
Pocketbooks.....	1,466	212	275	702	274	3	.....	.....	.....
Pottery.....	26,705	6,207	6,846	8,860	2,142	2,582	68	.....	.....
Poultry, killing and dressing.....	1,353	21	34	196	7	959	125	11	.....
Printing and publishing, book and job.....	113,121	80,023	19,145	12,093	1,293	549	13	5	.....
Printing and publishing, music.....	873	95	676	60	39	3	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	114,375	80,130	7,977	17,057	5,139	3,765	185	31	91
Printing materials.....	423	105	69	181	61	7	.....	.....	.....
Pulp goods.....	1,654	121	.....	380	753	187	213	.....	.....
Pulp wood.....	421	20	.....	12	.....	309	.....	80	.....
Pumps, not including power pumps.....	2,134	147	101	277	1,270	339	.....	.....	.....
Pumps, steam and other power.....	6,188	183	848	2,952	2,053	152	.....	.....	.....
Refrigerators.....	5,617	270	517	1,166	1,984	1,680	.....	.....	.....
Regalia and society badges and emblems.....	2,010	312	480	1,068	139	11	.....	.....	.....
Rice, cleaning and polishing.....	1,253	28	18	6	7	40	710	444	.....
Roofing materials.....	4,088	561	142	921	945	1,172	347	.....	.....
Rubber goods, not elsewhere specified.....	50,220	3,216	9,621	8,019	25,427	3,548	389	.....	.....
Rules, ivory and wood.....	408	.....	1	313	83	11	.....	.....	.....
Saddlery and harness.....	12,969	464	598	4,040	4,518	3,323	15	11	.....
Safes and vaults.....	2,972	213	295	522	1,844	98	.....	.....	.....
Salt.....	5,089	340	.....	772	792	2,538	213	223	211
Sand and emery paper and cloth.....	681	.....	165	30	117	369	.....	.....	.....
Sand-lime brick.....	557	81	.....	111	10	326	29	.....	.....
Sausage, not made in slaughtering and meat packing establishments.....	2,244	190	169	546	267	1,001	57	8	6
Saws.....	4,560	967	221	2,955	404	13	.....	.....	.....
Scales and balances.....	4,467	48	549	2,130	1,365	375	.....	.....	.....
Screws, machine.....	3,643	1,028	80	684	1,478	373	.....	.....	.....
Screws, wood.....	4,446	2,168	.....	1,436	839	3	.....	.....	.....
Sewing-machine cases.....	3,699	61	.....	.....	2,022	1,616	.....	.....	.....
Sewing machines and attachments.....	14,308	499	9,232	2,087	2,467	23	.....	.....	.....
Shipbuilding, iron and steel.....	33,508	11,928	6,861	6,900	928	6,393	498	.....	.....
Shipbuilding, wooden, including boat building.....	10,981	2,802	777	5,420	596	1,378	8	.....	.....
Shirts.....	51,972	4,051	12,562	27,222	7,363	439	335	.....	.....
Show cases.....	2,257	116	277	1,036	513	315	.....	.....	.....
Signs and advertising novelties.....	9,566	2,568	3,097	2,360	1,372	149	20	.....	.....
Silk goods, including throwsters.....	108,170	1,169	4,916	56,632	43,243	2,190	20	.....	.....
Silversmithing and silverware.....	7,070	76	970	2,449	3,575	.....	.....	.....	.....
Slaughtering and meat packing.....	98,832	4,728	3,263	13,188	8,734	68,019	511	355	34
Smelting and refining, copper.....	17,731	336	2,225	864	11,170	2,336	580	.....	220
Smelting and refining, lead.....	7,385	72	.....	727	5,073	108	1,318	87	.....

AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914—Continued.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.							
	In establishments where prevailing hours of labor per week were—							
	Total.	48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
Smelting and refining, zinc.....	9,617	447	3,902	.....	2,048	2,043	1,107	70
Smelting and refining, not from the ore.....	2,585	42	8	176	259	618	314	235
Soap.....	14,172	1,027	3,446	1,514	6,371	1,814	.....	.....
Soda-water apparatus.....	2,229	390	225	1,267	294	53	.....	.....
Sporting and athletic goods.....	5,602	226	1,573	2,049	1,705	49	.....	.....
Springs, steel, car and carriage, not made in steel works or rolling mills.....	3,703	478	477	377	1,473	817	81	.....
Stamped and enameled ware, not elsewhere specified.....	28,731	2,627	3,864	6,077	11,623	4,028	512	.....
Stationery goods, not elsewhere specified.....	7,728	981	1,618	3,035	2,021	73	.....	.....
Statuary and art goods.....	1,988	604	560	382	144	298	.....	.....
Steam fittings and steam and hot- water heating apparatus.....	26,388	3,983	1,689	3,810	7,203	9,703	.....	.....
Steam packing.....	4,213	196	1,086	756	1,558	394	223	.....
Stencils and brands.....	446	53	276	72	27	18	.....	.....
Stereotyping and electrotyping.....	3,457	3,045	171	222	6	13	.....	.....
Stoves and hot-air furnaces.....	29,535	2,957	3,046	11,182	7,549	4,801	.....	.....
Stoves, gas and oil.....	7,790	2,613	286	1,401	2,379	1,111	.....	.....
Structural ironwork, not made in steel works or rolling mills.....	47,167	1,533	8,596	13,905	19,523	3,610	.....	.....
Sugar, beet.....	7,997	.....	.....	180	108	.....	551	446
Sugar, cane.....	3,632	.....	2	82	14	395	208	1,215
Sugar, refining.....	11,253	614	591	.....	1,498	3,055	2,688	1,161
Sulphuric, nitric, and mixed acids.....	3,064	11	.....	229	379	490	937	764
Surgical appliances.....	4,282	423	536	878	2,249	196	.....	.....
Suspenders, garters, and elastic woven goods.....	9,646	831	1,804	2,440	4,391	180	.....	.....
Theatrical scenery.....	88	80	.....	8	.....	.....	.....	.....
Tin foil.....	1,031	1	83	480	467	.....	.....	.....
Tin plate and terneplate.....	5,238	2,190	7	2,657	378	6	.....	.....
Tinware, not elsewhere specified.....	22,584	497	2,183	8,975	8,023	2,811	95	.....
Tobacco, chewing and smoking, and snuff.....	25,980	1,275	1,677	4,952	16,478	1,582	16	.....
Tobacco, cigars and cigarettes.....	152,892	44,969	19,365	46,856	30,936	8,392	1,853	515
Tools, not elsewhere specified.....	16,866	2,202	3,455	2,519	7,936	754	.....	.....
Toys and games.....	7,887	386	1,000	2,619	3,304	578	.....	.....
Trunks and valises.....	9,911	466	1,589	2,498	3,566	1,756	36	.....
Turpentine and rosin.....	34,817	13,680	2,770	728	780	15,995	713	151
Type founding.....	1,054	21	736	263	34	.....	.....	.....
Typewriters and supplies.....	11,091	588	2,995	5,891	1,616	1	.....	.....
Umbrellas and canes.....	4,792	538	1,052	1,617	1,547	38	.....	.....
Upholstering materials, not else- where specified.....	4,426	130	346	808	1,226	1,825	91	.....
Varnishes.....	2,734	340	1,117	272	717	278	1	9
Vault lights and ventilators.....	601	205	170	91	104	31	.....	.....
Vinegar and cider.....	1,229	76	17	400	123	589	19	3
Wall paper, not made in paper mills.....	4,738	59	14	498	1,853	2,314	.....	.....
Wall plaster.....	5,389	127	185	909	555	2,895	140	578
Washing machines and clothes wringers.....	2,302	107	123	436	798	838	.....	.....
Waste.....	2,966	50	138	944	904	930	.....	.....
Watch and clock materials.....	670	7	121	176	322	44	.....	.....
Watch cases.....	3,514	481	185	616	1,875	357	.....	.....
Watches.....	12,390	.....	4,212	4,054	4,124	.....	.....	.....
Wheelbarrows.....	323	1	57	32	97	136	.....	.....
Whips.....	1,163	17	.....	208	829	109	.....	.....
Windmills.....	1,955	1	300	516	801	337	.....	.....
Window and door screens and weather strips.....	3,194	160	168	1,398	678	790	.....	.....
Window shades and fixtures.....	4,077	946	498	1,729	326	574	2	2
Wire.....	17,600	669	4,396	333	4,561	6,824	817	.....
Wirework, including wire rope and cable, not elsewhere speci- fied.....	12,126	410	1,389	2,107	5,244	2,976	.....	.....
Wood carpet.....	166	166	.....	.....	.....	.....	.....	.....

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AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY INDUSTRIES: 1914—Continued.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS.							
	Total.	In establishments where prevailing hours of labor per week were—						
		48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
Wood distillation, not including turpentine and rosin.....	2,782	103	.....	8	208	1,221	706	207
Wood preserving.....	2,830	47	51	215	173	2,180	98	42
Wood, turned and carved.....	11,615	294	1,405	1,772	3,535	4,588	4	17
Wooden goods, not elsewhere specified.....	6,418	227	387	905	2,905	1,994	.....	.....
Wool pulling.....	708	125	12	151	153	267	.....	.....
Wool scouring.....	1,059	.....	.....	190	516	353	.....	.....
Wool shoddy.....	2,145	7	.....	516	498	731	393	.....
Woolen and worsted goods.....	158,692	1,062	2,223	88,305	56,928	10,126	8	40
All other industries <sup>1</sup> .....	357	157	159	.....	.....	5	.....	36

<sup>1</sup>Includes: Millstones; ordnance and accessories; pulp, from fiber other than wood; and whalebone cutting.

AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY GEOGRAPHIC DIVISIONS FOR 1914 AND 1909 AND BY STATES FOR 1914.

DIVISION AND STATE.	AVERAGE NUMBER OF WAGE EARNERS.							
	Total.	In establishments where prevailing hours of labor per week were—						
		48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
UNITED STATES:								
1914.....	7,036,337	833,330	945,735	1,818,390	1,543,018	1,487,891	247,798	104,294
1909.....	6,615,046	523,652	481,157	1,019,438	1,999,307	2,017,280	344,011	116,083
GEOGRAPHIC DIVS:								
New England—								
1914.....	1,140,233	89,694	113,217	477,074	378,977	69,250	9,744	1,261
1909.....	1,101,290	51,613	48,576	159,383	674,662	147,915	13,015	3,296
Middle Atlantic—								
1914.....	2,355,940	245,925	464,095	714,601	541,442	272,012	53,597	47,223
1909.....	2,207,747	180,067	245,863	325,179	766,499	533,903	74,711	40,208
East North Central—								
1914.....	1,680,281	238,165	241,560	335,575	416,935	364,630	51,653	19,538
1909.....	1,513,764	123,872	102,083	291,908	366,362	521,120	37,652	34,248
West North Central—								
1914.....	381,595	66,810	35,832	91,301	49,023	114,354	17,189	3,919
1909.....	374,337	44,763	23,837	72,480	61,556	145,948	15,138	4,738
South Atlantic—								
1914.....	685,342	62,100	53,411	66,091	84,619	350,620	50,558	12,253
1909.....	663,015	46,034	32,726	56,542	78,412	319,626	108,368	12,847
East South Central—								
1914.....	264,378	25,332	13,646	39,366	35,331	113,058	23,062	8,332
1909.....	261,772	19,876	7,698	30,776	20,418	123,564	44,437	7,368
West South Central—								
1914.....	211,940	26,264	7,780	29,733	9,250	98,749	24,988	9,011
1909.....	204,520	15,137	4,889	24,743	6,130	105,470	32,104	9,771
Mountain—								
1914.....	81,113	17,867	5,595	11,259	17,306	19,220	7,100	1,618
1909.....	75,435	10,452	3,346	11,887	15,651	21,985	7,323	2,757
Pacific—								
1914.....	235,515	61,173	10,599	53,390	10,135	85,998	9,907	1,139
1909.....	213,166	31,838	12,139	46,540	9,617	97,749	11,263	850



AVERAGE NUMBER OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY GEOGRAPHIC DIVISIONS. FOR 1914 AND 1909 AND BY STATES FOR 1914—Contd.

DIVISION AND STATE.	AVERAGE NUMBER OF WAGE EARNERS.							
	Total.	48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
In establishments where prevailing hours of labor per week were—								
<b>NEW ENGLAND:</b>								
Maine.....	82,149	5,556	3,799	13,268	39,681	16,345	3,132	292
New Hampshire.....	78,993	4,480	5,021	5,598	57,764	5,162	631	232
Vermont.....	32,704	5,579	4,727	6,452	10,314	5,077	345	182
Massachusetts.....	606,698	49,358	68,221	340,219	123,488	21,614	3,133	157
Rhode Island.....	113,425	5,871	3,520	72,681	26,013	4,975	243	21
Connecticut.....	226,264	18,850	27,929	38,856	121,717	16,077	2,260	377
<b>MIDDLE ATLANTIC:</b>								
New York.....	1,057,857	136,221	296,578	357,822	135,878	105,769	16,476	5,137
New Jersey.....	373,605	28,298	62,279	60,538	177,308	32,349	7,051	3,523
Pennsylvania.....	924,478	81,406	105,238	296,241	228,256	133,894	30,070	38,563
<b>EAST NORTH CENTRAL:</b>								
Ohio.....	510,435	69,975	78,201	116,627	126,649	89,552	15,815	9,591
Indiana.....	197,503	29,358	23,549	29,299	50,232	55,021	6,733	1,393
Illinois.....	506,943	79,601	99,322	113,574	102,074	88,238	16,676	4,831
Michigan.....	271,090	31,326	31,353	57,614	75,878	64,861	5,568	1,677
Wisconsin.....	194,310	27,905	9,135	18,461	62,102	66,958	6,861	2,046
<b>WEST NORTH CENTRAL:</b>								
Minnesota.....	92,834	14,041	8,499	18,116	13,753	35,563	1,744	934
Iowa.....	63,113	10,966	4,210	12,484	7,662	22,800	2,857	1,330
Missouri.....	152,182	28,576	19,252	47,528	20,480	29,786	4,573	653
North Dakota.....	3,275	765	116	560	472	996	285	65
South Dakota.....	3,788	846	172	953	87	1,496	181	46
Nebraska.....	25,144	4,422	2,268	5,077	1,706	9,756	1,703	130
Kansas.....	41,259	7,194	1,315	6,583	4,863	13,957	5,846	761
<b>SOUTH ATLANTIC:</b>								
Delaware.....	22,155	1,263	2,050	8,444	6,000	4,033	203	131
Maryland.....	111,585	14,583	20,508	18,238	20,142	29,942	5,341	1,579
District of Columbia.....	8,877	4,839	691	977	767	381	1,199	5
Virginia.....	102,820	7,205	10,569	8,495	20,172	45,181	8,070	1,746
West Virginia.....	71,078	12,286	7,316	7,503	6,201	26,454	10,141	772
North Carolina.....	136,844	2,361	2,578	3,948	17,844	100,236	7,429	1,937
South Carolina.....	71,914	1,375	1,112	2,365	2,895	60,046	2,607	1,288
Georgia.....	104,461	8,809	5,915	8,538	9,096	59,608	7,162	3,868
Florida.....	55,608	9,379	2,672	7,583	1,502	24,739	8,406	927
<b>EAST SOUTH CENTRAL:</b>								
Kentucky.....	64,586	10,672	6,368	11,800	10,185	18,053	5,553	433
Tennessee.....	74,373	4,550	3,423	13,393	18,796	26,725	3,522	2,745
Alabama.....	78,717	6,765	1,564	9,804	4,777	36,131	12,797	3,507
Mississippi.....	46,702	3,345	2,291	4,369	1,573	32,149	1,190	1,647
<b>WEST SOUTH CENTRAL:</b>								
Arkansas.....	41,979	3,346	1,122	3,436	1,458	30,297	1,158	916
Louisiana.....	77,665	6,175	2,727	7,387	4,340	35,777	16,534	2,070
Oklahoma.....	17,443	4,369	2,247	2,277	687	3,996	1,719	1,332
Texas.....	74,853	12,374	1,684	16,633	2,765	28,679	5,577	4,693
<b>MOUNTAIN:</b>								
Montana.....	13,704	2,552	2,598	2,531	3,220	2,429	369	2
Idaho.....	8,919	586	53	1,328	265	6,223	409	30
Wyoming.....	2,989	1,622	35	447	26	644	192	13
Colorado.....	27,278	7,442	1,723	2,647	5,438	5,179	2,723	1,493
New Mexico.....	3,776	367	8	247	568	1,317	1,195	13
Arizona.....	6,898	873	53	880	3,046	1,367	566	46
Utah.....	13,894	3,977	1,011	2,158	3,331	1,826	1,226	18
Nevada.....	3,655	448	114	1,021	1,412	235	420	3
<b>PACIFIC:</b>								
Washington.....	67,205	10,518	1,464	7,331	4,259	40,855	1,784	518
Oregon.....	28,829	3,979	775	6,917	1,324	14,839	528	420
California.....	139,481	46,676	8,360	39,142	4,552	30,304	7,595	2,651

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PER CENT OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY GEOGRAPHIC DIVISIONS FOR 1914 AND 1909 AND BY STATES FOR 1914.

[Computed from figures on pages 32 and 33.]

Division and State.	Per cent of wage earners.							
	Total.	In establishments where prevailing hours of labor per week were—						
		48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
United States:								
1914.....	100.0	11.8	13.4	25.8	21.1	21.1	3.5	1.5
1909.....	100.0	7.9	7.3	15.4	30.2	30.5	5.2	1.8
Geographic divisions:								
New England—								
1914.....	100.0	7.9	9.9	41.8	33.2	6.1	.9	.1
1909.....	100.0	4.7	4.4	14.5	61.3	13.4	1.2	.3
Middle Atlantic—								
1914.....	100.0	10.4	19.7	30.3	23.0	11.6	2.3	.7
1909.....	100.0	8.2	11.1	14.7	34.7	24.2	3.4	1.9
East North Central—								
1914.....	100.0	14.2	14.4	20.0	24.8	21.7	3.1	.7
1909.....	100.0	8.2	6.7	19.3	24.2	34.4	2.5	2.4
West North Central—								
1914.....	100.0	17.5	9.4	23.9	12.9	30.0	4.5	.8
1909.....	100.0	12.0	6.4	19.4	16.4	39.0	4.0	1.6
South Atlantic—								
1914.....	100.0	9.1	7.8	9.6	12.4	51.2	7.4	.8
1909.....	100.0	6.9	4.9	8.5	11.8	48.2	16.3	1.3
East South Central—								
1914.....	100.0	9.6	5.2	14.9	13.4	42.8	8.7	2.4
1909.....	100.0	7.6	2.9	11.8	7.8	47.2	17.0	2.9
West South Central—								
1914.....	100.0	12.4	3.7	14.0	4.4	46.6	11.8	2.9
1909.....	100.0	7.4	2.4	12.1	3.0	51.6	15.7	3.1
Mountain—								
1914.....	100.0	22.0	6.9	13.9	21.3	23.7	8.8	1.4
1909.....	100.0	13.9	4.4	15.8	20.8	29.1	9.7	2.7
Pacific—								
1914.....	100.0	26.0	4.5	22.7	4.3	36.5	4.2	1.4
1909.....	100.0	14.9	5.7	21.8	4.5	45.9	5.3	1.5
1914.								
New England.....	100.0	7.9	9.9	41.8	33.2	6.1	.9	.1
Maine.....	100.0	6.8	4.6	16.2	48.3	19.9	3.8	.1
New Hampshire.....	100.0	5.7	6.4	7.1	73.1	6.5	.8	.1
Vermont.....	100.0	17.1	14.5	19.7	31.5	15.5	1.1	.1
Massachusetts.....	100.0	8.1	11.2	56.1	20.4	3.6	.5	(1)
Rhode Island.....	100.0	5.2	3.1	64.1	22.9	4.4	.2	(1)
Connecticut.....	100.0	8.3	12.3	17.2	53.8	7.1	1.0	.2
Middle Atlantic.....	100.0	10.4	19.7	30.3	23.0	11.6	2.3	.7
New York.....	100.0	12.9	28.0	33.8	12.8	10.0	1.6	.4
New Jersey.....	100.0	7.6	16.7	16.2	47.5	8.7	1.9	.6
Pennsylvania.....	100.0	8.8	11.4	32.0	24.7	14.5	3.3	1.2
East North Central.....	100.0	14.2	14.4	20.0	24.8	21.7	3.1	.7
Ohio.....	100.0	13.7	15.3	22.9	24.8	17.5	3.1	.8
Indiana.....	100.0	14.9	11.9	14.8	25.4	27.9	3.4	1.0
Illinois.....	100.0	15.7	19.6	22.4	20.1	17.4	3.3	.5
Michigan.....	100.0	11.6	11.6	21.3	28.0	23.9	2.1	1.0
Wisconsin.....	100.0	14.4	4.7	9.5	32.0	34.5	3.5	.4
West North Central.....	100.0	17.5	9.4	23.9	12.9	30.0	4.5	.8
Minnesota.....	100.0	15.1	9.2	19.5	14.8	38.3	1.9	1.0
Iowa.....	100.0	17.4	6.7	19.8	12.1	36.1	4.5	1.3
Missouri.....	100.0	18.8	12.7	31.2	13.5	19.6	3.0	.9
North Dakota.....	100.0	23.4	3.5	17.1	14.4	30.4	8.7	.5
South Dakota.....	100.0	22.3	4.5	25.2	2.3	39.5	4.8	.2
Nebraska.....	100.0	17.6	9.0	20.2	6.8	38.8	6.8	.3
Kansas.....	100.0	17.4	3.2	16.0	11.8	33.8	14.2	1.8
South Atlantic.....	100.0	9.1	7.8	9.6	12.4	51.2	7.4	.8
Delaware.....	100.0	5.7	9.3	38.1	27.1	18.2	.9	.1
Maryland.....	100.0	13.1	18.4	16.3	18.1	26.8	4.8	1.1
District of Columbia.....	100.0	54.5	7.8	11.0	8.6	4.3	13.5	.2

<sup>1</sup> Less than one-tenth of 1 per cent.

PER CENT OF WAGE EARNERS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK IN ESTABLISHMENTS WHERE EMPLOYED, BY GEOGRAPHIC DIVISIONS FOR 1914 AND 1909 AND BY STATES FOR 1914—Concluded.

Division and State.	Per cent of wage earners.							
	Total.	In establishments where prevailing hours of labor per week were—						
		48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72. Over 72.
South Atlantic—Contd.								
Virginia.....	100.0	7.0	10.3	8.3	19.6	43.9	7.9	1.7
West Virginia.....	100.0	17.3	10.3	10.6	8.7	37.2	14.3	1.1
North Carolina.....	100.0	1.7	1.9	2.9	13.0	73.3	5.4	1.4
South Carolina.....	100.0	1.9	1.6	3.3	4.0	83.5	3.6	1.8
Georgia.....	100.0	8.4	5.7	8.2	8.7	57.1	6.9	3.7
Florida.....	100.0	16.9	4.8	13.6	2.7	44.5	15.1	1.7
East South Central.....	100.0	9.6	5.2	14.9	13.4	42.8	8.1	3.2
Kentucky.....	100.0	16.5	9.9	18.3	15.8	28.0	8.6	.7
Tennessee.....	100.0	6.1	4.6	18.0	25.3	35.9	4.7	3.7
Alabama.....	100.0	8.6	2.0	12.5	6.1	45.9	16.3	4.5
Mississippi.....	100.0	7.2	4.9	9.4	3.4	68.8	2.6	3.5
West South Central.....	100.0	12.4	3.7	14.0	4.4	46.6	11.8	4.3
Arkansas.....	100.0	8.0	2.7	8.2	3.5	72.2	2.8	2.2
Louisiana.....	100.0	8.0	3.5	9.5	5.6	46.1	21.3	2.7
Oklahoma.....	100.0	25.1	12.9	13.1	3.9	22.9	9.9	7.6
Texas.....	100.0	16.5	2.3	22.2	3.7	38.3	7.5	6.3
	100.0	22.0	6.9	13.9	21.3	23.7	8.8	2.0
Mountain.....								
Montana.....	100.0	18.6	19.0	18.5	23.5	17.7	2.7	(1)
Idaho.....	100.0	6.6	.6	14.9	3.0	69.8	4.6	.3
Wyoming.....	100.0	54.3	1.2	15.0	.9	21.6	6.4	.4
Colorado.....	100.0	27.3	6.3	9.7	19.9	19.0	10.0	5.5
New Mexico.....	100.0	9.7	.2	6.5	15.0	34.9	31.7	.3
Arizona.....	100.0	12.7	.8	12.8	44.2	19.8	8.2	.7
Utah.....	100.0	28.6	7.3	15.5	24.0	13.1	8.8	.1
Nevada.....	100.0	12.3	3.1	27.9	38.6	6.4	11.5	.1
Pacific.....	100.0	26.0	4.5	22.7	4.3	36.5	4.2	.5
Washington.....	100.0	15.7	2.2	10.9	6.3	60.8	2.7	.8
Oregon.....	100.0	13.8	2.7	24.0	4.6	51.5	1.8	1.5
California.....	100.0	33.5	6.0	28.1	3.3	21.7	5.5	.1

<sup>1</sup> Less than one-tenth of 1 per cent.

#### UNION SCALE OF HOURS OF LABOR IN THE UNITED STATES, MAY 15, 1916.

Bulletin 214 of the United States Bureau of Labor Statistics, soon to be issued, will show the union scale of wages and hours of labor in the principal occupations having time rates in 48 of the leading industrial cities of the United States. The hours of labor in the several trades and cities covered by the bulletin are presented in the table following.

## UNION SCALE OF HOURS OF LABOR PER DAY IN THE PRINCIPAL TRADES

[From Bulletin No. 214 of the

Line No.	Trades.	Atlanta.	Baltimore.	Birmingham.	Boston.	Bridgeport.	Buffalo.	Charleston, S. C.	Chicago.	Cincinnati.	Cleveland.	Columbus.	Dallas.	Denver.	Detroit.	Fall River.	Grand Rapids.	Houston.	Indianapolis.	Jacksonville.
<i>Bakery.</i>																				
1	Bakers.....	9 $\frac{1}{2}$	8	8	9	9	8	8	8	8	8	9 $\frac{1}{2}$	8 $\frac{1}{2}$	9	8 $\frac{1}{2}$				9 $\frac{1}{2}$	
2	Do.....		10	9 $\frac{1}{2}$	10			8 $\frac{1}{2}$	9	8 $\frac{1}{2}$	9									
3	Do.....																			
4	Do.....																			
<i>Brewery and bottling house men.</i>																				
5	Bottlers.....	8	8	8	9	8		8	8	8	8	8	8	8	8	8	8	8	8	9
6	Do.....																			
7	Brewers.....	8	8	8	8	8		10	8	8	8	10	8	8	8	8	10	8	8	8
8	Chauffeurs and drivers.....	10	9	9	9	9		9	9	9	9	10	10	9	9	9	10	9	9	9
9	Do.....																			
10	Do.....																			
11	Coopers.....				8	8			8	8	8	8		8	8		8		8	
12	Elevator men.....				8	8			8	8	8	8		8	8		8		8	
13	Engineers.....	8	8	8	8	8			8	8	8	8		8	8		8		8	10
14	Firemen.....	8	8	8	8	8			8	8	8	8		8	8		8		8	
15	Labelers, bottle beer.....	8	8	8	8	8			8	8	8	10	8	8	8		8		8	
16	Laborers.....	10	8	8	8	8			10	8	8	8	8	8	8		8		10	
17	Do.....	10	8	8	8	8														
18	Do.....																			
19	Malsters.....								8	8	8	8		8	8		8		8	
20	Oilers.....	8	8	8	8	8			8	8	8	8		8	8		8		8	
21	Packers, bottle beer.....	8	8	8	8	8			8	8	8	8		8	8		8		8	
22	Stablemen.....	10	9	9	9	9		10	9	10	10	10	10	9	9		10	8	9	
23	Do.....																			
24	Washers.....								8	8	8	8		8	8		8		8	
25	Washhouse men.....	8	8	8	8	8			8	8	8	8		8	8		8		8	
26	Watchmen.....	10		8	12				12								12	10	8	11
<i>Building.</i>																				
27	Asbestos workers.....	8	8	8	8	8		8	8	8	8	8		8	8		8		8	
28	Bricklayers.....	9	8	8	8	8		9	8	8	8	8	8	8	8		8	8	8	8
29	Bricklayers, sewer, tunnel, and caisson work.....																			
30	Building laborers.....			8					8	9	8		8	8	9		9	8		
31	Do.....																			
32	Carpenters.....	9	8	8	8	8		9	8	8	8	8	8	8	8		8	8	8	8
33	Carpenters, Millwrights.....																			
34	Carpenters, Parquetry floor layers.....				8															
35	Cement workers:																			
36	Finishers.....	8	8	8	8	8		8	9	8	8	8		8	9			8	9	
37	Finishers' helpers.....																			
38	Laborers.....				8	8			8	8	8	8		8	8					
39	Composition roofers.....				8	8			8	8	8	8		8	8					
40	Do.....																			
41	Composition roofers' helpers.....				8	8			8	8	8	8		8	8					
42	Elevator constructors.....	9	8	8	8	8			8	8	8	8		8	8		8	8	8	8
43	Elevator constructors' helpers.....	9	8	8	8	8			8	8	8	8		8	8		8	8	8	8
44	Engineers: Portable and hoisting.....	9	8	8	8	8			8	8	8	8		8	8		9	8	8	8
45	Do.....																			
46	Hod carriers.....	8	8	8	8	8			8	8	8	8		8	8		9	8	8	8
47	Inside wiremen.....				8	8			8	8	8	8		8	8		8	8	8	8
48	Inside wiremen: Fixture hangers.....				8	8			8	8	8	8		8	8		8	8	8	8
49	Lathers.....				8	8			8	8	8	8		8	8		8	8	8	8
50	Marble setters.....	8	8	8	8	8			8	8	8	8		8	8		8	8	8	8
51	Marble setters' helpers.....				8	8			8	8	8	8		8	8		8	8	8	8
52	Painters.....	9	8	8	8	8		8	8	8	8	8		8	8		8	8	8	8
53	Painters: Fresco.....				8	8			8	8	8	8		8	8		8	8	8	8
54	Painters: Sign.....				8	8			8	8	8	8		8	8		8	8	8	8
55	Plasterers.....	9	8	8	8	8		9	8	8	8	8		8	8		8	8	8	8
56	Plasterers' laborers.....				8	8			8	8	8	8		8	8		8	8	8	8
57	Plumbers and gas fitters.....	9	8	8	8	8		8	8	8	8	8		8	8		8	8	8	8
58	Sheet-metal workers.....	9	8	8	8	8			8	8	8	8		8	8		8	8	8	8
59	Do.....	10	9	9					9	9									9	
60	Do.....																		10	
61	Slate and tile roofers.....		8		8	8			8	8	8	8		8	8		8	8	8	8
62	Steam fitters.....	9	8	8	8	8		8	8	8	8	8		8	8		8	8	8	8
63	Steam fitters' helpers.....		8	8	8	8		8	8	8	8	8		8	8		8	8	8	8
64	Stone masons.....	9	8	8	8	8		8	8	8	8	8		8	8		8	8	8	8





## UNION SCALE OF HOURS OF LABOR PER DAY IN THE PRINCIPAL TRADES

[From Bulletin No. 214 of the

Line No.	Trades.	Atlanta.	Baltimore.	Birmingham.	Boston.	Bridgeport.	Buffalo.	Charleston, S. C.	Chicago.	Cincinnati.	Cleveland.	Columbus.	Dallas.	Denver.	Detroit.	Fall River.	Grand Rapids.	Houston.	Indianapolis.	Jacksonville.
<i>Building—Concluded.</i>																				
64	Structural iron workers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
65	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
66	Structural iron workers: Fin- ishers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
67	Structural iron workers: Fin- ishers' helpers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
68	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
69	Tile layers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
70	Tile layers' helpers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
<i>Chauffeurs, teamsters, and drivers.</i>																				
71	Chauffeurs.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
72	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
73	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
74	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
75	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
76	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
77	Teamsters and drivers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
78	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
79	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
80	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
81	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
82	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
83	Freight handlers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
84	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
<i>Granite and stone.</i>																				
85	Granite cutters.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
86	Stone cutters.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
87	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
<i>Metal trades.</i>																				
88	Blacksmiths.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
89	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
90	Blacksmiths' helpers.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
91	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
92	Boiler makers.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
93	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
94	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
95	Boiler makers' helpers.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
96	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
97	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
98	Core makers.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
99	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
100	Machinists.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
101	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
102	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
103	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
104	Machinists' helpers.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
105	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
106	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
107	Metal polishers and buffers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
108	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
109	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
110	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
111	Molders: Iron.....	10	9	9	9	9	9	8	9	9	9	9	9	9	9	9	9	9	9	9
112	Do.....	10	9	9	9	9	9	8	9	9	9	9	9	9	9	9	9	9	9	9
113	Pattern makers: Wood.....	8	9	9	9	9	8	8	9	8	10	9	9	9	9	9	9	9	9	9
114	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
115	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
116	Do.....	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
<i>Millwork.</i>																				
117	Carpenters.....	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
118	Do.....	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
119	Painters: Hardwood finishers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

IN REPRESENTATIVE CITIES OF THE UNITED STATES, MAY 15, 1916—Continued.

Bureau of Labor Statistics.]

Kansas City.	Little Rock.	Los Angeles.	Louisville.	Manchester.	Memphis.	Milwaukee.	Minneapolis.	Newark.	New Haven.	New Orleans.	New York.	Omaha.	Peoria.	Philadelphia.	Pittsburgh.	Portland.	Providence.	Richmond.	Rochester.	St. Louis.	St. Paul.	Salt Lake City.	San Francisco.	Scranton.	Seattle.	Spokane.	Washington.	Worcester.	Line No.
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	64
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	65
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	66
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	67
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	68
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	69
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	70
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	71
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	72
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	73
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	74
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	75
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	76
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	77
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	78
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	79
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	80
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	81
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	82
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	83
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	84
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	85
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	86
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	87
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	88
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	89
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	90
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	91
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	92
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	93
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	94
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	95
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	96
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	97
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	98
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	99
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	101
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	102
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	103
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	104
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	105
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	106
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	107
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	108
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	109
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	110
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	111
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	112
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	113
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	114
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	115
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	116
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	117
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	118
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	119

## UNION SCALE OF HOURS OF LABOR PER DAY IN THE PRINCIPAL TRADES

[From Bulletin No. 214 of the

Line No.	Trades.	Atlanta.	Baltimore.	Birmingham.	Boston.	Bridgeport.	Buffalo.	Charleston, S. C.	Chicago.	Cincinnati.	Cleveland.	Columbus.	Dallas.	Denver.	Detroit.	Fall River.	Grand Rapids.	Houston.	Indianapolis.	Jacksonville.
	<i>Printing and publishing, book and job.</i>																			
120	Bindery women.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
121	Bookbinders.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
122	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
123	Compositors.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
124	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
125	Electrotypers: Battery men and builders.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
126	Electrotypers: Finishers and molders.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
127	Linotype operators.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
128	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
129	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
130	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
131	Machine tenders.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
132	Machinist-operators.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
133	Press feeders.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
134	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
135	Pressmen:																			
136	Cylinder.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
137	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
138	Platen.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	<i>Printing and publishing, news-paper.</i>																			
139	Compositors:																			
140	Daywork.....	8	7	7	7	8	8	8	7½	8	7½	8	8	7½	8	8	8	8	8	8
141	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
142	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
143	Night work.....	8	7	7	7	8	8	8	7½	8	8	8	8	7½	8	8	8	8	8	8
144	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
145	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
146	Linotype operators:																			
147	Daywork.....	8	7	7	7	8	8	6½	6	8	7½	8	6½	7½	8	8	8	6½	8	8
148	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
149	Night work.....	8	7	7	7	8	8	6½	6	8	7½	8	6½	7½	8	8	8	6½	8	8
150	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
151	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
152	Machine tenders:																			
153	Daywork.....	8	7	7	7	8	8	6	6	8	8	8	8	7½	8	8	8	8	8	8
154	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
155	Night work.....	8	7	7	7	8	8	7	6	8	8	8	8	7½	8	8	8	8	8	8
156	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
157	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
158	Machinist operators:																			
159	Daywork.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
160	Night work.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
161	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
162	Pressmen, web presses:																			
163	Daywork.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
164	Night work.....	8	7	8	6	8	8	7½	8	7	7½	8	8	8	7	8	7	8	8	7
	<i>Soft drink establishment employees.</i>																			
165	Bottlers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
166	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
167	Chauffeurs and drivers.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
168	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
169	Do.....	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

IN REPRESENTATIVE CITIES OF THE UNITED STATES, MAY 15, 1916—Concluded.

Bureau of Labor Statistics.]

Kansas City.	Little Rock.	Los Angeles.	Louisville.	Manchester.	Memphis.	Milwaukee.	Minneapolis.	Newark.	New Haven.	New Orleans.	New York.	Omaha.	Peoria.	Philadelphia.	Pittsburgh.	Portland.	Providence.	Richmond.	Rochester.	St. Louis.	St. Paul.	Salt Lake City.	San Francisco.	Scranton.	Seattle.	Spokane.	Washington.	Worcester.	Line No.
8 <sup>3</sup>	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	120
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	121
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	122
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	123
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	124
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	125
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	126
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	127
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	128
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	129
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	130
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	131
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	132
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	133
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	134
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	135
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	136
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	137
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	138
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	139
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	140
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	141
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	142
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	143
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	144
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	145
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	146
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	147
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	148
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	149
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	150
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	151
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	152
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	153
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	154
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	155
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	156
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	157
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	158
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	159
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	160
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	161
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	162
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	163
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	164
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	165
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	166
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	167
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	168
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	169

From the above table the following summary table has been drawn. This summary shows the frequency of occurrence of the different working hours by industrial groups with all localities included in the report combined.

In this summary each trade in each locality with a single statement of hours is given equal importance and counts as one in consolidating the figures for the industry, regardless of the number of union members in the city. Further, when in any city some of the members work one schedule of hours, for example 8, and others work different hours, for example 10, each statement of hours in the city counts as one in its respective column in the table. This method has been followed for each occupation and the figures for the several occupations in an industry have been combined to form the total figures for the industry. Thus the 9½ hours of bakers in Baltimore counts as one in the classified group—"Between 9 and 10 hours." In Boston there are two statements of hours, 8 and 10; here the 8 hours counts as one in the classification group "8 hours" and the 10 counts as one in the group "10 hours." This summarization is crude, but it has not been practicable to make a summary based on the number of persons working each specified number of hours.

From the actual numbers of the table percentages have been computed. In the bakery trades in the majority of instances employees work 9 hours a day or over, 40.3 per cent of the instances falling in the 9-hour class. There is an 8-hour day in the majority of instances for the employees in brewing, building, granite and stone work, and printing. The predominating hours of work in the metal trades are 9 per day.

NUMBER OF INSTANCES IN WHICH TRADES WITHIN AN INDUSTRY WORKED EACH SPECIFIED NUMBER OF HOURS PER DAY, MAY 15, 1916.

Industry group.	Instances of occurrence.											
	Number.						Per cent.					
	Under 8 hrs.	8 hrs.	Between 8 and 9 hrs.	9 hrs.	Between 9 and 10 hrs.	Over 10 hrs.	Under 8 hrs.	8 hrs.	Between 8 and 9 hrs.	9 hrs.	Between 9 and 10 hrs.	Over 10 hrs.
Bakery.....	1	11	8	23	8	6	1.8	19.3	14.0	40.3	14.0	10.5
Brewery and bottling-house men.....		320	4	78	1	50	69.4	.9	16.9	.2	10.8	1.7
Building.....		1,059	3	49		6	94.8	.3	4.4		.5	
Chaufeurs, teamsters, and drivers.....	2	7	3	19		56	1.6	5.6	2.4	15.3	45.2	29.8
Granite and stone.....		78		1			98.7		1.3			
Metal trades.....		118	11	259	9	40	27.0	2.5	59.3	2.1	9.2	
Millwork.....		18	5	24			38.3	10.6	51.1			
Printing and publishing, book and job.....	15	312	48	11	3		3.9	80.2	12.3	2.8	.8	
Printing and publishing, newspaper.....	200	309					39.3	60.7				
Soft-drink establishment employees.....		6		9	2	5	27.3		40.9	9.1	22.7	



## REDUCTION TO EIGHT HOURS IN 1915, 1916, AND THE FIRST SIX MONTHS OF 1917.

The following tables present information as to the reduction of hours of labor to 8 per day or 48 per week in manufacturing and other establishments in the United States during 1915, 1916, and the first six months of 1917, as reported by leading trade-union periodicals, labor papers, trade journals, daily papers published in various parts of the country, annual and other reports issued by officers of labor organizations, and by replies to inquiries made by the bureau. While the information is necessarily incomplete it is believed that the 534 reports from which data were obtained include no duplications.

As indicated in the following summary, 302 of these reports show the number of establishments involved, the total reported being 3,477. The number of employees affected was shown in 193 reports, the total being 1,051,703.

## SUMMARY OF REPORTS.

Item.	1915	1916	1917 (6 months).	Total.
Total number of reports examined.....	121	210	203	534
Reports showing number of establishments involved:				
Number of reports.....	99	134	69	302
Number of establishments reported.....	224	3,027	226	3,477
Reports showing number of employees affected:				
Number of reports.....	75	84	34	193
Number of employees reported.....	171,978	342,138	537,587	1,051,703
Reports showing both establishments involved and employees affected:				
Number of reports.....	73	67	17	157
Number of establishments reported.....	174	2,801	135	3,110
Number of employees reported.....	168,563	124,125	50,902	343,590

The following tables show by States and by industries the number of establishments and also the number of employees for which reports were obtained covering the periods specified. As indicated in the preceding summary table the sources of the data do not in all cases give both number of establishments and number of employees, hence the total number of employees shown can not be related to the total number of establishments given.

8809°—17—4

# 44 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

NUMBER OF ESTABLISHMENTS REPORTED AS ADOPTING THE 8-HOUR DAY IN 1915, 1916, AND THE FIRST SIX MONTHS OF 1917, BY STATES AND BY INDUSTRIES.

[Based on 302 reports showing number of establishments involved.]

## By States.

State or industry.	1915	1916	1917 (6 mos.).	Total.	State or industry.	1915	1916	1917 (6 mos.).	Total.
Alabama.....	1	.....	.....	1	North Carolina.....	1	.....	.....	1
California.....	.....	16	11	27	North Dakota.....	1	.....	.....	1
Canal Zone.....	.....	1	.....	1	Ohio.....	53	77	24	154
Connecticut.....	31	2	3	36	Oregon.....	.....	1	.....	1
Delaware.....	13	1	.....	14	Pennsylvania.....	8	152	19	179
District of Columbia.....	.....	.....	4	4	Porto Rico.....	.....	5	.....	5
Illinois.....	4	62	7	73	Rhode Island.....	1	.....	1	2
Indiana.....	1	4	2	7	Tennessee.....	.....	2	.....	2
Iowa.....	.....	1	1	2	Texas.....	2	22	3	27
Kansas.....	.....	1	4	5	Utah.....	.....	.....	5	5
Kentucky.....	.....	1	.....	1	Vermont.....	.....	1	.....	1
Louisiana.....	22	1	.....	23	Virginia.....	.....	.....	1	1
Maryland.....	4	1	.....	5	Washington.....	.....	2	2	4
Massachusetts.....	25	21	102	148	West Virginia.....	.....	2	.....	2
Michigan.....	5	21	.....	26	Wisconsin.....	1	40	.....	41
Minnesota.....	.....	1	.....	1	Wyoming.....	.....	1	.....	1
Missouri.....	.....	34	4	38	Interstate.....	.....	2	17	19
New Hampshire.....	.....	.....	1	1					
New Jersey.....	28	81	8	117	Total.....	224	3,027	226	3,477
New York.....	23	2,472	7	2,502					

## By industries.

Aluminum manu- facturing.....	.....	1	.....	1	Iron and steel.....	.....	1	1	2
Bakers.....	.....	3	2	5	Jewelry.....	.....	200	.....	200
Boots and shoes.....	.....	2	.....	2	Laundry.....	1	1	.....	2
Bottlers and brew- ers.....	7	2	2	11	Lumber.....	.....	5	5	10
Brass workers.....	1	2	1	4	Metal polishers.....	.....	39	4	43
Broom manufac- turing.....	.....	31	.....	31	Mining.....	.....	38	18	56
Building trades.....	.....	59	6	65	Municipal and State employees.....	2	4	3	9
Carriages and au- tomobiles.....	13	3	.....	16	Munitions.....	6	8	2	16
Cement and con- cretes.....	1	1	.....	2	Musical instru- ments.....	1	2	1	4
Chemicals.....	4	2	.....	6	Oil workers.....	4	4	3	11
Clerks, store.....	.....	.....	4	4	Paper manufactur- ing.....	.....	28	2	30
Cooperage.....	.....	3	.....	3	Plated ware.....	2	1	2	5
Electric and gas lighting.....	.....	2	.....	2	Policemen.....	1	1	3	5
Electrical supplies.....	8	4	.....	12	Printing and pub- lishing.....	3	1	1	5
Flour mills.....	.....	.....	1	1	Railroads.....	.....	3	20	23
Food and tobacco.....	4	2	.....	6	Rubber goods.....	1	11	1	13
Foundry and ma- chine shops.....	154	256	23	433	Ship and boat building.....	2	4	1	7
Furniture.....	.....	5	8	13	Sporting goods.....	1	.....	.....	1
Garment workers.....	5	1,971	107	2,083	Telephone and telegraph.....	1	1	1	3
Glass manufactur- ing.....	.....	1	.....	1	Textile workers.....	1	1	2	4
Hardware and stove manufactur- ing.....	.....	.....	.....	.....	Theatrical employ- ees.....	.....	1	.....	1
Hotel and restau- rant workers.....	1	2	1	4	Window cleaners.....	.....	300	.....	300
	.....	20	.....	20	Miscellaneous.....	.....	1	1	2
					Total.....	224	3,027	226	3,477

NUMBER OF EMPLOYEES REPORTED AS HAVING WORKDAY REDUCED TO 8 HOURS  
IN 1915, 1916, AND THE FIRST SIX MONTHS OF 1917, BY STATES AND BY INDUSTRIES.

[Based on 193 reports showing number of employees affected.]

## By States.

State or industry.	1915	1916	1917 (6 mos.).	Total.	State or industry.	1915	1916	1917 (6 mos.).	Total.
Alabama.....	350	.....	.....	350	New Jersey.....	11,246	9,471	75	20,792
California.....	.....	350	3,300	3,650	New York.....	13,460	76,693	66,035	156,188
Colorado.....	.....	130	275	405	North Carolina.....	75	.....	.....	75
Connecticut.....	37,783	.....	.....	37,783	Ohio.....	26,828	8,359	1,490	36,677
Delaware.....	16,250	20	.....	16,270	Oregon.....	.....	650	.....	650
Illinois.....	1,075	20,393	8,150	29,618	Pennsylvania.....	41,544	207,377	6,600	255,521
Indiana.....	3,000	1,300	4,300	8,600	Porto Rico.....	.....	2,230	.....	2,230
Kansas.....	.....	.....	90	90	Rhode Island.....	600	.....	.....	600
Kentucky.....	.....	4	50	54	Tennessee.....	.....	25	.....	25
Louisiana.....	2,330	.....	.....	2,330	Texas.....	1,500	125	400	2,025
Maryland.....	1,725	560	15,000	17,285	Washington.....	.....	621	.....	621
Massachusetts.....	4,702	10,049	7,512	22,263	West Virginia.....	.....	525	2,000	2,525
Michigan.....	9,510	425	.....	9,935	Wisconsin.....	.....	110	.....	110
Minnesota.....	.....	300	.....	300	Interstate.....	.....	1,200	426,000	427,200
Missouri.....	.....	1,200	610	1,810					
Montana.....	.....	21	.....	21	Total.....	171,978	342,138	537,587	1,051,703

## By industries.

Aluminum manu- facturing.....	.....	275	.....	275	Laundry.....	35	.....	.....	35
Bakers.....	.....	1,471	.....	1,471	Lumber.....	.....	66	1,875	1,941
Boots and shoes.....	.....	24,000	.....	24,000	Metal polishers.....	.....	.....	500	500
Bottlers and brew- ers.....	40	560	100	700	Mining.....	.....	184,000	2,000	186,000
Brass workers.....	2,060	.....	.....	2,060	Municipal and State employees.....	.....	4	.....	4
Building trades.....	28,676	.....	610	29,286	Munitions.....	18,000	6,000	.....	24,000
Carriages and au- tomobiles.....	31,085	.....	1,000	32,085	Musical instru- ments.....	7,500	54	.....	7,554
Cement and con- crete.....	45	.....	.....	45	Oil workers.....	7,180	350	300	7,830
Chemicals.....	46	82	.....	128	Paper manufac- turing.....	.....	485	2,500	2,985
Clerks, store.....	.....	.....	2,000	2,000	Plated ware.....	1,134	.....	.....	1,134
Cooperage.....	.....	13	.....	13	Policemen.....	.....	.....	102	102
Electrical supplies.....	3,941	852	.....	4,793	Railroads.....	.....	1,300	400,400	401,700
Food and tobacco.....	300	.....	.....	300	Rubber goods.....	192	1,500	.....	1,692
Foundry and ma- chine shops.....	88,300	19,336	3,185	110,821	Ship and boat building.....	120	1,250	.....	1,370
Furniture.....	.....	314	40	354	Telephone and telegraph.....	.....	.....	25,000	25,000
Garment workers.....	11,750	67,625	96,600	175,975	Textile workers.....	250	.....	.....	250
Hotel and restaur- ant workers.....	.....	125	.....	125	Window cleaners.....	.....	800	75	875
Iron and steel.....	.....	.....	300	300	Miscellaneous.....	.....	.....	1,000	1,000
Jewelry.....	.....	3,000	.....	3,000	Total.....	171,978	342,138	537,587	1,051,703

Of the 534 reports examined, as shown in the table on page 43, the largest numbers were for the following six States in the order named: Ohio, Pennsylvania, New Jersey, New York, Massachusetts, Connecticut; 312 in all, or 58 per cent of the total number of reports made. The largest numbers of establishments involved were found in the following six States in the order named: New York, Pennsylvania, Ohio, Massachusetts, New Jersey, Illinois, 3,183 in all, or 92 per cent of all the establishments involved. The largest numbers of employees affected were found in the following six States in the order named: Pennsylvania, New York, Connecticut, Ohio, Illinois, Massachusetts; a total of 538,050, which, omitting the 400,000 railroad employees not included in any State in the above figures, is 83 per cent of all.

The industry in which the largest number of employees was affected by the introduction of the 8-hour day was the railroads where more than 400,000, or 38 per cent of all mentioned in the above tables, were affected. In the mining industry 11 reports were made, in 4 of which 56 establishments were involved and in 3 of which 186,000 employees were affected. For garment workers 28 reports were obtained, in 17 of which 2,079 establishments were involved and in 20 of which 175,975 employees were affected.

In several industries the number of establishments involved and the number of employees affected were given in but few of the reports, as in the building trades, where 112 reports were found in which the 8-hour day had been adopted, but in only 12 of which were the number of establishments and of employees given, and in 13 reports of bakers where only 4 contained the number of establishments involved and 6 contained the number of employees affected.

The number of establishments involved and of employees affected as given in the reports of the first six months of 1917 is smaller than in either of the preceding years. This is due to the fact that few official reports of organizations for this period are as yet available, thus rendering it necessary to depend upon the more incomplete reports found elsewhere.

#### RULES FOR THE ENFORCEMENT OF THE FEDERAL CHILD-LABOR LAW.<sup>1</sup>

Rules and regulations for carrying out the provisions of an act of the Congress of the United States approved September 1, 1916, entitled "An act to prevent interstate commerce in the products of child labor, and for other purposes."

##### REGULATION 1.—*Certificates of age.*

Certificates of age, in order to protect the producer, manufacturer, or dealer from prosecution, shall be either:

1. Federal age certificates issued by persons hereafter to be designated by the board for children between 16 and 17 years of age when employment in or about a mine or quarry is contemplated and for children between 14 and 16 years of age when employment in a mill, cannery, workshop, factory, or manufacturing establishment is contemplated. Such certificates shall contain the following information: (1) Name of child; (2) place and date of birth of child, together with statement of evidence on which this is based, except when a physician's certificate of physical age is accepted by the issuing officer, in which case

<sup>1</sup> U. S. Department of Labor. Children's Bureau. Rules and regulations made by the board, consisting of the Attorney General, the Secretary of Commerce, and the Secretary of Labor, for carrying out the provisions of an act to prevent interstate commerce in the products of child labor, and for other purposes, approved Sept. 1, 1916. Child Labor Division Circular No. 1, issued Aug. 14, 1917.

physical age shall be shown; (3) sex and color; (4) signature of child; (5) name and address of child's parent, guardian, or custodian; (6) signature of issuing officer; and (7) date and place of issuance; [or]

2. Employment, age, or working certificate, permit, or paper issued under State authority in such States as are hereafter designated by the board.

REG. 2.—*Proof of age.*

Persons authorized by the board to issue age certificates under the authority of this act shall issue such certificates only upon the application in person of the child desiring employment, accompanied by its parent, guardian, or custodian, and after having received, examined, and approved documentary evidence of age showing that the child is 14 years of age or over if employment in a mill, cannery, workshop, factory, or manufacturing establishment is contemplated, or that the child is between 16 and 17 years of age if employment in or about a mine or quarry is contemplated; which evidence shall consist of one of the following-named proofs of age, to be required in the order herein designated, as follows:

(a) A birth certificate or attested transcript thereof issued by a registrar of vital statistics or other officer charged with the duty of recording births.

(b) A record of baptism or a certificate or attested transcript thereof showing the date of birth and place of baptism of the child.

(c) A bona fide contemporary record of the date and place of the child's birth kept in the Bible in which the records of the births in the family of the child are preserved, or other documentary evidence satisfactory to the Secretary of Labor or such person as he may designate, such as a passport showing the age of the child, a certificate of arrival in the United States issued by the United States immigration officers and showing the age of the child, or a life insurance policy; provided that such other satisfactory documentary evidence has been in existence at least one year prior to the time it is offered in evidence; and provided further that a school record or a parent's, guardian's, or custodian's affidavit, certificate, or other written statement of age shall not be accepted except as specified in paragraph (d).

(d) A certificate signed by a public-health physician or a public-school physician, specifying what in the opinion of such physician is the physical age of the child; such certificate shall show the height and weight of the child and other facts concerning its physical development revealed by such examination and upon which the opinion of the physician as to the physical age of the child is based. A parent's, guardian's, or custodian's certificate as to the age of the child and a record of age as given on the register of the school which the child first attended, or in the school census, if obtainable, shall be submitted with the physician's certificate showing physical age.



The officer issuing the age certificate for a child shall require the evidence of age specified in subdivision (a) in preference to that specified in any subsequent subdivision and shall not accept the evidence of age permitted by any subsequent subdivision unless he shall receive and file evidence that the evidence of age required by the preceding subdivision or subdivisions can not be obtained.

REG. 3.—*Authorization of acceptance of State certificates.*

States in which the age, employment, or working certificates, permits, or papers are issued under State authority substantially in accord with the requirements of the act and with regulation 2 hereof may be designated, in accordance with section 5 of the act, as States in which certificates issued under State authority shall have the same force and effect as those issued under the direct authority of this act, except as individual certificates may be suspended or revoked in accordance with regulations 4 and 8. Certificates in States so designated shall have this force and effect for the period of time specified by the board, unless in the judgment of the board the withdrawal of such authorization at an earlier date seems desirable for the effective administration of the act. Certificates requiring conditions or restrictions additional to those required by the Federal act or by the rules and regulations shall not be deemed to be inconsistent with the act.

REG. 4.—*Suspension or revocation of certificates.*

SECTION 1. Whenever an inspector duly authorized under this act shall find that the age of a child employed in any mill, cannery, workshop, factory, manufacturing establishment, mine, or quarry as given on a certificate is incorrect, or that the time record is not kept in accordance with regulation 8, he shall notify the child, the employer, and the issuing officer that the certificate or the acceptance of a State certificate for the purposes of this act is suspended and indicate such suspension on the certificate or certificates.

SEC. 2. A statement of the facts for which the suspension was made shall be forwarded by the inspector to the Secretary of Labor, or such person as he may designate, who will either (a) revoke or withdraw the certificate or the acceptance of the certificate, or (b) veto the suspension according as in his judgment the facts of the case warrant.

Due notice shall be sent to the child's parent, guardian, or custodian, to the employer, and to the issuing officer of the action taken in regard to a suspended certificate.

SEC. 3. If the suspension of a certificate be vetoed, a new certificate shall be issued upon the surrender of the one suspended. If for any

reason such new certificate can not be obtained from a State issuing officer, the notice of the veto if attached to a suspended certificate shall be recognized and accepted as meeting the requirements of section 5 of the act.

REG. 5.—*Revoked or suspended certificates.*

A revoked or suspended certificate will not protect a producer, manufacturer, or dealer from prosecution under section 5 of the act after notice of such suspension or revocation, except as provided in regulation 4.

REG. 6.—*Hours of employment.*

In determining whether children between 14 and 16 years of age have been employed more than eight hours in any day the hours of employment shall be computed from the time the child is required or permitted or suffered to be at the place of employment up to the time when he leaves off work for the day exclusive of a single continuous period of a definite length of time during which the child is off work and not subject to call.

REG. 7.—*Days of employment.*

A child may not be employed for more than six consecutive days.

REG. 8.—*Time record.*

SECTION 1. A time record shall be kept daily by producers or manufacturers showing the hours of employment in accordance with regulation 6 for each and every child between 14 and 16 years of age, whether employed on a time or a piece rate basis.

SEC. 2. Certificates of age for children employed in any mine or quarry or in any mill, cannery, workshop, factory, or manufacturing establishment may be suspended or revoked for failure on the part of a manufacturer or producer to keep time records as required by this regulation or for false or fraudulent entries made therein.

REG. 9.—*Inspection.*

An inspector duly authorized under this act shall have the right to enter and inspect any mine or quarry, mill, cannery, workshop, factory, or manufacturing establishment, and other places in which goods are produced or held for interstate commerce; to inspect the certificates of age kept on file, time records and such other records of the producer or manufacturer as may aid in the enforcement of the act; to have access to freight bills, shippers' receipts, or other records of shipments in interstate or foreign commerce kept by railroads,

express companies, steamship lines, or other transportation companies so far as they may aid in the enforcement of the act.

REG. 10.—*Obstructing inspection.*

SECTION 1. It shall be the duty of a producer or manufacturer to produce for examination by an inspector the certificates of age kept on file and any child in the employ of a manufacturer or producer whom the inspector may ask to see. Concealing or preventing or attempting to conceal or prevent a child from appearing before an inspector or being examined by him or hindering or delaying in any way an inspector in the performance of his duties shall be considered an obstruction of inspection within the meaning of section 5.

SEC. 2. No owner, manager, or other person in charge of premises or records shall be subject to prosecution for obstruction of inspection if the inspector shall refuse upon request to submit his identification card for examination by such owner, manager, or other person.

REG. 11.—*Removal.*

Withdrawal for any purpose of an article or commodity from the place where it was manufactured or produced constitutes a removal thereof within the meaning of the act; and the 30-day period within which employment of children contrary to the standards prescribed in section 1 of the act results in prohibiting shipment in interstate or foreign commerce shall be computed from that time.

REG. 12.—*Guaranty.*

SECTION 1. A guaranty to protect a dealer from prosecution under section 5 of the act shall be signed by and contain the name and address of the manufacturer or producer; it shall be specific, covering the particular goods shipped or delivered for shipment or transportation, and shall not be a general guaranty covering all goods manufactured or produced or to be manufactured or produced by the guarantor. It may be incorporated in or attached to or stamped or printed on the bill of sale, bill of lading, or other schedule that contains a list of the goods which the manufacturer or producer intends to guarantee.

SEC. 2. A dealer shipping goods from a State other than the State of manufacture or production does not require a guaranty in order to be protected from prosecution. (See sec. 6 of the act.)

SEC. 3. A guaranty substantially in accordance with the following forms will comply with the requirements of the act:

For products of mines or quarries—

(I or we), the undersigned, do hereby guarantee that the articles or commodities listed herein (or specify the same) were produced by (me or us) in a

mine or quarry in which within 30 days prior to removal therefrom<sup>1</sup> no children under the age of 16 years were employed or permitted to work.

(Name and place of business of producer or manufacturer.)

(Date of removal.)

For products of a mill, cannery, workshop, factory, or manufacturing establishment—

(I or we), the undersigned, do hereby guarantee that the articles or commodities listed herein (or specify the same) were produced or manufactured by (me or us) in a (mill, cannery, workshop, factory, or manufacturing establishment) in which within 30 days prior to the removal of such goods therefrom<sup>1</sup> no children under the age of 14 years were employed or permitted to work, nor children between the ages of 14 years and 16 years were employed or permitted to work more than eight hours in any day or more than six days in any week, or after the hour of 7 o'clock p. m. or before the hour of 6 o'clock a. m.

(Name and place of business of producer or manufacturer.)

(Date of removal.)

#### REG. 13.—*Alteration and amendment of regulations.*

These regulations may be altered or amended at any time without previous notice by the board as constituted in section 2 of the act.

[PUBLIC—No. 249—64TH CONGRESS.]

[H. R. 8234.]

AN ACT To prevent interstate commerce in the products of child labor, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That no producer, manufacturer, or dealer shall ship or deliver for shipment in interstate or foreign commerce any article or commodity the product of any mine or quarry, situated in the United States, in which within thirty days prior to the time of the removal of such product therefrom children under the age of sixteen years have been employed or permitted to work, or any article or commodity the product of any mill, cannery, workshop, factory, or manufacturing establishment, situated in the United States, in which within thirty days prior to the removal of such product therefrom children under the age of fourteen years have been employed or permitted to work, or children between the ages of fourteen years and sixteen years have been employed or permitted to work more than eight hours in any day, or more than six days in any week, or after the hour of seven o'clock postmeridian, or before the hour of six o'clock antemeridian: *Provided*, That a prosecution and conviction of a defendant for the shipment or delivery for shipment of any article or commodity under the conditions herein prohibited shall be a bar to any further prosecution against the same defendant for shipments or deliveries for shipment of any such article or commodity before the beginning of said prosecution.

<sup>1</sup> During the month of September, 1917, a manufacturer or producer may substitute for the clause "within 30 days prior to the removal therefrom" the clause "on and after September 1, 1917."

SEC. 2. That the Attorney General, the Secretary of Commerce, and the Secretary of Labor shall constitute a board to make and publish from time to time uniform rules and regulations for carrying out the provisions of this act.

SEC. 3. That for the purpose of securing proper enforcement of this act the Secretary of Labor, or any person duly authorized by him, shall have authority to enter and inspect at any time mines, quarries, mills, canneries, workshops, factories, manufacturing establishments, and other places in which goods are produced or held for interstate commerce; and the Secretary of Labor shall have authority to employ such assistance for the purposes of this act as may from time to time be authorized by appropriation or other law.

SEC. 4. That it shall be the duty of each district attorney to whom the Secretary of Labor shall report any violation of this act, or to whom any State factory or mining or quarry inspector, commissioner of labor, State medical instructor, or school-attendance officer, or any other person shall present satisfactory evidence of any such violation to cause appropriate proceedings to be commenced and prosecuted in the proper courts of the United States without delay for the enforcement of the penalties in such cases herein provided: *Provided*, That nothing in this act shall be construed to apply to bona fide boys' and girls' canning clubs recognized by the Agricultural Department of the several States and of the United States.

SEC. 5. That any person who violates any of the provisions of section one of this act, or who refuses or obstructs entry or inspection authorized by section three of this act, shall for each offense prior to the first conviction of such person under the provisions of this act, be punished by a fine of not more than \$200, and shall for each offense subsequent to such conviction be punished by a fine of not more than \$1,000, nor less than \$100, or by imprisonment for not more than three months, or by both such fine and imprisonment, in the discretion of the court: *Provided*, That no dealer shall be prosecuted under the provisions of this act for a shipment, delivery for shipment, or transportation who establishes a guaranty issued by the person by whom the goods shipped or delivered for shipment or transportation were manufactured or produced, resident in the United States, to the effect that such goods were produced or manufactured in a mine or quarry in which within thirty days prior to their removal therefrom no children under the age of sixteen years were employed or permitted to work, or in a mill, cannery, workshop, factory, or manufacturing establishment, in which within thirty days prior to the removal of such goods therefrom no children under the age of fourteen years were employed or permitted to work, nor children between the ages of fourteen years and sixteen years employed or permitted to work more than eight hours in any day or more than six days in any week or after the hour of seven o'clock postmeridian or before the hour of six o'clock antemeridian; and in such event, if the guaranty contains any false statement of a material fact, the guarantor shall be amenable to prosecution and to the fine or imprisonment provided by this section for violation of the provisions of this act. Said guaranty, to afford the protection above provided, shall contain the name and address of the person giving the same: *And provided further*, That no producer, manufacturer, or dealer shall be prosecuted under this act for the shipment, delivery for shipment, or transportation of a product of any mine, quarry, mill, cannery, workshop, factory, or manufacturing establishment, if the only employment therein, within thirty days prior to the removal of such product therefrom, of a child under the age of sixteen years has been that of a child as to whom the producer or manufacturer has in good faith procured, at the time of employing such child, and has since in good faith relied upon and kept on file a certificate,



issued in such form, under such conditions, and by such persons as may be prescribed by the board, showing the child to be of such an age that the shipment, delivery for shipment, or transportation was not prohibited by this act. Any person who knowingly makes a false statement or presents false evidence in or in relation to any such certificate or application therefor shall be amenable to prosecution and to the fine or imprisonment provided by this section for violations of this act. In any State designated by the board, an employment certificate or other similar paper as to the age of the child, issued under the laws of that State and not inconsistent with the provisions of this act, shall have the same force and effect as a certificate herein provided for.

SEC. 6. That the word "person" as used in this act shall be construed to include any individual or corporation or the members of any partnership or other unincorporated association. The term "ship or deliver for shipment in interstate or foreign commerce" as used in this act means to transport or to ship or deliver for shipment from any State or Territory or the District of Columbia to or through any other State or Territory or the District of Columbia or to any foreign country; and in the case of a dealer means only to transport or to ship or deliver for shipment from the State, Territory, or district of manufacture or production.

SEC. 7. That this act shall take effect from and after one year from the date of its passage.

Approved, September 1, 1916.



## THE "WELFARE PLAN" OF THE LAKE CARRIERS' ASSOCIATION.

BY PAUL F. BRISSENDEN.

At its convention, held in New York City, December 4 to 12, 1916, the International Seamen's Union of America adopted a resolution requesting the United States Department of Labor "to investigate the employment system, shipping offices, and so-called 'Welfare plan' of the Lake Carriers' Association and to make public the results of such investigation." The resolution charged that this welfare plan was virtually a strike-breaking and blacklisting system, the continuation of which would almost certainly lead to a serious strike on the Lakes. A forthcoming bulletin of the Bureau of Labor Statistics will present the results of an inquiry into the nature and operation of this welfare plan.

The Lake Carriers' Association is composed of vessel owners and managers operating vessels upon the Great Lakes, principally such vessels as carry iron ore, coal, and grain—articles which make up the bulk of the tonnage on the Lakes. Its declared object is, among other things, "to establish and maintain by contract or otherwise such amicable relations between employers and employed as will avoid the public injury that would result from lockouts and strikes in the Lake-carrying service." The association has at the present time a membership of 64 vessel owners or managers and operates through them 414 boats. It carries about four-fifths of the total registered tonnage of the Great Lakes. The most important, and virtually the dominating member of the association is the Pittsburgh Steamship Co., a subsidiary of the United States Steel Corporation. This company carries about one-fourth of the total tonnage of the association.

As early as 1893 the association established shipping offices at the various lake ports, and in 1901 had drawn up a plan for establishing in the principal ports of the Great Lakes "club rooms" for the use of the seamen. "Before the plan could be put into effect, however, some of the unions," according to what is apparently an official statement of the association, "proposed to undertake this feature of the work and the plan was laid aside." Contracts were made with various unions to supply all men below the grade of officers, the unions promising to deal justly in cases of injury, disability, or death in service. "The result of this experiment," the statement concludes, "was complete failure."

In the spring of 1908 the original plan was somewhat elaborated, definitely labeled "The welfare plan," and its provisions in substantially their present form were put into effect in the lake ports and on the association's vessels with the opening of navigation. At the same time the association announced its definite adoption of the "open-shop principle."

The welfare plan provides for the maintenance of assembly rooms at the various lake ports. Sailors are given the privileges of these rooms upon the payment of an annual fee of \$1. This entitles them to certification and membership in the welfare plan. Members are called welfare men by the association. If a sailor wishes to ship on an association boat he is asked to enroll under the welfare plan if he has not already done so. When labor is at a premium non-members may be shipped, but the preference is given to welfare men. Each man registered under the plan is given a registration or record discharge book, called by the association a welfare book, in which is kept a serial record of his service on association boats. This book must be presented by the man when applying for work to the "commissioner" or shipping master in charge of the local assembly room or shipping office and to the captain or chief engineer of the boat on which he ships. The welfare book is kept in the possession of the captain or chief engineer until he signs up the sailor's "discharge record" for the trip and returns the book to him.

The official association text of the welfare plan gives some important details regarding the use of the welfare or discharge books: "The association record discharge book will be put in the hands of the holder, to be deposited by him at the time of signing articles with the master or chief engineer according to the department of service. In this book such executive officer will at the termination of the service on the ship, enter a discharge, and in the appropriate column a statement of the character of service. If this entry be 'good' or 'fair,' the book shall be returned direct to the man, but when, in the best judgment of the officer with whom the book is deposited, such entry can not justly be made and in every case of desertion or failure to serve after engaging, the book shall be returned by the master to the secretary of the association, together with a statement in explanation from the officer with whom the book was deposited. The association will thereupon take such action in such manner as it may deem wise and just as to canceling its outstanding certificate of membership."

On becoming a welfare man the sailor "pledges that from engagement on any vessel \* \* \* in the Lake Carriers' Association he will perform all his lawful duties regardless of whether any officer or member of the crew may or may not be a member of any union

or association of any kind." The great majority of the welfare men are nonunion men and the union man who registers under the welfare plan ceases to be an active union man. At the present time there appears to be little or no formal discrimination against union men by the association's commissioners. None the less, the evidence indicates that the welfare plan has operated to diminish union activity and undermine the strength of the union. Active union propaganda, at least, is incompatible with welfare membership and such membership is virtually a prerequisite to employment on most lake vessels.

"There is no requirement on the part of the Lake Carriers' Association," says one of its officials, "that men shall belong to the welfare plan in order to secure employment \* \* \* other than that officers of the boats insist that men employed on their vessels be welfare men."

The association denies that the assembly rooms are shipping or employment offices on the ground that it is the captain of the boat and not the commissioner who does the actual hiring. As the scheme actually operates, however, the assembly rooms become clearing houses for the buying and selling of seafaring labor, which is virtually engaged by the commissioner subject to the approval of the ultimate employer. They are comparable with the ordinary employment agencies, except that (1) the job seeker does not pay a specific fee for each job, and (2) the commissioner does not formally hire.

It is worthy of notice that these association shipping offices put greater restriction on the freedom of purchase and sale of labor than do the ordinary employment agencies. The captain of an association boat is not free to look where he will for sailors. He must go to one of these assembly rooms. The sailor's freedom in seeking work is correspondingly restricted. He can not go directly to the ship captain; at any rate, he may not apply to him unless he has first become a welfare man. These restrictions are less rigidly enforced when labor is scarce.

The union men insist that despite the general improvement of sanitary and living conditions aboard ship, the sailors are now really worse off than they were prior to the inauguration of the welfare plan in 1908. As the union sailors look at it, they are now less free than ever, being subject under the welfare plan to a system of virtual espionage and under constant apprehension of the blacklist. The average sailor is certainly no better satisfied with his job now than he has been in the past, as is pretty clearly demonstrated by the continued high turnover of labor on the Lakes. The rate of turnover on the association's boats in 1916 was more than 600 per cent. It is generally admitted that native American sailors are and have been for



several years leaving the Lakes in increasing numbers to take jobs ashore.

The association is making a systematic attempt to enforce a policy of neutrality toward the unions. There is no question of the sincerity of association officials on this point. The association is theoretically neutral and formally intent on being fair to union men. However, the interpretation and practical application of its open-shop principle and the actual operation of its welfare plan have undeniably had a damaging effect upon the lake unions. The welfare plan has certainly been a factor in reducing the membership and influence of the sailors' unions.

An official statement issued by the Lake Seamen's Union declares that through this welfare system "the seaman is to be held in constant fear of an adverse opinion being rendered against him by any captain he serves under." The statement continues: "Always he must dread that the master will refuse to return his book when the term of employment is ended. If he desires to quit when the captain does not want him to, he must hesitate—terror of being deprived of the book is relied upon to bind him to the ship. He must not dare resent ill treatment; he must not complain under constant espionage; he must live in fear, always in dread of the fatal mark. The continuous discharge-book system is far more cruel than any ordinary blacklist. The particular system chosen by the lake carriers is the most outrageous of any we have ever heard of. Might is to be made right; fear is to be law."

The available evidence indicates that without the slightest imputation of insincerity on the part of the association in its profession of a genuine neutrality toward the unions, the general effect of the welfare plan in the actual administration of its provisions by the general officers of the association, its commissioners, and those in authority on its boats, is discriminatory toward the unions. No matter how disinterestedly neutral the association has endeavored to be, the obvious result has been the elimination of union men, the use of strike breakers, and the virtual exercise of the power of the blacklist. The membership of the association has increased; that of the union has diminished. Undoubtedly many sailors exaggerate the situation and all of them are more or less affected psychologically by the fact that the most important member of the association is a subsidiary of the steel corporation. Perhaps also some of that "dread of the blacklist," of which union officials so often speak, is a product of the sailors' imagination. Yet there seems to be no doubt that the welfare plan, whether or not so intended, is admirably suited to limit the employee's freedom of activity.

## MEDICAL, HOSPITAL, AND SURGICAL TREATMENT FOR EMPLOYEES.

BY ANICE L. WHITNEY.

A study of work for industrial betterment carried on by employers, covering a large section of the country and including many firms which are large employers of labor, was made recently by agents of the United States Bureau of Labor Statistics. Schedules were taken for 431 establishments, 375 of which, with a total of 1,204,010 employees, reported some provisions for giving medical treatment. These establishments cover a great variety of industries, such as mining, foundries and machine shops, manufacturing of iron and steel, electrical supplies, automobiles, furniture, boots and shoes, textiles, and explosives; also steam and electric railroads, telegraph and telephone companies, electric light and power companies, and stores.

The method of caring for the health of employees along strictly medical lines varies greatly with the needs of the industry and the individual ideas of employers. It ranges from the most simple equipment, consisting of first-aid cabinets located in the office or about the plant, to the most elaborate and up-to-date emergency hospitals. These hospitals often consist of a suite of rooms including doctors' offices, operating rooms, and wards for men and women with doctors and nurses on duty throughout the working hours.

This work has grown to large proportions in many industries because of the impetus which has been given to the safety movement in the last few years. As a result of this work in the mining and iron and steel industries especially, crews of men are instructed in the principles and practice of first aid, and interest is stimulated and maintained among the employees by means of safety-first magazines and bulletins and by contests among various first-aid teams for which prizes are given. In some cases the day on which these contests take place becomes the gala day of the year for the employees and their families. The participation in rescue and first-aid work is entirely voluntary on the part of employees, but each one before being allowed to enter the work must have a doctor's certificate showing that he is physically fit to undertake it. Four to six men are assigned to each first-aid crew and the course consisting of lectures, demonstrations, and drills is usually completed in 12 lessons. This training by the company doctor goes on continually, and many

new crews are added each year. Rescue crews consist of from five to eight men who are trained by special instructors to work with rescue helmets in a room filled with smoke or noxious gases. One company has a fully equipped rescue car containing stretchers and stretcher racks with a capacity of from 16 to 20 men. There is also a small operating room with sterilizing equipment and a supply of drugs and dressings. In addition the car carries oxygen helmets, safety lamps, reels of life line, and two pulmotors, and is always ready with the necessary crew of men in case of emergency.

In the mining industry, where much of the work is done by first-aid crews, there are first-aid boxes at the different mine levels and sometimes emergency and refuge chambers built of concrete. One company reports a special signal system in case of accidents, to call the first-aid men. Stretchers and usually pulmotors, or lung motors, are supplied. One company keeps first-aid boxes dry by use of electric-light bulbs. Pocket first-aid cases are also frequently furnished the men.

Of the 375 establishments reporting provisions for medical treatment 110 have first-aid equipment; of these, 77 have first-aid kits only, 16 have first-aid cabinets with stretcher or cot, 12 have first-aid kits in rest rooms, 5 have kit, stretcher, and pulmotor.

In the mining and iron and steel industries, in foundries, machine shops, and other extrahazardous industries the emergency hospital equipment is often very elaborate. All the modern sanitary appliances, such as faucets, which are operated by foot or knee pressure, glass cabinets for medicines and instruments, porcelain tables, electric sterilizers, and complete equipment for major and minor operations, are found. Forty-three of these establishments employ surgeons, so that accidents, even though very serious, may be cared for without the loss of time which is often so serious a factor in surgical cases. In order that there may be as little delay as possible in getting patients to the general hospital, eight establishments which are not equipped to care for very serious cases have their own ambulances, of which six are motors.

There is a systematic endeavor in most establishments which possess good emergency equipment to have the employees report to the doctor or nurse for even the slightest injuries, and as a result there has been a great reduction in the number of cases of infection. In many cases severe penalties are imposed if workers endeavor to remove particles from the eyes of fellow workmen or bind up cuts or scratches, and sometimes this is considered sufficient cause for discharge.

About 190 of the companies visited give free medical service to employees in addition to the accident work. In those industries in which accidents are rare and seldom serious much has been made of

the medical service, and in department stores and large offices, which almost uniformly have elaborate emergency equipment, employees are encouraged to report to the hospital for the most trivial complaints. In these establishments often a large percentage of the employees are treated each month, while in those which confine themselves to accident work only, comparatively few usually receive treatment. Of the 375 establishments, 265 have hospital equipment varying from very ordinary to very elaborate, and 110 other establishments have first-aid kits only. Of these 375 establishments, 171 employ doctors, 84 have doctors on call, 99 have none, and 21 do not report. One hundred and twenty-two establishments employ 1 doctor each, 20 employ 2 doctors, 8 employ 3, and 16 employ numbers varying from 4 to 12. Two companies employ 14 and 22 doctors, respectively, each company having several plants; another employs 43, but this company covers a wide territory and much family work is included. One company has a hospital adjacent to the plant which was started by the firm but is now a public hospital at which all emergency cases are treated. One other does not report number of doctors. Of the doctors reported in the 171 establishments, 48 are reported as surgeons.

Trained nurses are employed by 181 establishments, 165 have none, and 29 do not report. Of these 181 establishments, 104 have 1 trained nurse each, 39 have 2 nurses, 20 have 3, 12 have from 4 to 8; the 5 employing more than 8 have reported for more than one plant. In one establishment the nurses in the company hospital serve as emergency nurses.

The management of one very large company employing many young women believes that the company should not take the responsibility of treating its employees in any except the very simplest first-aid cases. It is the policy of this company to have a first-aid cabinet in the rest room in charge of one of the older employees, and if any sudden, serious case develops to send for a physician. As far as possible, however, the company works through the family physician, believing that a better feeling results on the part of employees and their families if this is done. This company also believes that a finely equipped emergency hospital encourages those with trifling ailments to think too much of them, and makes it too easy often to get medicine without which in the end the employee would probably be better off.

The emergency hospital work is to a certain extent allied with that of the benefit association, and in a few instances is managed by this association, the employer giving space and equipment and usually making a contribution to the association funds. In the majority of cases, however, the employer pays for and controls the hospital work,

and the medical work in connection with the benefit association is incidental to the regular work of the hospital.

It is quite a general practice to give applicants for employment a more or less comprehensive physical examination. This ranges from a few general questions to a thorough physical test, of which complete records are made and kept. It is also quite usual for such establishments to reexamine after absence from illness or other causes. It is to be understood that the main purpose of entrance examinations is to exclude those who are undesirables from the standpoint of the employer—that is, usually those suffering from tuberculosis or other contagious diseases—although occasionally firms having some outside work are willing to take tubercular people. In a very few instances, however, valuable assistance is given by the medical department in helping employees to correct minor defects revealed by the examinations. One firm employing a very large number of men gives advice to applicants who are rejected because of defective physical condition as to the correct treatment necessary for cure or help and recommends them to reliable physicians or hospitals. Where circumstances warrant the arrangements for hospital care are made by the health director of the company. Only such applicants are rejected as are totally incapacitated or are suffering from contagious or infectious diseases. The claim is made by this firm that by means of this advice 25 per cent of the rejected are reclaimed and hired. Another place reports that of the 7 per cent rejected the proportion able to remedy their defects through proper attention is large enough to reduce the net rejections to less than 2 per cent.

Periodic examinations are found less frequently than preliminary medical examinations. In occupations which are subject to occupational diseases or in establishments which handle or manufacture food products, periodic examinations are either necessary for compliance with the State or municipal law or are so manifestly a requirement of ordinary humanity and social protection that they can not be regarded as welfare work. Examinations given by steam and electric railroads are mainly for sight and hearing, and, therefore, are more for the protection of the public than for the benefit of the employees. In the comparatively few cases besides these in which periodic examinations are given general corrective work is done or a change of work is ordered in cases where it is found that employees are not physically capable of doing the work assigned to them. This, as well as leave of absence sometimes with and sometimes without pay, is often the method of dealing with the less serious cases. Employees who are found to be in a generally run-down or anemic condition are frequently given egg and milk or



malted milk regularly, and the results of this diet are carefully noted by physicians or nurses. Special examinations and subsequent medical attention are given in a number of establishments upon request of the employee.

Of the 49 establishments which report periodic examinations, 17 have annual examinations and of these 10 examine all employees, 1 examines heads of departments and assistants annually, the remaining employees being examined at the end of one year's service and not thereafter, and 6 do not report the number examined each year. Six establishments have semiannual examinations, and of these 1 examines all employees, another all but the salaried force, 1 all male employees, while the others do not report classes of employees examined; 2 of these establishments give semiannual dental examinations. Of the other periodic examinations reported 4 (3 biennial and 1 every four years) are by railroads and 22 are for food handlers or for persons exposed to occupational diseases, and vary from weekly to bimonthly examinations.

Nine establishments examine after absence on account of illness or for other causes and of these 1 examines every two years and also before promotion and reemployment, 1 establishment examines laborers after one year of service, 18 report special examinations in cases of suspected tuberculosis or other disease, and 3 give them on request of the employees. Fifteen report definite corrective work on the part of physicians as a result of examinations. Four give egg and milk or malted milk to employees in poor physical condition. Thirty-two firms will pay the entire expenses of employees who, after a reasonable length of service, develop tuberculosis, but if the employee is able to pay part of the expenses he is expected to do so. One firm maintains its own tuberculosis sanatorium in the mountains, to which all of its employees suffering from this disease are sent; a limited number of employees suffering from other diseases are also cared for at this place. Because of lack of local facilities for the care of tuberculosis another firm has established a special dispensary near the plant for the use of employees who either have contracted tuberculosis or are suspected of having it. These patients are under the constant oversight of a doctor, and a specially trained nurse who superintends their examination at the clinic and also visits them in their homes to teach the most modern methods of prevention and cure. The most serious cases are kept at the dispensary. In Chicago a number of firms are contributors to a tuberculosis sanatorium where employees of these firms may be treated at much reduced rates; and in cases of necessity no payment at all is required.

Thirty-two firms send employees to sanatoriums. Two establishments have a joint fund given by employer and employees for sana-

torium care of tubercular cases. Sixteen companies pay all expenses, 1 pays all after two years' service, 1 after three years' service, and another pays if employees are unable to do so. One company has its own sanatorium and several other firms send to a sanatorium which is maintained jointly.

Change of occupation in cases of poor physical condition is reported in 14 cases, and leave of absence either with or without pay for the purpose of recuperation is reported in 6 cases. Several companies have introduced dental service for their employees. One company having semiannual dental examinations for all employees has a suite of rooms consisting of dentists' offices, a sterilizing room, and a radiograph room. The rooms are of white enamel with porcelain fittings, glass-topped tables and desks, and faucets operated by foot pressure. Radiographs are made in all cases of suspected blind abscess. General prophylactic work is done, and a report made to the patient of the teeth which need attention. Very complete records are kept of all cases.

Another plant employing one dentist and two assistants has had a dental dispensary in operation for several years. The office is equipped with two chairs and two sets of instruments, so that no time is lost between patients, and one set of instruments is always sterilized and ready for immediate use. All employees in need of immediate attention are cared for, but only those who have been in the company's employ for more than six months are entitled to receive extensive treatment. Nearly all kinds of dental work are done at no expense to the employees. This work costs the employer a little more than \$4 a year per employee. Here, as in several other establishments, toothbrushes and powder are sold at cost. Still another place which provides general surgical work gives prophylactic treatment for the preservation of the teeth and also treats pyorrhea. Others do regular dental work but charge for the cost of materials only. In one establishment, while the work is done on the company's time, the charge to the employee is the actual cost of the work to the company.

There are a few instances of employers providing the services of an ear, nose, and throat specialist or of an oculist who examines eyes free and furnishes glasses at cost. Out of 43 department stores included in this topic, 3 furnish chiropodists, owing to the prevalence of foot troubles caused by the strain of long standing. Five companies employ oculists, 19 employ dentists, and 2 ear, nose, and throat specialists.

Visits to the home by the doctor or visiting nurse are often of great value. One very large firm has an efficient method of keeping track of employees who are out because of illness. These employees are

reported every 12 days by the absentee department and a special investigation is conducted. In case the employee needs financial assistance, either for medical service or for the support of his family, he is given a regular weekly allowance from the "aid-to-the-sick" fund which the company maintains. Another company has a systematized method of caring for its employees who are absent because of illness or injury. Such employees are required to notify the health department within 24 hours. A trained nurse calls on the second day of absence, and every third day thereafter, to see that the patient is receiving proper medical attention. While this company does not attempt to do organized social supervision or give bedside care, the nurses try to instruct families in the essentials of American standards of living. Each nurse engaged in this work is assigned to a district and is encouraged to cooperate with public and private agencies that are concerned with the betterment of social conditions. In this establishment, as in others that employ visiting nurses, automobiles are furnished by the company for the use of the nurses.

In several instances absences are investigated by the visiting nurse who gives advice and assistance, and in one case her report to the manager is the basis for help extended by the company.

Of the establishments scheduled, 166, employing 429,871 male workers, report 102,701 male cases of illness and accident, or 24 per cent in an average month, while 90 establishments, employing 83,034 female employees, report 22,819 cases, or 27 per cent for a like period. Two hundred and sixty-one establishments, including several which do not report cases by sex, with a total of 770,889 employees, report 196,722 cases, or 26 per cent. For the establishments reporting the per cent varies in male cases from less than 1 to 70, in female cases from less than 1 to 74; in total male and female from less than 1 to 68 per cent. Included in the totals are 9 establishments showing a percentage running from 76 to 110. It should be borne in mind that these are the per cents that the number of "cases" are of the number of employees, and may or may not be the per cents that the number of employees receiving treatment are of the total number of employees. This arises from the fact that the same employees may have received treatment at two or more distinct times during the month, and each treatment would be considered a "case." It is also to be emphasized that the term "illness and accident" as used here includes all cases reported to the hospital, many of them of a very minor character.

While these per cents may have no definite value as showing the proportion of employees treated, they do show in a general way

the great variation in the relation between the number of employees and the services rendered.

For a company having a limited amount of space and wishing to install emergency equipment at a moderate cost, one room that was equipped at an approximate cost of \$1,000 was almost a model of its kind. The floor of rubber tiling cost \$350. The plumbing, which was of the most modern type, having knee-pressure faucets and all of the fittings of the best porcelain, cost \$250. The rest of the equipment, consisting of two medicine cabinets, an instrument cabinet, a porcelain operating slab, an electric instantaneous heater for use in case the other hot-water supply should fail, an electric warming pan, a sanitary cot, and a sanitary screen by which the cot can be entirely shut off from the rest of the room, was furnished at a cost of about \$400.

A description of elaborate emergency equipment which has been practically standardized by one large company and which may be modified to meet the needs of individual plants is as follows: All interior woodwork is finished with a sufficient number of coats of paint and enamel to give a finish which can be easily washed and kept clean. The operating, re-dressing, and bath rooms have a tile or vitralite wainscoting, and the floors are of marble chips set in white cement. This is preferable to a tile flooring, as tile where subject to rough usage becomes gray and porous and thus more difficult to keep in a sanitary condition. Steel enamel chairs and tables are used in preference to wood, as they are more sanitary and wear better. The re-dressing room is used for the re-dressing of all cases and for minor injury and medical cases. The equipment here consists of a washstand with knee or foot faucet attachments, a foot bath, medicine and instrument cabinets, bottle rack for antiseptic solutions, basin stands, instrument sterilizers, dressing carriage tables, chairs, and nurse's desk, Justrite pail, and the necessary surgical instruments.

The operating room is equipped similarly to the re-dressing room with the addition of high-pressure steam, hot and cold water, instrument and utensil sterilizer. The wards or recovery rooms are equipped with beds, tables, and chairs. Beds are furnished with electric warming blankets and heating pads. The X-ray and laboratory room is used for diagnoses of fractures and of various diseases.

There is undoubtedly much valuable preventive and curative work done through the agency of these hospitals. In many cases employees who are too poor or too careless to take steps to secure the proper treatment for themselves or who do not realize that such treatment is necessary are advised and cared for in time, and much needless suffering is thereby avoided. If the work is intelligently

and conscientiously carried out and the tendency to give medicine for too trivial causes is avoided, the results to the employee will be better health and increased earning power and to the employer a more efficient force of employees.

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#### ORGANIZATION UNDER THE ACT TO CONTROL FOOD AND FUEL.

Immediately after the approval of the administration food-control bill (H. R. 4961) on August 10, the President formally appointed Mr. Herbert C. Hoover as Food Administrator. Previous to the enactment of the law granting the President this authority Mr. Hoover had been designated by the Chief Executive to assume unofficially, so far as authorization by Congress was concerned, the responsibility of mobilizing the food resources of the country, conserving the visible supply of farm products, and promoting through every practicable and economic means the stabilization of prices to the private consumer and the Government and the guaranty of fair returns to the producer. Now that it has been officially recognized, the food administration announces a threefold purpose: (1) So to guide trade in the fundamental food commodities as to eliminate vicious speculation, extortion, and wasteful practices, and to stabilize prices in the essential staples; (2) to guard our exports so that against the world's shortage we may retain sufficient supplies for our own people and cooperate with the allies to prevent inflation of prices; and (3) to stimulate the saving of food in order that exports to our allies may be increased to a point which will enable them to provision their armies and to feed their peoples during the coming winter.

The purpose of the recently enacted food-control law, under which the food administration is acting, is, according to the preamble, "to assure an adequate supply and equitable distribution and to facilitate the movement of foods, feeds, fuel (including fuel oil and natural gas), and fertilizer and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds, and fuel, hereafter in this act called necessities; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulations, and private controls, affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessities during the war. For such purposes the instrumentalities, means, methods, powers, authorities, duties, obligations, and prohibitions hereinafter set forth are created, established, conferred, and prescribed. The President is



authorized to make such regulations and to issue such orders as are essential effectively to carry out the provisions of this act."

Briefly summarized, the law authorizes the President:

1. To establish and maintain Government control of all necessities for the period of the war.

2. To requisition or commandeer any supplies that may be considered necessary for the armed forces or the common safety of the United States, and to pay compensation therefor.

3. To license the importation, manufacture, storage, mining, or distribution of any necessities if essential to carry into effect any of the purposes of the act, and to order any licensee making unreasonable, unjust, or unfair storage charges, commission or profit, to discontinue such practice.

4. To create and use any agency or agencies, to accept the service of any person without compensation, to cooperate with any agency or person, to utilize any department or agency of the Government, and to coordinate their activities so as to avoid any preventable loss or duplication of effort or funds.

5. To stop the practice of food destruction by speculators for the purpose of raising prices.

6. To requisition foods, feeds, fuels, and other supplies necessary to the support of the Army or the maintenance of the Navy, or any other public use connected with the common defense, and to requisition, or otherwise provide, storage facilities for such supplies; and he shall ascertain and pay a just compensation therefor.

7. To purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans, and potatoes.

8. To requisition and take over, for use or operation by the Government, any factory, packing house, oil pipe line, mine, or other plant, or any part thereof, in or through which any necessities are or may be manufactured, produced, prepared, or mined, and to operate the same.

9. To determine and fix, and to give public notice of what, under specified conditions, is a reasonable guaranteed price for wheat in order to assure producers a reasonable profit, and to fix such guaranteed price for each of the official grain standards for wheat as established in the United States Grain-Standards Act. "The guaranteed prices for the several standard grades of wheat for the crop of 1918 shall be based upon number one northern spring, or its equivalent, at not less than \$2 per bushel at the principal interior primary markets."

10. To prohibit the use of food, fruits, food materials, or feeds in the distillation of beverages after September 8, 1917.

11. To prohibit the importation of distilled liquors.

12. To commandeer any or all distilled spirits in bond or in stock at the date of the approval of this act for redistillation, in so far as such redistillation may be necessary to meet the requirements of the Government in the manufacture of munitions and other military and hospital supplies, or in so far as such redistillation would dispense with the necessity of utilizing products and materials suitable for foods and feeds in the future manufacture of distilled spirits for the purposes herein enumerated. The President shall determine and pay a just compensation for the distilled spirits so commandeered.

13. To regulate, curtail, or prohibit the manufacture of vinous or malt liquors.

14. To fix the price of coal and coke, wherever and whenever sold, either by producer or dealer, to establish rules for the regulation of and to regulate the method of production, sale, shipment, distribution, apportionment, or storage

thereof among dealers and consumers, domestic or foreign; or if any dealer or producer fails to meet the prices or conform to the regulations prescribed, the President is "authorized and empowered in every such case to requisition and take over the plant, business, and all appurtenances thereof belonging to such producer or dealer as a going concern, and to operate or cause the same to be operated in such manner and through such agency as he may direct during the period of the war or for such part of said time as in his judgment may be necessary," and to pay "a just compensation for the use thereof."

15. To require any or all producers of coal and coke \* \* \* to sell their products only to the United States through an agency to be designated by the President, such agency to regulate the resale of such coal and coke and the prices thereof, and to establish rules for the regulation of and to regulate the methods of production, shipment, distribution, apportionment, or storage thereof among dealers and consumers, domestic or foreign, and to make payment of the purchase price thereof to the producers thereof, or to the person or persons legally entitled to said payment.

16. To procure, or aid in procuring, such stocks of nitrate of soda as he may determine to be necessary, and find available, for increasing agricultural production during the calendar years 1917 and 1918, and to dispose of the same for cash at cost, including all expenses connected therewith.

Pursuant to the power granted him as to issuing licenses under certain conditions, as mentioned in No. 3 above, the President on August 14 issued a proclamation requiring all those engaged in the business of either storing or distributing wheat or rye as owners, lessees, or operators of warehouses or elevators, and all those engaged in the business of manufacturing any products derived from wheat or rye (except those operating mills and manufacturing plants of a daily capacity of 100 barrels or less and farmers and cooperative associations of farmers), to take out a Government license on or before September 1, 1917.

Upon his appointment as Food Administrator, Mr. Hoover issued a statement, outlining his plan for controlling the 1917 wheat harvest and fixing the price, in which he announced the President's approval of the appointment of a committee to be selected from representatives of the producing sections and consuming elements in the community. The duty of this committee is to determine a fair price for the 1917 wheat harvest. In this connection Mr. Hoover says:

Upon the determination of this fair basis it is the intention of the food administration to use every authority given it under the bill and the control of exports to effect the universality of this fair basis throughout the whole of the 1917 harvest year, without change or fluctuation. It should thus be clear that it will not be to the advantage of any producer to hold back his grain in anticipation of further advance, for he will do so only at his own cost of storage and interest, and, if it is necessary for the Government to buy the entire wheat harvest in order to maintain this fair price in protection of the producer, we intend to do so.

Furthermore, the holding of wheat or flour contracts by persons not engaged in the trade, and even when in the trade, in larger quantities than is necessary

for the ordinary course of their business, is unlawful under the act, and such cases will be prosecuted with vigor. We would advise such holders to liquidate their contracts at once.

This committee on prices was announced August 15, and is composed of men chosen primarily for their character and ability and peculiar fitness for the duties resting upon them, without regard to the fact that they represent any particular organization or come from any particular section of the country. However, it will be observed by a careful study of the personnel of the committee that its members represent widely distributed geographical districts and are connected with organizations and enterprises having deep interest in the regulation of prices. Among the membership are four farmers, one capitalist, three college presidents, one banker, one professor of economics, and two representatives of labor. It should be borne in mind that this committee is giving its first attention to determining a fair price for wheat this year, upon which basis future prices will be fixed, subject, of course, to the provision in the food-control law establishing a minimum price for 1918 of \$2 per bushel in the principal interior primary markets. The fixing of fair prices for other foodstuffs will be determined later. The personnel of the fair-price committee is as follows:

Harry A. Garfield, chairman (college president and professor of political science), president of Williams College, Williamstown, Mass.

Charles J. Barrett (farmer), president of Farmers' Union, Union City, Ga.

William N. Doak, vice president and national legislative representative of Brotherhood of Railroad Trainmen at Washington, Roanoke, Va.

Eugene E. Funk (farmer and member of firm of Funk Bros.' Seed Co.), president of National Corn Association, Bloomington, Ill.

Edwin F. Ladd (college president and professor of chemistry), president of North Dakota Agricultural College, Fargo, N. Dak.

R. Goodwin Rhett (banker and business man), president of Chamber of Commerce of the United States, Charleston, S. C.

J. W. Shorthill (farmer), secretary of National Council of Farmers' Cooperative Associations, York, Nebr.

James W. Sullivan, representative of American Federation of Labor at Washington, Brooklyn, N. Y.

L. J. Tabor (farmer), master of Ohio State Grange, Barnesville, Ohio.

Frank W. Taussig (professor of economics), chairman of United States Tariff Commission, Cambridge, Mass.

Theodore N. Vail (capitalist), president of American Telephone & Telegraph Co., New York, N. Y.

Henry J. Waters (college president and professor of agricultural science), president of Kansas State Agricultural College, Manhattan, Kans.

At the same time the fair-price committee was made public the formation of a \$50,000,000 corporation under the grain division of the food administration was announced, to be used in connection with wheat purchasing, selling, and accounting, and the taking over of the entire 1917 wheat harvest, if necessary, to maintain the prices to be determined by the fair-price committee. The executive officers of this corporation consist of H. C. Hoover, chairman; Julius Barnes, Duluth, Minn., president; Gates W. McGarrah, president of the Mechanics & Metals Bank, New York City, treasurer; F. G. Crowell, Kansas City, Mo., vice president; Edward Chambers, vice president of Santa Fe Railway, Chicago, Ill., transportation director; Judge Curtis H. Lindley, San Francisco, Cal., counsel; J. W. Short-hill, secretary of National Council of Farmers' Cooperative Associations, York, Nebr., secretary.

Twelve men have been named by the Food Administration to represent the grain division in the purchasing of wheat at the various terminals. These men are as follows: George S. Jackson, Baltimore; Charles Kennedy, Buffalo; Howard B. Jackson, Chicago; P. H. Ginder, Duluth; D. F. Piazzek, Kansas City, Mo.; Frank L. Carey, Minneapolis; C. B. Fox, New Orleans; Charles T. Neal, Omaha; H. B. Irwin, Philadelphia; M. H. Houser, Portland, Oreg.; R. A. Lewin, San Francisco; and Edward M. Flesh, St. Louis.

The millers of the country, at the request of the Food Administration, have organized a committee to represent the entire trade, and this committee, as announced on August 15 at a conference held in Washington, is as follows: Chairman, James F. Bell, Minneapolis; secretary, A. P. Husband, Chicago; Northwest, Albert C. Loring, Minneapolis; Southwest, Andrew J. Hunt, Arkansas City, Kans.; Southeast, E. M. Kelly, Nashville, Tenn.; St. Louis and Illinois, Samuel Plant, St. Louis; Ohio Valley, Mark N. Mennel, Toledo, Ohio; Chicago and Milwaukee, Bernard A. Eckhart, Chicago; Pacific Coast, Theodore B. Wilcox, Portland, Oreg.

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#### BOARD TO ADJUST LABOR DISPUTES IN PLANTS HAVING GOVERNMENT CONTRACTS.

The Council of National Defense announces the creation of a labor-adjustment commission, the personnel of which at this writing has not been determined, composed of three representatives of the Government, three representatives of employers, and three representatives of employees, to whom shall be referred all disputes concerning wages

or conditions of employment in plants working on Government contracts. This commission shall have power to appoint labor-adjustment committees to hear and determine such labor disputes as the commission may assign to them, involving less than 1,000 workers (the commission itself handling those involving more than 1,000 workers), and the awards of the commission or of any committee appointed by it shall be binding upon employers and employees. In announcing the creation of this commission the Council of National Defense issued the following statement defining the functions of the new body:<sup>1</sup>

First. There shall be created by the Council of National Defense a labor-adjustment commission to be composed of nine members—three members representative of the Government, three members representative of employers, and three members representative of labor. Vacancies shall be filled by representatives of the same elements selected in the same manner. The commission shall have jurisdiction over all disputes concerning wages or conditions of employment in all establishments having contracts with the Government in accordance with the eight-hour law of June 19, 1912, or March 3, 1913, and shall hear and determine all labor disputes in which more than 1,000 workers are directly affected and may, in its discretion, hear and determine labor disputes in which less than 1,000 workers are directly affected. It shall also have authority to appoint from time to time labor-adjustment committees to hear and determine such labor disputes as may be assigned to them by the commission where less than 1,000 workers are directly affected, such committees to be representative of the same elements as the commission. The awards of the labor-adjustment commission or labor-adjustment committees appointed by it shall be made in each case not more than 30 days after the case has been submitted to the commission, and shall be binding upon the employers and the employees in the plant or plants affected for such period as may be expressed in the award, but not longer than 60 days after the close of the war. In all hearings before the commission or committees the employers and employees affected shall have the right to be represented in the presentation of their respective cases by such persons as they may select under such rules as the commission may prescribe.

Second. That in every contract hereafter made by the Government in accordance with the eight-hour law of June 19, 1912, or March 3, 1913, which may require or involve the employment of laborers or mechanics, there shall be included the following stipulations: That wages of persons employed upon such contracts shall be computed on a basic day rate of eight-hours' work, with overtime

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<sup>1</sup> Statement taken from the Official Bulletin for Aug. 10, 1917, p. 2.



rates to be paid for at not less than time and one-half for all hours work in excess of eight hours. That whenever a labor dispute arises in any establishment under contract with the Government in accordance with the provisions of the eight-hour law of June 19, 1912, or March 3, 1913, which the employers and employees, or their representatives, are unable to mutually adjust and a strike or lockout seems imminent, the Department of Labor may, on its own initiative or at the request of the employers, the employees, or the department whose contract is affected, appoint a mediator, who shall, on behalf of the Government, endeavor to bring about a mutually satisfactory adjustment of the dispute. If the mediator thus appointed is unable to bring the employers and employees to a mutual agreement, the question or questions in dispute shall be submitted for adjudication to the adjustment commission created by the Council of National Defense, work to be continued pending its decision. Every contractor and subcontractor shall agree to accept and abide by the decision of the labor-adjustment commission or labor-adjustment committee, as the case may be, and every worker accepting employment in any plant within the jurisdiction of the adjustment commission shall do so with the definite understanding and agreement that he will accept and abide by the decisions of the adjustment commission or the adjustment committee, as the case may be, in the settlement of any question affecting labor submitted to it for adjudication.

## METHODS OF MEETING THE DEMANDS FOR LABOR.

BY CHARLES F. OSBORN.

In the existing emergency arising from war conditions the need for additional labor in many industries has proved very great. This need has been met both by the creation of new employment agencies and by the extension and development of existing organizations. A large additional burden has been placed on the United States Civil Service Commission, especially in the furnishing of artisans, helpers, and additional laborers at naval establishments. In this article is given an account of the method now being used in securing this type of labor. The United States Department of Labor, through its Division of Information, has extended and amplified its organization to meet existing conditions, and has also organized a new agency known as the United States Public Service Reserve. This unit operates under the supervision of the United States Department of Labor, and a description of its methods of work is also presented, together with a statement of the work now being done by the Division of Information of the United States Department of Labor. All of these agencies are in a general sense working cooperatively to the end that the man and the job may be brought together in the shortest possible time.

### METHOD OF EMPLOYMENT OF CIVILIAN MECHANICAL FORCES AT NAVAL ESTABLISHMENTS.

The civilian mechanical forces at navy yards and other naval establishments normally consist, in the aggregate, of about 22,000 artisans, helpers, and laborers. In the four months ending July 31 the total was increased to approximately 35,000. All such positions are filled through the United States Civil Service Commission, the usual procedure being to accept applications at the several yards and stations for the classes of work in which there is need for additional men. Under this usual method the applications are received and the ratings made by the local labor boards at the yards and stations; the boards, with reference to the administration of the civil-service law and rules, are under the direct and sole control of the Civil Service Commission and each of them includes in its personnel the district secretary of the civil-service district in which the establishment is situated.

When it appeared certain, on account of the international situation, that a greatly augmented force of civil employees was necessary, it also soon became evident that, owing to the industrial conditions prevailing, the customary means of recruiting the navy-yard service would fail to meet the needs in certain trades, especially those connected with shipbuilding; and it was plain that agencies in addition to the local labor boards mentioned must be employed if the tremendously increased work at naval establishments was to be kept from lagging. Accordingly the Civil Service Commission promptly inaugurated a campaign both extensive and intensive designed to meet the situation.

In a country of such broad expanse as the United States the task of bringing the man and the job together is more difficult than in a compact territory, such as England, for instance. The organization which the Civil Service Commission has been building up for years consists of approximately 3,000 local boards of examiners, made up exclusively of Federal employees, in every part of the country, and these local boards report to district secretaries in 12 civil-service districts, all under the supervision and direction of the commission at Washington.

In the existing emergency, the commission made an arrangement with the Navy Department to instruct the responsible officers at navy yards and naval stations to make daily reports to the department by telegraph of their respective urgent needs; that is, the needs which could not be met through the local filing of applications. This has been done from the beginning of the unusual demand. These telegraphic reports from the several sources are collected in the Navy Department and transmitted daily to the Civil Service Commission. The commission in turn sends weekly, or more frequently when necessary, to each of its 3,000 district and local boards a compilation of these specified needs, and all of the commission's representatives are instructed to use every proper effort to locate men with the qualifications desired who are willing and able to accept Government employment. The district and local boards disseminate the information by sending notices to newspapers, by enlisting the aid of local trades-unions, by keeping in touch with offices of the United States Employment Service of the Department of Labor, and by directly approaching individuals when there is opportunity for personal interview. In all of this effort, however, care is exercised to avoid interference with employees of private plants engaged directly upon contracts for the Government.

In the commission's efforts to locate available workers, the American Federation of Labor, through its widespread organization, has rendered assistance of the greatest value.

As the result of all of this endeavor, the commission has been able to keep in advance of most of the calls for workmen by the Navy Department, and, with the exception of some of the shipbuilding trades, keep up with its regular work, notwithstanding the fact that the demand for skilled labor has been greater than the country has ever before known. In cases where men were not to be had the commission is encouraging the special training of men in allied trades.

Besides supplying immediate needs, represented by the 13,000 men employed since April 1, the commission has enrolled for possible future use the names of about 30,000 mechanics skilled in various occupations who have expressed their willingness to accept Government employment if called upon to do so.

The examinations given to applicants for mechanical trades and similar positions do not include scholastic tests. Each applicant is required to execute a formal application setting forth his training and experience in the occupation in which he seeks to be employed, and to undergo a physical examination. The two elements, (1) training and experience and (2) physical ability, determine the rating, the former having a weight of 60 per cent and the latter, 40 per cent. Invariably confidential inquiries are made of persons by whom or under whom the applicant has been employed, or of fellow workmen of the applicant, and the result of these inquiries may affect the rating for training and experience or cause the applicant to be rejected as morally or otherwise unfit for the Government service. Applicants for positions as ordinary unskilled laborers are required to undergo a physical examination only. In their case, also, character vouchers are required.

In many cases of urgent need the commission arranges for a district secretary or other representative to call upon the prospective applicant and receive his application, have him examined physically, call upon his references, and give him a rating on the spot. If he is found eligible, the examiner may arrange upon specific authority from the commission to send the man at once to a naval establishment which is in immediate need of his services. The commission is authorized by the Navy Department to employ men urgently needed at naval establishments with the understanding that the expense of their transportation to the place of employment will be borne by the Government if they agree to serve or actually do serve for six months. When appointment is made under this provision the offer of employment so indicates.

The men who have qualified in accordance with the commission's regulations and who have accepted employment offered are furnished with credentials in the form of a letter or telegram from the office of the commission or of an employment card given directly by the

district secretary or other representative of the commission. When a man thus duly authorized appears for work report is made to the commission by the labor board at the naval establishment in which he is employed.

The greater part of the appointments resulting from the commission's extra effort have been made in the navy yards at Portsmouth, N. H., Philadelphia, Pa., Washington, D. C., Norfolk, Va., and Charleston, S. C., and the naval station at Key West, Fla.

The latest report available showed only 397 vacancies in the entire navy-yard service coming within the class of "urgent needs" which were unfilled on the date of the report, the total being made up as follows: Four angle smiths, 30 boat builders, 13 boiler makers' helpers, 4 calkers (wood), 3 calkers and chippers (iron), 3 canvas workers, 33 coppersmiths, 1 diesinker, 1 galvanizer, 1 loftsmen, 1 puncher and shearer, 1 rivet heater, 18 sailmakers, 130 ship fitters, 19 ship joiners, 16 ship smiths, 6 ship smiths' helpers, 64 shipwrights, and 49 shipwrights' helpers. This list of vacant positions does not mean, of course, that workmen in other trades are not in demand; the enumeration covers only the workmen reported as immediately and urgently wanted at the time the report was compiled.

#### WORK OF UNITED STATES PUBLIC SERVICE RESERVE.

Another agency which has been organized to provide adult male workers in the present emergency is the United States Public Service Reserve, which has been formed under the supervision of the United States Department of Labor. The purpose for which the organization was formed is stated in the following extract, taken from one of its leaflets:

The United States Public Service Reserve is an official national organization of adult males who desire to find their place for effective service to the country in the war emergency and to make it easy for the Government to locate them when it needs help from men of their capacities. It has been organized and is conducted by the United States Department of Labor, which is the Federal department to which such matters belong and to which all branches of the Government look for assistance in finding men. Enrollment in its ranks does not excuse anyone from the obligation to bear arms when his day for such service arrives. Its purpose is to enable those who are not called into the Army or Navy to play their part in realizing the ideal of a whole nation organized to war for the safety of our country and the preservation of the civilization and the future peace of the world. It is a common meeting ground where men of all degrees of capacity and attainment may unite in devoting themselves to the service of our country and mankind.

Prospective employees are enrolled either in a voluntary or wage-earning capacity. Certification is then made of such available employees to the Government or to private concerns as need certain kinds of labor. The Public Service Reserve now has in its files more



than 10,000 offers of service which have been received from all parts of the country. A large clerical force is busy communicating with persons who have made the offers referred to, with a view to getting more specific data as to aptitude for service and enlistment in the reserve. The form of application used by the Public Service Reserve is reproduced below (see Exhibit A), and under inquiry 17 will be found a list of occupations especially useful at this time in service necessary in the Government and with many private employers.

## EXHIBIT A.

TO THE UNITED STATES PUBLIC SERVICE RESERVE,  
Department of Labor,

Washington, D. C.

I hereby apply for membership in the

## UNITED STATES PUBLIC SERVICE RESERVE

And ask it to register in its records the accompanying description of my training, experience, aptitudes, and capacity for service. Whenever the U. S. Public Service Reserve learns of a need in public or private employment, for service in the national interest of a man of my qualifications, I request it to notify me with full particulars including duties and compensation, and thereby afford me an opportunity to assist under the auspices of the Reserve. I make this application because I desire a practical opportunity in this war emergency to contribute personal service by doing work that will aid the general welfare.

Name.....

Residence.....

(Street address.)

(City or town.)

(State.)

Business address.....

Telephone (Home).....

(Business).....

## INFORMATION CONCERNING APPLICANT

(Please answer all questions.)

1. What is your age?.....
2. Of what country are you a citizen?.....
3. Country of birth.....
4. Country of birth of parents: Father..... Mother.....
5. Physical disabilities, if any.....
6. Number and relationships of dependents, if any.....
7. Education: Check schools you have attended:  
Common..... High..... Business..... Trade or Industrial.....  
Technical High..... College..... Technical College..... Professional School.....  
If college, technical college, or professional school give names, courses, dates and degrees.....
8. What command of foreign languages have you?.....
9. What is your present occupation?.....
10. What is your special line of work in that occupation?.....
11. Name of your employer, if any.....  
His address.....  
(Street.) (City or town.) (State.)  
His business.....
12. Are you willing to work anywhere, in this country or abroad?.....
13. If not, state limitations.....
14. Are you willing to devote all your time?.....
15. If not, state between what dates you can work.....
16. Are you in a position to work for the Government without compensation?.....

(SEE ALSO QUESTION 17, PAGE 4.)

## VERY IMPORTANT.

List here the *principal* positions you have held or things you have done, with approximate time spent in each (including length of time in your present position). State specific branch of the trade, vocation, or profession in which you are most proficient.

Give the names and addresses of two or more persons who can, if asked, give information as to your qualifications.

SEE NEXT PAGE.

17. State the kind of work *other than that in which you are now engaged*, that you are willing to undertake, circumstances permitting, if it should be desirable for the public good. Select, if possible, from the following list of occupations especially useful at this time, and state training and experience, if any. Specify as definitely as possible the particular kind of work you have in mind.

Accountant.  
Aviator mechanic.  
Ambulance driver.  
Automobile mechanic.  
Automobile truck driver.  
Baker.  
Blacksmith.  
Butcher.  
Canner.  
Carpenter.  
Clerk—General.  
Statistical.  
Draftsman.  
Electrician.  
Engineer—(specify kind).  
Farmer—expert.  
Farm worker.  
Foreman—construction.  
Harness maker.  
Helper—(specify kind).  
Horseshoer.  
Inspector—(specify kind).  
Instrument maker.  
Laborer—(unskilled).  
Loftsmen or templet maker.  
Lumberman.  
Machinist.  
Machine hand.  
Mason.  
Metallurgist.  
Miner.  
Munition worker.  
Navigator.  
Nurse—Trained.  
Helper.  
Painter.

Plumber.  
Railroad—(steam or trolley).  
Construction.  
Operation.  
Maintenance of way.  
Sailor.  
Saddler.  
Sheet-metal worker.  
Ship worker:  
Boilermaker.  
Calker (wood).  
Carpenter.  
Draftsman.  
Driller.  
Fitter.  
Molder.  
Patternmaker.  
Rigger.  
Riveter.  
Smith.  
Wright.  
Shipping clerk.  
Stenographer.  
Structural steel worker.  
Shoemaker.  
Tailor.  
Testing materials—(specify kind).  
Tinner.  
Teamster.  
Telegraph operator.  
lineman.  
Typewriter.  
Toolmaker.  
Veterinary surgeon.  
Wheelwright.  
Wood worker (machine).

Write answer to question 17 here.

## FEDERAL EMPLOYMENT WORK OF THE DEPARTMENT OF LABOR.

(Division of Information, Bureau of Immigration.)

The United States Employment Service of the Department of Labor was placed on a nation-wide basis by order of Hon. W. B. Wilson, Secretary of Labor, on January 8, 1915. Previous to that time the Division of Information of the Bureau of Immigration in said department had been conducting in a limited way an employment service through its one branch office in New York City. The authority of law under which the service operates is found in section 30 of the act of February 5, 1917, which superseded a similar act of February 20, 1907, supplemented by the act creating the Department of Labor. The pertinent parts of said acts are as follows:

It shall be the duty of said division to promote a beneficial distribution of aliens admitted into the United States among the several States and Territories desiring immigration. Correspondence shall be had with the proper officials of the States and Territories, and said division shall gather from all available sources useful information regarding the resources, products, and physical characteristics of each State and Territory, and shall publish such information in different languages and distribute the publications among all admitted aliens at the immigrant stations of the United States and to such other persons as may desire the same.

The purpose of the Department of Labor shall be to foster, promote, and develop the welfare of wage earners of the United States, to improve their working conditions, and to advance their opportunities for profitable employment.

The following list shows the organization in effect on July 31, 1917, including zones, headquarters, names and titles of officers in charge, and subbranches where such exist.

## UNITED STATES EMPLOYMENT SERVICE.

WILLIAM B. WILSON, *Secretary of Labor.*  
 LOUIS F. POST, *Assistant Secretary of Labor.*  
 A. CAMINETTI, *Commissioner General.*  
 T. V. POWDERLY, *Chief, Division of Information.*

WASHINGTON, D. C., July 31, 1917.

Zone.	Headquarters.	Name and title of officer in charge.	Subbranch.
Maine.....	Portland: Customhouse.....	Timothy Elliott, inspector in charge of employment.	
New Hampshire.....			
Vermont.....			
Massachusetts.....	Boston: 1151 Washington St.	H. J. Skeffington, acting director of employment.	New Bedford.
Rhode Island.....	Providence: 222 Federal Building.	James A. Sullivan, inspector in charge of employment.	
Connecticut.....			
New York.....	New York: Room 8, U. S. Barge Office.	P. A. Donahue, director of employment.	Buffalo (Room 8, Federal Building).
New Jersey.....	Newark: 9 Franklin St., Women and Girls' Division.	Thomas J. Burns, director of employment. Margaretta Neale, acting superintendent.	Jersey City. Orange.
Pennsylvania.....	Philadelphia: 132 South Third St.	J. L. Hughes, acting director of employment.	Pittsburgh (Berger Building).

Zone.	Headquarters.	Name and title of officer in charge.	Subbranch.
Delaware.....	Wilmington: Old Federal Building.	A. G. Benkhart, acting director of employment.	
Maryland.....	Baltimore: Stewart Building, Women and Girls' Division.	Geo. A. Mahone, director of employment.	
District of Columbia	Washington: Department of Labor Building, Women and Girls' Division.	Nannie Irvine, in charge. T. V. Powderly, acting director of employment. Grace Porter Hopkins, acting superintendent.	
Virginia.....	Norfolk: 119 West Main St..	W. R. Morton, inspector in charge.	
West Virginia.....			
North Carolina.....			
South Carolina.....	Charleston: Customhouse...	W. V. Howard, acting director of employment.	
Georgia.....	Savannah: Customhouse....	Edgar T. Whatley, inspector in charge of employment.	
Florida.....	Jacksonville: Federal Building.	Gideon B. Travis, inspector in charge of employment.	Miami.
Alabama.....	Mobile: Federal Building...	Henry C. Brownlow, inspector in charge of employment.	
Mississippi.....	Gulfport: Post-office Building.	Hunter M. Course, inspector in charge.	
Louisiana.....	New Orleans: City Hall....	H. A. M. Jacobsen, inspector in charge.	
Tennessee.....	Memphis: Post-office Building.	J. H. Ware, inspector in charge..	
Arkansas.....	Little Rock: 27 Post-office Building.	Robert B. Keating, inspector in charge of employment.	
Ohio.....	Cleveland: Post-office Building.	J. A. Fluckey, acting director of employment.	
Kentucky.....			
Indiana.....	Indianapolis: 319 Federal Building, Women and Girls' Division.	John S. Sherman, director of employment.	
Illinois.....	Chicago: 845 S. Wabash Ave., Women and Girls' Division.	Morna Hickman, in charge. P. L. Prentiss, acting director of employment.	
Michigan.....	Detroit: Old Post-office Building.	Benjamin J. Sand, acting director of employment.	Sault Ste. Marie.
Wisconsin.....	Madison: Capitol Building..	J. C. Hise, inspector in charge of employment.	
Minnesota.....	Minneapolis: Federal Building.	Chas. W. Seaman, acting director of employment.	
North Dakota.....			
South Dakota.....			
Iowa.....			
Missouri (eastern district).	St. Louis: 19 N. Eighth St..	W. R. King, acting director of employment.	
Missouri (western district).	Kansas City: 804 Grand Ave.	A. L. Barkman, director of employment.	
Nebraska.....	Omaha: County courthouse.	M. A. Coykendall, inspector in charge of employment.	Lincoln.
Kansas.....			
Oklahoma.....			
Texas (southern district).	Galveston: American National Insurance Co. Building.	James B. Bryan, acting director of employment.	Brownsville. Eagle Pass. Houston. Laredo. San Angelo. San Antonio. Del Rio.
(Western district)	El Paso.....	Perry P. Young, inspector in charge of employment.	
(Northern district).	Fort Worth.....	Wm. H. Robb, inspector in charge of employment.	Amarillo. Big Spring.
New Mexico.....	Sante Fe.....	Karl W. Greene, acting director of employment.	Albuquerque. Tucumcari. Deming.
Colorado.....	Denver: 355 Federal Building, Women and Girls' Division.	H. H. Moler, inspector in charge. Katherine M. Herring, clerk in charge.	
Utah.....	Salt Lake City: Federal Building.	D. Arthur Plumly, acting director of employment.	
Wyoming.....			
Montana.....	Helena: Power Building....	Chas. K. Andrews, acting director of employment.	
Idaho.....	Moscow.....	Wm. J. McConnell, inspector in charge of employment.	
Washington.....	Seattle: First Ave. and Union St.	Lawrence Wood, acting director of employment.	Spokane. Walla Walla. Tacoma. Aberdeen. Everett. Bellingham. North Yakima. Friday Harbor.

Zone.	Headquarters.	Name and title of officer in charge.	Subbranch.
Washington (con.)..	Seattle: First Ave. and Union St.	Lawrence Wood, acting director of employment.	Nooksack. Lynden. Custer. Port Townsend. Port Angeles. Astoria.
Oregon.....	Portland: 249 Ankeny St...	R. P. Bonham, director of employment.	Sacramento. Fresno. Eureka. Monterey. San Diego. Santa Ana. Santa Barbara. San Luis Obispo. Bakersfield. San Bernardino. Calexico. Indio.
California (northern district).	San Francisco: 2 Appraisers' Building. Women and Girls' Division, 108 Customhouse.	William Greenblatt, acting director of employment. Estelle Barfield, acting superintendent.	
(Southern district.)	Los Angeles: Post-office Building.	Charles T. Connell, inspector in charge.	
Nevada.....	Reno.....	Neil McGee, inspector in charge of employment.	
Arizona.....	Phoenix.....	Frank Brown, acting director of employment.	Tucson. Douglas. Naco. Nogales. Phoenix. Yuma.

The activities of the employment service are given publicity through newspapers, through notices posted in post offices, and by other means. Many newspapers give free space to the bulletins of opportunities furnished them by the Division of Information in Washington through the local officers.

Arrangement of close cooperation between the Department of Labor and the Post Office Department is an effective means of making known to wage earners the fact that opportunities for employment may be found by applying at the nearest office of the United States Employment Service.

Applicants for employment are registered in two ways (1) in the ordinary manner by calling at an employment office and filing an application in person, (2) by utilizing the cooperative arrangement with the Post Office Department mentioned in the preceding paragraph. Under this plan each postmaster in the United States is supplied with the application blanks of the Department of Labor, and any applicant seeking employment or any employer in need of help has but to call at the post office and request a blank upon which to file an application, fill out and sign the same, and return it to the postmaster, whereupon it is mailed without postage to the headquarters of the employment zone in which the post office is located.

The nature of the questions that applicants for employment are required to answer, together with the experience acquired by placement officers, tends to the selection of workers who possess the necessary qualifications. In the same way the questions asked of employers and the watchfulness of those in charge of the Government



employment offices minimize the likelihood of workers being sent to localities where labor troubles exist or are threatened.

Prior to this country's becoming involved in the world war, practically the entire machinery of the United States Employment Service was utilized in directing wage earners to private employment. Inasmuch, however, as need for artisans in navy yards, arsenals, and other Government establishments has since that time become very great, a joint agreement was entered into between the Department of Labor and the Civil Service Commission whereby the Employment Service renders effective assistance in directing help to Government workshops. The service has also been assisting in the securing of ship carpenters, calkers, ironworkers, and men experienced along other lines in ship construction for work in building vessels contracted for by the United States Shipping Board Emergency Fleet Corporation. Cooperation has also been arranged with the Department of Agriculture, under which a shortage of men in any farming community is certified to the United States Employment Service by the field agents of that department, so that the employment service may direct the required number from the nearest point at which they are available.

In many of the States formal agreements have been made between representatives of the United States Department of Labor and State commissioners of labor or other State officials, under the terms of which cooperative employment offices are established. In some cases cooperation has been effected in a similar manner with municipalities. Through the Women and Girls' Division of the United States Employment Service cooperation has been effected with a great number of national women's organizations with a combined membership of approximately 7,000,000. Under this plan organizations of women are invited to cooperate by the creation of a woman's federated council on employment, composed of representatives of each of said organizations in the locality where an employment office or a Women and Girls' Division is established by direction of the Department of Labor. Such councils have been organized in a number of large cities and have been found to be effective aids in securing the placement of women and girls. The plan also provides for information as to industry, vocational guidance, and industrial training. The placement of girls is limited to those over 16 years of age. The Young Men and Boys' Division established on similar lines as those of the Women and Girls' Division is also supplemented by men's federated councils having similar functions as those possessed by women's federated councils, and placing boys over 16 years of age. The men's councils also aid adults in employment matters. An important feature of the activities of the service is the work done in

conjunction with the bureau of registration and information of the National League for Woman's Service. This organization is engaged in registering wage-earning women and girls who are ready to serve their country in factories and mills which are supplying the needs of the Army and Navy.

In an undertaking of so large a scope as that of the United States Employment Service it is manifestly impossible to reduce to figures all the results accomplished. For instance, each year thousands of men are notified by bulletins of localities in which they may obtain work in the harvest fields, but as they did not come into direct contact with representatives of the Employment Service no record could be kept of the number securing work in this way. The following table, however, summarizes the activities since the beginning of the fiscal year 1915 so far as it has been possible to procure accurate data:

Fiscal year.	Number of opportunities.	Number of men called for.	Number of applicants for work.	Number referred to employment.	Number actually placed.
1915....	<sup>1</sup> 2,409	<sup>1</sup> 7,427	90,119	<sup>1</sup> 8,883	<sup>1</sup> 11,871
1916....	25,645	107,331	184,032	84,963	75,156
1917 <sup>2</sup> ...	189,491	418,810	413,649	363,189	283,799

<sup>1</sup> Figures are for months of May and June only.

<sup>2</sup> The figures for fiscal year 1917 are incomplete.

## DEVELOPMENT OF EMPLOYMENT MANAGERS' ASSOCIATIONS.

BY PROF. J. H. WILLITS, SECRETARY, PHILADELPHIA ASSOCIATION FOR THE  
DISCUSSION OF EMPLOYMENT PROBLEMS.

Considerable significance attaches to the tendency among executives of soundly managed industrial concerns to form themselves into associations for the discussion and interchange of experience on problems having to do with the selection and dealing with the personnel. This tendency may now be said to have attained the proportions of a national movement, which can not fail to have more or less influence on management and on labor, and in fact on the whole question of industrial relationships.

Although the first of these associations was formed only about five years ago, associations, which in general have been remarkably successful, have been organized in 10 cities, including Boston, Chicago, Cleveland, Detroit, Newark, New York, Philadelphia, Pittsburgh, Rochester, and San Francisco. Nearly one thousand of the larger industrial concerns are enrolled as members in these associations, and, since most of these organizations have a minimum size requirement for admission to membership, the very small firms, whose personnel problems are distinctly different from those of their larger neighbors, are eliminated.

Each of the associations attempts to bring together the personnel and employment executives to discuss their common problems, pool their common experiences, and endeavor to work out a method of selecting and dealing with the employees in plants in a way that is at once practical, scientific, and human. The reduction of high labor turnover, the training of employees, training of foremen, selection of employees, and medical service and nurse work are sample topics of discussion. That man or firm which has made the most successful attempts to develop ideal personnel conditions is usually chosen to lead the discussion.

On April 2 and 3, 1917, a national conference of employment managers was held in Philadelphia. This conference was attended by 500 personnel and employment executives, chiefly, representing each of the 10 local associations, and many outsiders as well. At this conference a national employment managers' committee was formed of delegates from each personnel and employment managers' association to organize a permanent national committee which would serve to correlate the independent local organizations. The follow-

ing committee was appointed: Chairman, Joseph H. Willits, secretary Philadelphia Association for the Discussion of Employment Problems; vice chairman, John C. Bower, secretary Pittsburgh Employment Managers' Association; secretary-treasurer, Ralph G. Wells, secretary of Employment Managers' Association of Boston; Mark M. Jones, president of the Newark Society; C. L. Miller, secretary Employment Managers' Group Detroit Executives' Club; W. H. Winans, Employment Managers' Group, Manufacturers and Wholesale Merchants' Board, Cleveland; Dr. E. B. Gowin, New York Society; C. R. Beard, Chicago Employment Advisers' Club; Lewis B. Ermeling, Rochester Employment Managers' Group; F. Dohrman, president of the San Francisco Society.

This committee met on the 17th day of May, 1917, at Rochester, and decided that its purpose should be to bring about a closer cooperation between organizations devoted to the study of employment problems, to arrange for national conferences, and to assist in the interchange of reports of meetings, investigations, and information of interest to local associations.

Where all this will lead can not now safely be predicted. That these organizations will prove permanent can hardly be questioned in view of the interest which is continually increasing among responsible employing concerns in problems of personnel. What their effect will be on labor is difficult to predict. By enlightening selfishness they will undoubtedly serve to improve the physical and mental conditions of employment. At present, unions are not discussed in meetings. While this may tend to indicate what the industrial democrats call a paternalistic policy, nevertheless such a policy is a good deal more broad minded and democratic than getting together chiefly to condemn and combat unions. Individual employers are not referred to by name. There is no pooling of interests in case of strikes, as in some other employers' associations. In short, there is here a new association—a new employers' association, but an employers' association that is different.

Some idea of the type of business house that finds it worth while to join in the discussion afforded in these groups is found in the following list of a few of the members of most of the associations, each firm being located, except as indicated, in the city giving its name to the local association:

*Boston Association.*—W. F. Schrafft & Sons; Dennison Manufacturing Co., Framingham, Mass.; Cheney Bros., South Manchester, Conn.; Jordan Marsh Co.

*Chicago Association.*—Sears, Roebuck & Co.; Chicago Typothetæ School of Printing; Commonwealth Edison Co.; Marshall Field & Co.; Armour & Co.; Selz, Schwab & Co.

*Detroit Association.*—Detroit Gear & Machine Co.; Packard Motor Car Co.; Dodge Bros.; Solvay Process Co.; Michigan State Telephone Co.; Detroit Steel Products Co.; Detroit Fuse & Manufacturing Co.

*Newark Association.*—Weston Electrical Instrument Co.; The Celluloid Co.; L. Bamberger & Co.; Edison Affiliated Interests (Inc.), Orange, N. J.; Hyatt Roller Bearing Co., Harrison, N. J.

*New York Association.*—American Metal Co. (Ltd.); Equitable Life Assurance Co.; R. H. Macy & Co.; Crocker-Wheeler Co.; American Telephone & Telegraph Co.; Champlain Silk Mills.

*Philadelphia Association.*—Fayette R. Plumb (Inc.); John B. Stetson Co.; Strawbridge & Clothier; The American Pulley Co.; The Barrett Co.; Curtis Publishing Co.; The A. M. Collins Manufacturing Co.; New York Shipbuilding Corporation, Camden, N. J.

*Pittsburgh Association.*—Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.

*Rochester Association.*—Rochester Railway & Light Co.; Eastman Kodak Co.; Yawman & Erbe Manufacturing Co.; Taylor Instrument Co.

### LABOR LAW ADMINISTRATION IN NEW YORK STATE.

A comprehensive study of the administration of labor laws in New York State<sup>1</sup> has just been issued by the American Association for Labor Legislation.<sup>2</sup>

Administration of labor laws through a single industrial commission with extensive quasi-legislative and judicial powers, in addition to its administrative authority, is a recent development in the field of labor-law enforcement. Wisconsin, in 1911, was the first State to establish such a commission. Several other States have followed Wisconsin's lead, New York adopting this form of administration in 1915. To study and appraise this new commission form of administration, with special reference to administrative methods and problems, was the chief purpose of this investigation.

The report contains 14 chapters. It traces the development of agencies for administering labor legislation in New York, states the huge problem confronting the industrial commission, discusses the functions and administrative methods of the commission as a whole and of each bureau in detail, and offers suggestions and recommendations for the improvement of administration.

The first State agency dealing with labor problems was the bureau of labor statistics, which was created by legislative enactment in

<sup>1</sup> This investigation was conducted under the joint supervision of the Bureau of Municipal Research of New York City and the American Association for Labor Legislation. The field work and preparation of the first draft of the report was made under the direction of Mr. Herschel H. Jones of the bureau. The report covers a period of 13 months, from June 1, 1915, to June 30, 1916.

<sup>2</sup> The American Labor Legislation Review for June, 1917. Labor law administration in New York. Published by the American Association for Labor Legislation, 131 East Twenty-third Street, New York. Price, \$1.



1883. But this bureau possessed no enforcing authority, being limited to the collection of statistical information. However, the factory act of 1886, which provided for factory inspection and for the first time set an age and hour limit on the employment of children, established also the State's first enforcing authority in the labor legislation field. In the same year the board of arbitration was created. The apparent wastefulness of maintaining these three independent agencies, all dealing with labor questions, led in 1901 to their consolidation into the New York State Department of Labor. A bureau of mercantile inspection was added in 1908, a bureau of industries and immigration in 1910, and the division of industrial directory in 1911. The development of the department, handicapped by lack of funds, was slow until 1906, when an increased appropriation permitted an enlarged inspection staff and marked the beginning of continuous and rapid growth. The records of the department show that between 1907 and 1913 it grew from an office with 96 employees and a yearly expenditure of \$154,798 to an arm of the government commanding the services of 227 persons and expending annually the sum of \$505,640. In 1913 this department was reorganized and to it were added an industrial board and a division of industrial hygiene for technical research. In 1914 the workmen's compensation commission was created, a State bureau of employment was authorized, and a legal bureau to give advice and assistance in prosecuting cases was established.

This gradual multiplicity of agencies again brought the State face to face with waste and duplication in the administration of its labor law. Accordingly, in 1915, all these activities were brought together under an industrial commission of five members, appointed by the governor. The number of employees of the commission is now over 600 and the appropriation for 1917 was \$1,225,000. Those who advocated the enforcement of the labor law through an industrial commission hoped through it to secure economy in inspection and the avoidance of friction because of rival boards of inspectors, elimination of duplicate reports and statistics of accidents, consolidation of all interests for efficient accident and disease prevention, and the general substitution of cooperation for prosecution in the administration of the labor law.

The report outlines the problem confronting the industrial commission when it took office on June 1, 1915, involving the enforcement of laws affecting the lives, health, and welfare of approximately 3,000,000 wage earners in the largest industrial State in the Union, where more than 1,000 industrial accidents occur every working day and in which the number and diversity of establishments and differences of race and language constitute a problem of almost

inconceivable magnitude. The commission exercises supervision of the administration and enforcement of labor laws through eight large bureaus, as follows: Inspection, fire hazards, mediation and arbitration, statistics and information, industries and immigration, industrial code, employment, and workmen's compensation. It also has power to make and amend rules and regulations for carrying into effect the provisions of the labor law, to grant variations from the law in special cases, and to determine the awards in workmen's compensation cases. The functions of the commission are therefore not only executive, but in part legislative and judicial.

The report gives a comprehensive description of the activities of each bureau and at the end of each chapter summarizes its conclusions and submits recommendations for reorganization or improvement or development of the particular agency under discussion. These recommendations are designed to aid in overcoming the difficulties against which the commission is contending, the more important ones dealing with further improvement in civil-service methods, larger appropriations, and a larger force for many departments of the commission's work, more careful differentiation between procedure in making modifications or orders and in granting variations from the law or code, more energetic prosecutions, expansion of the industrial council to include representatives of the general public, the desirability of abolishing home work, and diminishing the amount of routine work of commissioners.

The right to modify or amend the labor law or to grant exemptions from compliance with its provisions with respect to the physical requirements of buildings and devices for preventing accidents should be particularly noted as an important power of the commission, for it opens the way for securing safety without compelling compliance with requirements which are unreasonable and impracticable in particular circumstances. These variations are granted on petition after public hearing, and while they occasion an enormous amount of work for the commission and the various bureaus operating under it, they seem to have brought about a more equitable and just administration of the law and a better feeling on the part of those subject to its restrictions.

Referring to the industrial commission as an administrative body, it is suggested that much of the detailed work now brought before it should be disposed of in other ways in order that it might have more time and energy for considering general policies, initiating plans for extension and reorganization of work in the various bureaus, and promoting the establishment of codes; and that there should be more direct contact between the bureau heads and the commission in order that each might become familiar with the work of the others and

develop more of a spirit of pulling together in the interests of the department as a whole.

A feature of the reorganized labor department under the industrial commission is the industrial council composed of five members representing employers and five representing employees, to whom the commission shall submit all questions of general policy in connection with the labor laws, including the workmen's compensation act, as well as all proposed rules and regulations for the industrial code, the council to give its advice on these matters and on the appointment of employees to positions requiring special knowledge or training and to cooperate with the civil service commission in conducting examinations and preparing eligible lists for such positions. This council, however, according to the report, has failed to prove an important factor in the administration of the labor laws, and in order that it might have greater opportunity to demonstrate its possibilities for usefulness it is recommended that the commission should refer to it more matters of general policy, that greater use should be made by the commission of the council as a means of extending its educational activities, that the commission should bring the council into closer touch with the initial preparation of new codes and amendments to codes, and that the council should contain one or more employer representatives of the large industries centered in New York City.

Another interesting feature in the enforcement of labor laws in New York, pointed out by the report, is the establishment of a "departmental" or municipal term court in New York City for reviewing violations prosecuted by the industrial commission. One day a week is regularly assigned to the commission for the adjudication of its cases. Not only, states the report, is there a great saving in time which the inspectors must devote to appearing in court, but there is also a great gain in both the efficiency and the uniformity of the administration of the law, because the judge assigned to this court soon becomes familiar with the technical and other perplexing problems involved.

Although the bureau of workmen's compensation is but one of the eight bureaus constituting the industrial commission, more than one-half of the entire time of the members is devoted to the administration of the workmen's compensation law. The section of the report dealing with this subject, however, is relatively small and less comprehensive than the importance of the subject demands. Many important aspects of the compensation law have been inadequately treated or not even mentioned. The experience of the commission in dealing with such matters as voluntary agreements, delay in compensation, payments, failure or delay in accident reporting, lump-sum

settlements, informal conferences as a method of settling disputed cases; impartial physicians and medical examinations, physicians' and hospital fees, self-insurance, revision of benefits, etc., would be extremely valuable. It is to be hoped that a more exhaustive study of the workmen's compensation law will be undertaken at some future date.

The report concludes that on the whole the operation of the industrial commission act, after making due allowance for the exceptional difficulties and circumstances of the first year of its administration, confirms the opinion that the act is one of the most beneficial pieces of labor legislation ever adopted by the New York Legislature. Not only have its fundamental principles been vindicated, declares the report, but under its provisions the enforcement of the State's labor laws has been improved. The act is regarded as a progressive piece of legislation creating new conditions as the result of its operation, and it is believed that if modifications in its terms or in its methods of administration, necessitated in part by these new conditions themselves, are required from time to time, it is not a cause for discouragement but rather furnishes a new opportunity to the forward-looking worker for industrial betterment.

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#### WHOLESALE PRICES IN THE UNITED STATES, JANUARY TO JUNE, 1917.

The mounting cost of living in the United States is reflected in statistics of wholesale prices collected by the Bureau of Labor Statistics of the United States Department of Labor for the first six months of 1917. Notable increases during this period are shown for the principal farm products, foodstuffs, and metals and metal products. Among lumber and building materials and fuels the increase since the first of the year has also been quite pronounced. For all commodities included in the bureau's investigation, aggregating 294 distinct articles or price series, the increase for June over January was 23 per cent.

In the following table are shown the bureau's weighted index numbers for the first six months of 1917 by groups of commodities. The table also shows the number of articles or price series in each group, together with the per cent of increase for June as compared with January.

## INDEX NUMBERS OF WHOLESALE PRICES, JANUARY TO JUNE, 1917.

[Aggregate value of commodities exchanged in 1916=100.]

Commodity group.	Number of articles or price series included.	Index numbers.						Per cent of increase in June compared with January.
		January.	February.	March.	April.	May.	June.	
Farm products.....	30	120	123	132	147	150	160	33.3
Food, etc.....	91	119	127	127	144	151	148	24.4
Cloths and clothing.....	66	127	127	128	132	136	140	10.2
Fuel and lighting.....	15	147	154	157	154	162	167	13.6
Metals and metal products.....	25	124	128	134	140	146	161	29.8
Lumber and building materials.....	39	105	107	109	113	116	126	20.0
Drugs and chemicals.....	10	101	103	106	109	115	116	14.9
House-furnishing goods.....	6	116	117	117	137	137	148	27.6
Miscellaneous.....	21	114	115	116	120	123	127	11.4
All commodities.....	294	122	126	130	139	147	150	23.0

## RETAIL PRICES OF FOOD IN THE UNITED STATES.

According to reports received by the Bureau of Labor Statistics the retail price of food declined 4 per cent from June 15 to July 15, 1917. This decline in food prices was largely due to the marked decline in the price of flour and potatoes, which articles form a large part of the diet of the average family. These two articles decreased 10 per cent and 33 per cent, respectively. Onions also decreased considerably during the month—27 per cent.

A table showing the course of prices in the United States in June and July, 1917, is given herewith:

## AVERAGE MONEY RETAIL PRICES AND RELATIVE RETAIL PRICES OF FOOD ON JUNE 15 AND JULY 15, 1917.

[The relative price shows the per cent that the average price on the 15th of each month was of the average price for the year 1916.]

Article.	Unit.	Average money price.		Relative price.	
		June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.
Sirloin steak.....	Pound.....	\$0.328	\$0.327	120	120
Round steak.....	do.....	.301	.306	123	125
Rib roast.....	do.....	.261	.257	123	121
Chuck roast.....	do.....	.222	.219	120	127
Plate beef.....	do.....	.170	.165	133	129
Pork chops.....	do.....	.309	.316	136	139
Bacon.....	do.....	.425	.429	148	149
Ham.....	do.....	.391	.396	133	135
Lard.....	do.....	.280	.274	160	157
Hens.....	do.....	.288	.280	122	119
Salmon, canned.....	do.....	.263	.266	130	132
Eggs.....	Dozen.....	.409	.420	109	112
Butter.....	Pound.....	.469	.459	119	117
Cheese.....	do.....	.338	.330	131	128
Milk.....	Quart.....	.106	.111	116	122
Bread.....	16-oz. loaf <sup>1</sup> .....	.085	.088	131	135
Flour.....	1-barrel bag.....	1.973	1.766	183	164
Corn meal.....	Pound.....	.055	.059	162	174
Rice.....	do.....	.108	.106	119	116
Potatoes.....	Peck.....	.960	.645	237	159
Onions.....	Pound.....	.070	.051	142	104
Beans, navy.....	do.....	.195	.195	177	177
Prunes.....	do.....	.157	.160	117	119
Raisins, seeded.....	do.....	.146	.148	113	115
Sugar.....	do.....	.093	.091	116	114
Coffee.....	do.....	.302	.306	101	102
Tea.....	do.....	.568	.599	104	110
All articles combined.....				133	128

<sup>1</sup> 16 ounces, weight of dough.



In the year from July 15, 1916, to July 15, 1917, prices of food as a whole advanced 32 per cent. Onions was the only article which was lower. Flour made the greatest jump—91 per cent. Potatoes were 83 per cent higher in July, 1917, than in the same month of the previous year. Corn meal was 81 per cent higher, and beans 67 per cent higher. Of the meats, pork advanced more than beef.

Comparing prices on July 15, 1914, just prior to the present war, with prices on July 15, 1917, food as a whole advanced 42 per cent. In July, 1917, flour was 125 per cent higher—that is, two and one-fourth times the price in July, 1914. Cornmeal was 89 per cent higher, lard was 78 per cent higher, sugar 75 per cent higher, and potatoes and bread each 59 per cent higher.

A table showing the average and relative retail prices in July of each year from 1913 to 1917 is given herewith:

AVERAGE MONEY RETAIL PRICES AND RELATIVE RETAIL PRICES OF FOOD ON JULY 15 OF EACH YEAR, 1913 TO 1917.

[The relative price shows the per cent that the average price on the 15th of each month was of the average price for the year 1916.]

Article.	Unit.	Average money price July 15.					Relative price July 15.				
		1913	1914	1915	1916	1917	1913	1914	1915	1916	1917
Sirloin steak.....	Pound.....	\$0.265	\$0.270	\$0.265	\$0.287	\$0.327	97	99	97	105	120
Round steak.....	do.....	.233	.215	.240	.260	.306	95	100	98	106	125
Rib roast.....	do.....	.201	.208	.206	.220	.257	95	98	97	104	121
Chuck roast.....	do.....	.175	.167	.179	.219	.....	102	97	104	127	.....
Plate beef.....	do.....	.127	.123	.132	.165	.....	99	96	103	129	.....
Pork chops.....	do.....	.216	.222	.211	.234	.316	95	98	93	103	139
Bacon.....	do.....	.278	.273	.270	.290	.429	97	95	94	101	149
Ham.....	do.....	.282	.279	.265	.323	.396	96	95	90	110	135
Lard.....	do.....	.159	.154	.145	.208	.274	91	88	83	119	157
Hens.....	do.....	.217	.219	.208	.241	.280	92	93	88	102	119
Salmon, canned.....	do.....	.....	.....	.198	.200	.266	.....	.....	98	99	132
Eggs, strictly fresh.....	Dozen.....	.300	.300	.278	.319	.420	80	80	74	85	112
Butter.....	Pound.....	.347	.343	.343	.355	.459	88	87	87	90	117
Cheese.....	do.....	.....	.232	.213	.330	.....	.....	.....	90	94	128
Milk.....	Quart.....	.088	.088	.087	.088	.111	97	97	96	97	122
Bread.....	16-oz. loaf <sup>1</sup> .....	.055	.063	.062	.088	.....	85	97	97	95	135
Flour.....	5-bbl. bag.....	.809	.787	1.003	.927	1.766	75	73	93	86	164
Corn meal.....	Pound.....	.030	.031	.033	.033	.059	87	92	96	96	174
Rice.....	do.....	.....	.091	.091	.106	.....	.....	100	100	116	.....
Potatoes.....	Peck.....	.288	.405	.223	.352	.645	71	100	55	87	159
Onions.....	Pound.....	.....	.035	.053	.051	.....	.....	72	109	104	.....
Beans, navy.....	do.....	.....	.076	.117	.195	.....	.....	69	106	177	.....
Prunes.....	do.....	.....	.135	.134	.160	.....	.....	101	100	119	.....
Raisins.....	do.....	.....	.125	.128	.148	.....	.....	97	99	115	.....
Sugar.....	do.....	.054	.052	.070	.087	.091	68	65	87	109	114
Coffee.....	do.....	.....	.299	.299	.306	.....	.....	100	100	102	.....
Tea.....	do.....	.....	.546	.516	.599	.....	.....	100	100	110	.....
All articles combined.....	.....	.....	.....	.....	.....	.....	83	90	88	97	128

<sup>1</sup> 16 ounces, weight of dough.

A table is given below showing average prices of food on June 15 and July 15, 1917, in Atlanta, Ga.; Boston, Mass.; Chicago, Ill.; Denver, Colo.; New York, N. Y.; Philadelphia, Pa.; St. Louis, Mo.; San Francisco, Cal.; and Seattle, Wash.

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AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR NINE  
SELECTED CITIES FOR JUNE 15 AND JULY 15, 1917.

[The average prices shown below are computed from reports sent monthly to the bureau by retail dealers.  
As some dealers occasionally fail to report, the number of quotations varies from month to month.]

Article.	Unit.	Atlanta, Ga.		Boston, Mass.		Chicago, Ill.		Denver, Colo.		New York, N. Y.	
		June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.
Sirloin steak.....	Pound....	\$0.314	\$0.310	\$0.412	\$0.432	\$0.303	\$0.302	\$0.311	\$0.325	\$0.323	\$0.337
Round steak.....	do.....	.282	.277	.410	.440	.269	.266	.294	.303	.325	.337
Rib roast.....	do.....	.242	.233	.290	.308	.251	.246	.245	.249	.276	.279
Chuck roast.....	do.....	.204	.192	.245	.264	.220	.217	.219	.220	.218	.219
Plate beef.....	do.....	.164	.158			.168	.165	.151	.151	.202	.199
Pork chops.....	do.....	.303	.314	.320	.330	.279	.292	.308	.311	.322	.326
Bacon, sliced.....	do.....	.430	.427	.418	.420	.436	.439	.450	.446	.420	.422
Ham, sliced.....	do.....	.391	.391	.426	.426	.416	.414	.445	.448	1.285	1.285
Lard.....	do.....	.281	.282	.282	.278	.263	.258	.292	.289	.273	.274
Hens.....	do.....	.235	.240	.317	.313	.276	.253	.283	.273	.298	.287
Salmon, canned.....	do.....	.225	.230	.287	.292	.270	.269	.248	.250	.300	.303
Eggs, strictly fresh.....	Dozen.....	.407	.353	.498	.504	.396	.406	.407	.417	.447	.478
Butter.....	Pound.....	.505	.485	.478	.470	.434	.432	.433	.433	.456	.453
Cheese.....	do.....	.344	.338	.330	.323	.336	.339	.346	.346	.338	.328
Milk.....	Quart.....	.139	.135	.110	.120	.100	.100	.093	.098	.109	.114
Bread.....	16-oz. loaf <sup>2</sup> .....	.087	.090	.081	.082	.101	.101	.091	.090	.088	.088
Flour.....	1-bbl. bag.....	1.867	1.725	2.166	1.990	1.917	1.713	3.244	3.284	2.028	1.870
Corn meal.....	Pound.....	.049	.051	.068	.068	.057	.058	.048	.050	.067	.070
Rice.....	do.....	.101	.108	.112	.111	.102	.105	.114	.117	.105	.105
Potatoes.....	do.....	4.068	4.808	4.033	4.645	4.002	4.744	5.600	5.4.683	6.079	6.044
Onions.....	Pound.....	.092	.070	.067	.057	.053	.042	.068	.053	.059	.059
Beans, navy.....	do.....	.181	.188	.192	.191	.203	.199	.198	.201	.090	.188
Prunes.....	do.....	.167	.173	.164	.166	.160	.162	.172	.177	.159	.161
Raisins.....	do.....	.151	.150	.147	.148	.145	.147	.143	.147	.141	.142
Sugar.....	do.....	.101	.098	.089	.088	.088	.086	.092	.092	.084	.084
Coffee.....	do.....	.296	.295	.345	.345	.287	.293	.311	.309	.263	.262
Tea.....	do.....	.769	.780	.643	.636	.560	.571	.574	.570	.509	.520
		Philadelphia, Pa.		St. Louis, Mo.		San Francisco, Cal.		Seattle, Wash.			
		June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.	June 15, 1917.	July 15, 1917.
Sirloin steak.....	Pound....	\$0.365	\$0.389	\$0.315	\$0.321	\$0.225	\$0.228	\$0.270	\$0.265		
Round steak.....	do.....	.337	.365	.305	.310	.219	.221	.258	.252		
Rib roast.....	do.....	.278	.298	.259	.256	.216	.223	.233	.230		
Chuck roast.....	do.....	.240	.253	.217	.217	.155	.153	.195	.187		
Plate beef.....	do.....	.164	.170	.161	.162	.148	.149	.161	.157		
Pork chops.....	do.....	.342	.343	.291	.308	.306	.316	.326	.328		
Bacon, sliced.....	do.....	.413	.423	.418	.421	.441	.436	.461	.461		
Ham, sliced.....	do.....	.450	.459	.412	.411	.418	.418	.407	.405		
Lard.....	do.....	.279	.275	.253	.243	.285	.285	.279	.280		
Hens.....	do.....	.308	.313	.256	.249	.261	.260	.263	.258		
Salmon, canned.....	do.....	.240	.248	.263	.268	.234	.240	.248	.252		
Eggs, strictly fresh.....	Dozen.....	.433	.445	.370	.377	.371	.392	.404	.430		
Butter.....	Pound.....	.528	.512	.473	.457	.436	.455	.439	.448		
Cheese.....	do.....	.361	.356	.334	.329	.301	.297	.311	.303		
Milk.....	Quart.....	.090	.110	.100	.110	.100	.100	.113	.120		
Bread.....	16-oz. loaf <sup>2</sup> .....	.079	.079	.092	.092	.083	.083	.090	.091		
Flour.....	1-bbl. bag.....	2.000	1.696	1.854	1.609	3.571	3.313	3.372	3.235		
Corn meal.....	Pound.....	.049	.054	.050	.065	.065	.065	.063	.065		
Rice.....	do.....	.108	.110	.099	.099	.102	.100	.103	.104		
Potatoes.....	do.....	4.107	4.604	4.942	4.587	4.188	5.295	5.246	5.3.982		
Onions.....	Pound.....	.063	.053	.063	.046	.036	.020	.046	.032		
Beans, navy.....	do.....	.183	.184	.205	.197	.192	.184	.203	.199		
Prunes.....	do.....	.153	.152	.167	.169	.145	.148	.139	.140		
Raisins.....	do.....	.134	.134	.170	.168	.138	.140	.141	.140		
Sugar.....	do.....	.083	.080	.090	.087	.081	.083	.092	.093		
Coffee.....	do.....	.274	.278	.280	.282	.300	.300	.308	.308		
Tea.....	do.....	.566	.583	.591	.610	.519	.521	.508	.512		

<sup>1</sup> Whole.<sup>2</sup> 16 ounces, weight of dough.<sup>3</sup> Per one-quarter barrel bag.<sup>4</sup> Per peck.<sup>5</sup> Per 100 pounds.<sup>6</sup> Per pound.

## WASTE IN FOOD DISTRIBUTION IN NEW YORK.

The large economic waste connected with the distribution of food products in New York State, particularly in New York City, contributing directly to the high cost of living, is set forth in the Third Annual Report of the Department of Foods and Markets for the year ending December 31, 1916, which was transmitted to the legislature on February 28 of this year. The report opens with a brief account of how the department succeeded, in some instances, in lowering to the consumer the price of certain foods and at the same time assuring a fair price to the producer, who now, it is stated, receives only 35 cents out of every dollar paid by the consumer for the articles he produces. In the case of apples and fruits prices were reduced by selling large quantities at auction in the city wholesale markets, while the price of eggs was forced down by the issuance of an order requiring each egg taken from cold storage to be so stamped, making it impossible for them to be sold as fresh eggs at a high price, as had been the practice. A more economical method of distributing the milk supply is recommended, it being pointed out that excessive profits are being made by the dealers who buy and sell the milk at prices fixed by themselves.

Three general and fundamental reasons are given for the high cost of food, namely, (1) cheap money, (2) decreased supply in food products, and (3) waste, the last-named being accomplished through loss at the farm, loss in transit, loss in the city, and loss through credit, all of which must be made up by the consumer. A fruitful source of high prices, it is stated, is the cost of distribution, which represents approximately 65 per cent of the total cost of food paid by the consumer. "The middleman is an economic agency so long as he performs a legitimate and a useful service; \* \* \* but in our system we have developed a practice of manipulation, speculation, and control by middlemen in the distribution of food that operates to the detriment of both producer and consumer." The situation is not considered hopeless because the possibilities of saving on distribution are encouraging enough to promise material reduction in the cost of food to the city consumer. To accomplish this saving efforts must be begun at the farm, and the department outlines a plan briefly as follows:

The plan of the department is to establish rooms for assembling food at the railroad station in the local producing centers throughout the State. The producers, under this system, would organize into cooperative associations under the encouragement of the State, and they would own the market or assembling rooms. The farmer would bring his product to these local packing houses, as it comes from the tree or ground, and an employee in charge of the packing house would grade and pack the produce and, if located in a village or city, would supply the local needs and ship the balance in carload lots straight to a

terminal wholesale market in the city. The food would be received in this terminal market by licensed and supervised agents of the State, who would weight it, cause an inspection of it, make an open sale, keep an open record of the receipts of the goods, of its condition, of its weight, of its price, and of the person who bought it. The sales would be made in quantities to accommodate the retailer so that he could buy his supply direct from the agent of the producer and, of course, the housewife would be supplied daily from the retail stores. The country assembling plant would have to be large or small, cheap or expensive, to suit the needs of the neighborhood. To be complete, it would have canning facilities so that all of the tender and overripened produce of the farms could be brought to the station and preserved in standard packages and quality for future use. Surplus would be taken care of in the same way. In prosperous neighborhoods the plant should also have refrigerating facilities, so that perishable produce could be precooled and properly prepared for market; and staple products, such as apples, pears, eggs, dressed poultry, and other products, could be stored in time of surplus for distribution in seasons of scarcity.

The report suggests the urgent necessity for several large terminal markets in New York City, established and supported by the State, located where full carloads of food coming to the city over any railroad could run straight into the market and discharge without the expense of extra handling or cartage, and provided with ample cold storage and common storage facilities so that food could be handled economically and absolutely without waste. This food would then be distributed to the retailer in whatever quantities required. Thus, it is claimed, all the unnecessary expense of useless middlemen and speculators would be eliminated. It is believed that while the initial cost would be considerable, such market could be operated at profit to the State and benefit to producers and consumers.

In connection with the present article it should be stated that a women's organization in New York is making a noteworthy effort to stop the waste of food which has been embargoed at piers and terminals.<sup>1</sup>

There is a law in New York City which is being enforced very strictly and which results in a tremendous waste of good food. All the fruit and vegetables destined for the markets of the city must be examined at the piers and terminals by representatives of the board of health. Food must be embargoed if a certain percentage is bad, and frequently the badness is due merely to injury in transportation. Sometimes 80 per cent of the food is perfectly good, yet, with labor at 50 cents an hour, it does not pay the commission merchants to have it looked over, and so the good is thrown away with the bad. Oranges, grapefruit, and lemons will pass if not more than 19 per cent is damaged, berries 24 per cent, and vegetables 15 per cent. When the percentage of damaged food is greater than the allowance,

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<sup>1</sup> Kittredge, Mabel H., *Food Salvage in New York*. The New Republic, New York, Aug. 12, 1917, pp. 43-45.

an embargo is put on it by the inspector and it must be sorted before any of it is allowed to enter the city markets.

If it does not pay the commission merchants to assort an embargoed shipment, they can turn it back on the railroad, which can sort it to earn the freight charge. If, however, an embargoed shipment is not sorted, it is ordered to the dump on Barren Island. There are no municipal storehouses to which it can be sent, no municipal markets where it can be sorted and sold, and the dock and pier space must be cleared for the morrow's shipments. The only space for sorting food is the middle of the street.

The city canning and drying kitchen, instituted by women of the Women's University Club and the Mayor's Committee of Women on National Defense, and of the Junior League, was established to salvage food that could not be otherwise disposed of. All of these organizations are giving personal service, and the work was undertaken only after a thorough study of the conditions and the assurance by the board of health that a very large quantity of perfectly good food might still be saved.

The operation as conducted by the women of the city kitchen is as follows: The work on the pier is in charge of one woman who, with the consent of the board of health, the railroad officials, and the dock superintendent, moves freely among the commission merchants, waiting to salvage food that finds no buyer because its overhauling is not profitable, or facilities to salvage are unavailable, or labor is too high. The volunteer labor which the kitchen is able to command makes it possible for the women to sort, with the aid of Boy Scouts, food which it would not pay a commission merchant to handle.

After all the possible purchasers finish their labors the salvage for the kitchen begins. The food salvaged may be potatoes or other fresh foods which need no canning, and these are sold at once at a little below the wholesale price. If the salvaged food needs canning it is transported to the city kitchen under Williamsburg Bridge, where it is preserved for use next winter. Sterilized glass jars are ready, and the work begins at once when the food reaches the kitchen. The cold-pack preserving method is used when possible, and 20 per cent more sterilization than the schedule demands is allowed. Nothing is rejected that is in good condition. Cabbages are turned into sauerkraut; vegetables are packed into kegs with salt. If there is little food value a relish may be made that will take the place of butter or act as an appetizer to an otherwise dull meal.

The filled jars are stored in the same building. The cost is carefully calculated, glass jars, labor, transportation, ingredients, etc., added, and the food will be sold direct to the public. The plant is a one-story public-school building, which, of course, is city property,



and there is no expense for rent. The truck is also loaned by the city and after unloading at the kitchen such food as can be cared for in one day, it carries the remainder to many a grateful institution.

Fuel is paid for, and the paid labor in the kitchen is at present limited to an organizer, two canning experts, a bookkeeper, and five women for unskilled labor. There are from 30 to 40 volunteer workers a day. Each volunteer receives a card marked off in squares representing an hour's work, and the worker's card is punched according to her hours of labor. She can obtain fresh food at cost as an equivalent of her work, or preserved food can be had next winter, the food to be stored by the kitchen until wanted.

The volunteer labor is handled from an uptown office, largely by telephone, the woman in charge being in touch with clubs, settlements, and similar organizations, and with individuals anxious to help. Many volunteer laborers are foreigners; these are encouraged to introduce their own methods of preserving foods and have contributed many valuable recipes.

At present the women are working in only a few of the 125 terminals in the city, but the following are some of the recent daily reports of food salvaged by the city canning kitchen:

July 16.—800 pounds of cabbage, 1,500 pounds of cucumbers, 400 pounds of apricots, and 200 pounds of vegetables (unclassified).

July 17.—Out of 65 barrels (9,650 pounds) of cucumbers, 4,000 pounds were saved. Because of limited space the kitchen had to refuse on that day 38 barrels of cucumbers.

July 18.—1,000 pounds of pineapple, 150 pounds of grapefruit, 1,200 pounds of cabbage, 300 pounds of turnips, and 5 barrels of beans.

Beginning with July 13 the kitchen has salvaged daily about 3,000 pounds of good potatoes which are at once sold at 1 cent a pound to people who are the greatest sufferers from the present high prices.

The women fully realize that they are not solving any economic problem, for the matter of labor does not have to be considered, except in a very small way; but what they are trying to do is to solve one of the problems of food conservation. Certainly they are saving food, which in these war times is a matter of great importance.

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#### AMERICAN SEA POWER AND THE SEAMEN'S ACT.

Mr. Andrew Furuseth, president of the International Seamen's Union of America, has prepared a pamphlet on the subject "American sea power and the seamen's act," in which he undertakes to defend the provisions of the act and to show primarily that it is not a violation of international law. Some of the considerations which

prompted Congress to pass the seamen's law are mentioned, one of these being an impression that it would provide national seamen for national emergencies that might arise. The author, however, states that there is no chance of getting from the merchant marine as now manned the necessary men to man and then to reman the fighting Navy. He cites figures to show that, based upon the membership of the seamen's union, the total number of men, organized and unorganized, employed on the lakes and seagoing vessels under the American flag is approximately 67,600, and that of this number about 19,260 are Americans.<sup>1</sup> This number, however, is believed to be too large, since there is a much larger proportion of foreigners among the unorganized than among the organized seamen. It is stated that out of 27,250 sailors (estimated, since the number of unorganized sailors is unknown) there are about 5,000 Germans (18.3 per cent), while the combined number of sailors born in Holland, Denmark, Sweden, and Norway (neutrals) is about 10,800, or 39.6 per cent. Of the 27,250 sailors, approximately 6,300, or 23.1 per cent, are said to be Americans.

Another thought which prompted the passage of the act, according to the author, was the safety of the traveling public. The increase in the number of lives lost at sea from 1,018 in the period 1860 to 1864 to 5,445 in the period 1910 to 1914 (4 years and 5 months) would seem to indicate an apparent loss of skill among seamen.

The author ascribes the decadence of the merchant marine to economic causes arising from the fact "that the United States is a high-wage country"; and since the wages of seamen depend upon the wages of the port in which they are hired, American ships have not been able to compete with the low wages paid to seamen sailing from other ports.

It is stated that the seamen's act is not enforced, "but to the extent that it is permitted to operate it is equalizing the wages in all vessels leaving American ports."

It was further expected by the legislators that the equalization in wage cost would not stop in ports of the United States. The same instinct that would cause the seamen to quit their vessels to get higher pay would cause foreign shipowners to so pay and so treat their men that the men would remain in their vessels voluntarily, and so there would automatically come a practical equality in the wage cost of operating merchant vessels throughout the world. No one who has studied the law has any doubt that this will be the result if the law is given a fair chance.

The seamen's law is quoted liberally in order to show how its various sections were drawn with the one purpose of making the

<sup>1</sup> This figure is based on the assumption that the per cent of Americans among the unorganized seamen is the same as among those who are members of the seamen's union, and is necessarily only approximate.

seamen economically free, of promoting safety at sea, and of equalizing the wage cost in foreign and domestic vessels. The attitude of shipowners toward the measure is commented upon, the opinion being expressed that they have been quite successful in nullifying the law and are now before the courts contesting the act, presumably on the grounds of comity of nations, international law, and that Congress exceeded its powers in passing it. It is pointed out that Congress had all possible objections to the bill before it when it was considering the proposed legislation, and that the President was fully aware of them when he was about to approve it. Yet the bill was passed and signed by the Chief Executive. The author believes that the seamen's law should be given a fair opportunity to demonstrate its value.

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#### GOVERNMENT INSURANCE FOR UNITED STATES SOLDIERS AND SAILORS.

On August 10 a bill was introduced in the Senate (S. 2758) by Senator Simmons, of North Carolina, and in the House of Representatives (H. R. 5723) by Congressman Alexander, of Missouri, to provide insurance for American soldiers and sailors, separation allowances for families of men in the military and naval services, indemnification for disabilities incurred, and a system of reeducation and rehabilitation of injured men at Government expense. This action is in pursuance of the plan developed cooperatively by the committee on compensation for soldiers and sailors and their dependents, authorized by the Council of National Defense, and a committee of insurance men appointed by the Secretary of the Treasury, an account of which appeared in the MONTHLY REVIEW for August (pp. 100-104). In submitting the plan to the President, whose approval was given on August 7, the Secretary of the Treasury explained the operation of the proposed law, which is really an amendment to the present act to authorize the establishment of a Bureau of War-Risk Insurance in the Treasury Department, approved September 2, 1914, in a letter from which the following excerpts are taken:

The bill \* \* \* provides not only for the man, but for his family. It aims to accomplish these ends by granting a reasonable measure of indemnity against the risk of loss—

- (1) Of support of the breadwinner.
- (2) Of life and limb.
- (3) Of present insurability at ordinary rates.

The risk of dependency, in the case of an enlisted man's family, is indemnified against by allotment of part of the pay of the enlisted man, supplemented by a family allowance granted and paid by the Government.

For wife and children up to 18, or if incapable of pursuing a substantially gainful occupation because of mental or physical infirmities, then without age

limit, allotments are compulsory unless waived or exempted under regulations. For other dependents they are voluntary. The compulsory allotment must equal the family allowance, with a minimum, however, of \$15 and a minimum of one-half pay. The monthly family allowance ranges from \$5 to \$50 maximum, dependent upon the size of the family; and, as to other kindred than wife and children, further dependent upon their actual needs and upon the amount ordinarily contributed by the man for their support, a voluntary allotment to these kindred, similar to the compulsory allotment for wife and children, is required as a condition to the allowance; but if the compulsory allotment is being made, then as to the additional allotment, a minimum of \$5 and a maximum of one-seventh pay is a condition to the Government grant. The family allowance continues only for the war emergency.

To illustrate: A private gets \$33 a month for service abroad. If he has a wife and two children he must allot to them at least \$15 out of his pay. The Government supplements this by giving the family an allowance of \$32.50. This family's minimum income, therefore, would be \$47.50. The father can allot as much more as he pleases. If there is another child, the Government will allow \$5 additional. If that man should have a mother or father actually dependent upon him and to whom he has been accustomed to contribute, say, \$15 a month, he can secure an allotment of \$10 a month from the Government for the parent by allotting \$5 more of his pay. Thus, the private with a wife, three children, and a mother actually dependent upon him, by giving \$20 out of his \$33 a month, would get from the Government for his family \$47.50 a month, giving the family an income of \$67.50, and still leave the man \$13 a month for spending money. If there are more children, or if there is also a dependent father, the Government would give up to \$50 in all, over and above the man's own allotment.

\* \* \* \* \*

To instill thrift, to enable a man to build up a fund out of which he can pay the insurance premiums, and above all, better to preserve equality and democracy among the members of our own forces and between them and the allies, provision is made enabling the War Department and the Navy Department, by regulation, to compel men who do not allot one-half of their pay to deposit so much of the half pay as is not allotted, these deposits to bear interest at 4 per cent per annum, compounded semiannually.

\* \* \* \* \*

The risk of disability or death as to officers, men, and nurses while in active service as part of the military or naval forces of the United States is indemnified against by compensation on the analogy of the workmen's compensation act rather than through a pension system. The sacrifice of and loss to the family is, however, taken into consideration by varying the amount of compensation, both after death and during disability, with the size of the family.

\* \* \* \* \*

If total disability results from personal injury suffered or disease contracted in the course of the service, the compensation, based on the percentage of pay, but with a minimum of from \$40 to \$75 per month, according to the size of the family, may increase for the higher officers to a maximum of \$200 per month. Compensation, however, is not payable while the officer receives retirement allowance.

Partial disabilities are compensated for on the basis of percentages of the compensation for total disability, dependent upon the average impairment of earning capacity resulting from such injuries in civil occupations. Provision is made for commutation under regulations, but of a part only of the compensation.

Medical, surgical, and hospital treatment, supplies, and appliances are given.

Compensation is a helpful measure of justice, but rehabilitation and reeducation, fitting him for a life of activity and usefulness, either in his former or some other vocation, is an obligation fundamental both to him and his fellow men.

The bill does not attempt to cover the matter of means and methods of effecting this. A study of European experience, both as to the victims of war and of industry, is essential therefor. Two principles are, however, established in the bill:

(1) The man's obligations to avail himself of such opportunities as the Government may provide or cause to be provided under penalty of loss of compensation during any period of unreasonable refusal.

(2) A man's right to disability compensation regardless of his individual economic recuperation. This is an essential spur to the full development of his potentialities.

To illustrate some of these provisions and to contrast them with the pension provisions by practical examples: Assume that a man were totally disabled by losing both legs and both arms in battle. Under the existing pension system he would receive \$100 a month, regardless of the size of his family. Under the compensation provisions of this bill, if he were a private and unmarried he would receive \$40 per month, and if, as is most probable, he needed a nurse or attendant, up to \$20 additional. If he had a widowed mother dependent upon him for support he would get another \$10. If he subsequently married his monthly compensation would be at once increased by \$15. If later on he had children the compensation would again be increased \$10 a month for each of the first two children, a possible maximum of \$105 a month.

In addition to this monthly payment, under either system he would be fitted with artificial limbs and would have treatment. His compensation or pension would not be affected by any increased earnings. Furthermore, if he wanted to set up as a small storekeeper, under the compensation system he would be allowed to commute \$20 a month of his compensation; this might give him \$1,000 or more and still leave him protected to some extent.

If death results from the injury or disease incurred or contracted in the course of the service, compensation is paid to the widow, children, and dependent widowed mother. The amount, based upon percentage of pay, ranges from a minimum, according to the size of the family, of \$15 to \$60 per month, to a maximum for the higher officers of \$200 per month. Burial expenses of not exceeding \$100, as may be fixed by regulations, are allowed. This compensation ends for widows two years after remarriage; for children, on reaching 18, unless they are physically or mentally incapable of following a substantially gainful occupation. To give the young man returning in maimed condition the opportunity to secure the care, love, and comfort that only wife and children can give, the family status at the time of each monthly payment, and not at the time of the injury or discharge, determines the amount of the grant.

Death or disability resulting from injury suffered or disease contracted in the course of the service is covered, irrespective of the date when disability or death occurs; but if it occurs after discharge or resignation it is compensated for only if a certificate has been obtained within one year after discharge or resignation that the person was suffering from injury or disease so incurred or contracted likely to result later in death or disability.

To illustrate again: If the man above referred to died as a result of his injuries, leaving the wife, two children, and widowed mother, under the pension system the family would receive, ordinarily, \$16, at best \$24, a month;



even an officer's family would receive only \$34 a month. Under the compensation system the family would continue to receive \$60 a month. On the death of the mother this would be reduced to \$50. If the wife remarried it would continue at this rate for two years, and would then be reduced to \$25 until the first child reached 18, thereafter to \$15, terminating when the second child reached 18.

Risk of noninsurability at ordinary rates is indemnified against by the issuance of Government insurance, covering total disability and death, to officers, men, and Army nurses while in active service as part of the military or naval forces in an amount of \$1,000 to \$10,000.

\* \* \* \* \*

The cheapest form of insurance, costing during the war on an average of \$8 per \$1,000 of insurance, and thus bringing even the maximum of \$10,000 insurance within the reach of practically every private, is provided for. After the war the insurance may be converted into other forms with earlier maturity, the premiums to be based, however, on the same mortality tables and without "loading." All insurance is to be payable in installments, to be nonassignable and free from the claims of creditors either of the insured or of the beneficiary. It is to be limited to wife, children, and other specified kindred. It must be applied for within 120 days after the terms are promulgated or subsequent enlistment or entrance into the service. For those who are totally disabled or die before they have had an opportunity to insure within the prescribed period of 120 days, insurance in the sum of \$5,000 is deemed to have been applied for and granted.

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On the administrative side the bill provides for a division of the War Risk Bureau into two sections—one on marine and seamen's insurance, the other on military and naval insurance. Each division is to have a commissioner under the direction of the bureau.

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In his letter the Secretary of the Treasury submits the following estimate of the cost for the first two years of the operation of the proposed law:

ESTIMATED COST OF FIRST TWO YEARS OF OPERATION OF PROPOSED LAW TO  
PROVIDE INSURANCE FOR SOLDIERS AND SAILORS.

Item.	First year.	Second year.
Family allowances.....	\$141,000,000	\$190,000,000
Death indemnities.....	3,700,000	22,000,000
Compensation for total disability.....	5,250,000	35,000,000
Compensation for partial disability.....	3,200,000	21,000,000
Insurance against death and disability	23,000,000	112,500,000
Total.....	176,150,000	380,500,000

MEDICAL CARE OF INJURED FEDERAL EMPLOYEES.<sup>1</sup>

Under the terms of the "Act to provide compensation for employees of the United States suffering injuries while in the performance of their duties," approved September 7, 1916, reasonable medical and surgical treatment shall be furnished, upon application and without

<sup>1</sup> Data taken from United States Public Health Reports, July 20, 1917, pp. 1125-1127.

charge, by all medical officers at first, second, and third class relief stations of the United States Public Health Service. Officers in charge of the second and third class relief stations are directed by the Surgeon General to obtain letters signed by the proper authorities of the local contract hospitals to the effect that civil employees of the United States, injured while in the performance of their duties, will be received at said hospitals and furnished quarters, subsistence, nursing, and necessary medicines during the fiscal year ending June 30, 1918, at the same rates as named in their proposals submitted for the care of seamen during said fiscal year; the services to be the same as that furnished seamen.

The rules for caring for injured Federal employees, as prescribed by the Surgeon General, are as follows:

1. An injured civil employee of the United States, in order to receive treatment shall present to the medical officer a certificate stating that he is a Government employee and that he was injured on a certain date while in the performance of his duties. Such certificate must be signed by the employee's superior officer, or by the medical officer, United States Employees' Compensation Commission.

2. An injured civil employee of the United States, in order to obtain the benefits of the service, must apply in person (or by proxy if too seriously injured so to do) at the local office of the Public Health Service, or to a medical officer of said service.

3. At marine hospitals no charge shall be made for services or supplies furnished injured civil employees of the United States. Expenditures incurred at said hospitals for the care and treatment of such injured employees are payable from appropriations for the Public Health Service.

4. At second and third class relief stations of the service, expenditures incurred on account of either office or hospital treatment furnished injured civil employees of the United States shall be taken up in special vouchers rendered against the United States Employees' Compensation Commission. The rates charged for the care of seamen, as approved by the department, shall be charged for the care of injured Government employees at all contract hospitals of the service, and vouchers for such care should be rendered against the above-named commission. All vouchers for services or supplies furnished in the treatment of said injured employees will be paid direct by the United States Employees' Compensation Commission, and such vouchers should be forwarded to the bureau for reference to the proper officer of that commission, unless otherwise instructed. In preparing said vouchers, the words "employees' compensation fund" should be written in at the station after the word "appropriation" appearing on voucher forms, and stubs attached to such vouchers should be altered to show that payment is made on account of the United States Compensation Commission. Until further notice, vouchers for said services or supplies should be rendered on blanks issued by the Public Health Service, Forms 1926 and 1949. Expenditures payable from the above-mentioned fund should not be listed among the expenditures noted in monthly schedules of incumbrances, Form 1955. No charges shall be made for professional services furnished said injured employees by medical officers of the service, nor shall any charge be made for supplies *in stock* furnished such persons.

5. Treatment furnished injured employees of the United States, in accordance with the above-mentioned act of Congress, shall be taken up in monthly reports of patients admitted to and discharged from hospital treatment at first and second class relief stations, and relief certificates and hospital permits shall be issued in case of treatment furnished such patients at third-class relief stations of the service. On such reports the class of patients should be designated or shown and authority for said treatment should be cited as "act of September 7, 1916." Treatment furnished said patients shall also be taken up in "Medical officers' monthly report of relief, Form 1922," and in annual reports of medical and surgical relief furnished office and hospital patients, Forms 1923, 1924, and 1925.

6. Upon the termination of both office and hospital treatment, a copy of the clinical record of treatment furnished injured employees of the United States shall be forwarded, through the bureau, to the medical officer, United States Employees' Compensation Commission. Such clinical records shall include the history, diagnosis, treatment, and other information connected with each case, and shall be prepared on service forms 1946, A, B, C, and D.

7. When it is in the interest of economy and to the welfare of injured employees of the United States, the above-mentioned commission will order the transfer of such patients from one station to another, including authority for the necessary expenses involved in such transfers. No injured employees should be so transferred without special authority from the United States Employees' Compensation Commission. Upon the transfer of an injured employee from a second or third class relief station to a marine hospital, for the purpose of receiving further treatment, a copy of the clinical record should be forwarded to the medical officer in charge of said marine hospital; and upon discharge of the employee from the marine hospital a complete clinical record (covering his treatment at both the contract relief station and marine hospital) shall at once be forwarded, through the bureau, to the medical officer, United States Employees' Compensation Commission.

### HOODS FOR REMOVING DUST, FUMES, AND GASES.

A special bulletin, issued in May, 1917, under the direction of the New York Industrial Commission,<sup>1</sup> gives the results of a careful study of various types of hood for removing dust, fumes, and gases, showing the inadequacy of certain kinds in use in some plants and describing, with supplemental illustrations, hoods that are so constructed and adapted as to prove highly effective in accomplishing the purpose for which they are intended.

The bulletin mentions the well-known classification of dusts to which workers are exposed, namely, (1) mineral, (2) metallic, (3) vegetable, (4) animal, and (5) combination of two or more of these, but in describing the physical effects of dusts this classification is discarded and the different forms are considered according to their effects, as follows:

<sup>1</sup> New York. Department of Labor. Industrial Commission. Hoods for removing dust, fumes, and gases. Special Bulletin No. 82, May, 1917, prepared by the division of industrial hygiene. Albany, 1917. 23 pp. Illustrated.

1. Irritating dusts which have only a mechanical action and act directly upon the parts most exposed, such as the eyes, nose, throat, and skin. These dusts are found in metal grinding, stonecutting, emery grinding, and in the handling of wool, hemp, cotton, jute, tobacco, fur, feathers, and hair.

2. Poisonous dusts which, when entering the system, cause a general poisoning or have an affinity for certain parts of the body, such as the blood, bones, and the nervous system. These include lead, arsenic, and salts of mercury, the most common being lead dust, to which the worker is exposed in many trades. This enters the system by being inhaled or through the stomach by eating food contaminated by lead-laden hands. The tissues chiefly affected are the arteries, nerves, brain, muscles, and also the blood.

3. Infected dusts which carry pus germs.

Dangerous fumes, vapors, and gases, it is stated, usually show their effects immediately on account of the rapidity with which they enter the blood and are carried to all parts of the body, and are classified as follows:

1. Irritating fumes and vapors which act locally upon the eyes, the mucous membranes of the nose, throat, larynx, bronchial tubes, and the lungs, such as ammonia, chlorine, nitric and sulphuric acid.

2. Poisonous intoxicating fumes and gases, such as benzol, wood alcohol, carbon disulphide, benzene, anilin, and lead, which affect the blood, heart, and circulation, the nervous system and digestive organs.

3. Others, such as wood alcohol, affecting the optic nerve and causing blindness; chromic acid which causes ulceration and perforation of the partition separating the nostrils; phosphorus which affects the jawbone; and mercury which particularly affects the teeth and lower jaw.

Irritating fumes, such as ammonia, cause intense inflammation of the transparent membrane covering the eyes. The fumes of nitric acid have been known to cause intense inflammation of the mucous membrane of the bronchial tubes, and later, when the worker has apparently recovered from the effects, inflammation of the lungs appears, causing death in a few hours.

Intoxicating fumes, such as carbon disulphide, benzol, dinitrochlorbenzol, and benzene, cause headache, dizziness, nausea, and weakness in the legs.

Poisonous fumes, such as anilin, may cause attacks varying in severity with the amount inhaled. Those unaccustomed to the fumes are particularly susceptible. In mild attacks there will be headaches, dizziness, pain in the eyes, a feeling of fullness in the head, and great weakness in the knees. The speech is slow and uncertain which, with the staggering walk, gives the appearance of drunkenness. The worker's face is pale at first, later blue, and he breathes with difficulty. If treated at this time, by inhalations of fresh air and heart stimulants, he recovers in a couple of days. But should the worker be so unfortunate as to fall and be unnoticed in some secluded part of the plant, he will continue to absorb the anilin fumes, and death will occur very

shortly. Very frequently the worker apparently recovers, returns home, and during the night or the following day the symptoms recur; the pulse becomes feeble; breathing is slow and difficult; unconsciousness and convulsions will occur, followed by death.

Lead fumes arising from improperly hooded metal pots in the composing rooms of the printing industry frequently cause anemia and lead poisoning among the printers.

Wood alcohol is used frequently in the preparation of varnish and shellac, in the manufacture of hats, artificial flowers, and for dissolving dyes. In poisoning from the fumes, the worker suffers with cramps, nausea, vomiting, headache, and dizziness. His flesh is tender to the touch, his temperature is low, and he complains of great chilliness and weakness. The symptoms very much resemble those of ptomaine poisoning. In addition the sight is affected, varying in degree from dimness of vision to complete blindness. In fatal cases death occurs from paralysis of the heart. Wood alcohol possesses a particularly harmful effect upon the optic nerve, causing blindness, even in mild cases of poisoning.

Mercurial vapors are met with in the manufacture of several scientific instruments and mercurial salts. While mercury is one of the heaviest of metals, it is known to volatilize or evaporate at ordinary temperatures. For this reason all operations should be performed under hoods. The fumes, when inhaled, affect the blood and nervous system, particularly the teeth, gums, and jawbone.

Since these dangers confront workmen in factories where dust, fumes, and gases result from manufacturing processes it becomes imperative to provide adequate protection for those exposed. The report suggests that there are three methods practiced in removing dust, fumes, and gases—the downward, lateral, and upward movement of air currents through hoods, the upward system being the one most generally in use. The passage of the air through these hoods may be effected by natural or mechanical means. The report notes experiments conducted with air currents moved by mechanical means in connection with a hood 42 inches in diameter at its base, inclosed on three sides, having an opening in front measuring 30 inches square placed over a pot of lead alloy, the temperature of which was 505° F., the surface of which measured 706 square inches, equal to 30 inches in diameter. Into this hood, which was connected with a pipe 10 inches in diameter, the air current passed at a velocity of 115 feet per minute, or 719 cubic feet per minute. A chemical analysis of the air 3 feet from the hood failed to reveal the presence of lead.

A hood constructed as above gives fairly good results in removing heated air and lead dross. Hoods or pipes, as described, placed above forge fires or metal pots where the pipes are vertical, in which there is an aspiration of 1,000 feet per minute, would be considered as satisfactory.

It appears from the report that one of the most effective types of hood is that constructed with a double wall, with an allowance of 1 inch between the inner wall and the outer wall, at the edges of which there should be a minimum air velocity of not less than 1,000



feet per minute and 200 feet per minute over the central area of the hood. This hood is thus further described:

The opening at the apex of the hood together with the area at the base between the inner and outer wall of the hood should equal the area of the pipe or branch pipe from the top of the hood. The mouth of the hood should extend over the furnace, vat, or machine at least 6 inches in every direction if the hood is not elevated more than 2 feet. For each additional 2 feet of elevation such hoods must be increased 6 inches in all directions. The farther away from the vat the less effective the hood will be. The outer wall of the hood should be extended an inch or an inch and a half below the inner shell, whereby rising fumes are more readily caught than if the walls are the same length. It is of course necessary to provide mechanical air movement instead of relying on natural aspiration. Air currents from windows and doors do not affect the upward movement of air in these hoods as readily as the single type. Still it must be remembered that sufficient openings should be provided in the workroom to allow for the removal of air through the hoods, as a partial vacuum is naturally created in the removal of air from the workroom.

Chemical tests of air were conducted whereby large quantities of air were used taken 5 feet from the hoods to determine the effect of this style of hood, resulting in mere traces of material being found in the vapors given off from the vats. As the sampling was done covering an hour's time, with the small traces found it is safe to judge such hoods efficient.

Another type of hood found to be efficient is that inclosed on four sides and having a sliding door in front provided with hand or arm holes to enable the operative to work and observe what he is doing without lifting the hood.

Attention is drawn to the advisability of insulating the ducts leading from hoods in order to prevent radiations of heat into the workroom. The importance of using hoods to carry off the poisonous fumes resulting from painting by using spraying brushes, and from heating soldering irons is emphasized. It is also suggested that the proper removal of products of combustion and oxides of antimony and lead from type-metal pots, in connection with linotype machines and monotype casters, is an important factor toward keeping the air of composing and monotype rooms ventilated and preventing lead poisoning of employees. It is very essential that hoods be provided to remove the shavings and sawdust from machines found in the woodworking trades. Here the removal is by downward, lateral, and upward suction, and an air velocity of not less than 5,000 feet per minute should be maintained to be effective.

Taking up the matter of pipe construction the report states that the area of any main duct, into which any number of branch pipes enter, should not be less, at any place in it, than the combined areas of the branches entering it, plus 20 per cent; that no branches from any hood should enter the main duct at an angle greater than 45 degrees or be placed directly opposite one another; and that care

should be exercised that fumes or gases from different hoods entering a common main do not chemically react on each other and form explosive mixtures.

### INFECTIONS FOLLOWING INDUSTRIAL ACCIDENTS IN OHIO.

Many of the accidents occurring from day to day in the industrial world would not terminate fatally nor would they be recorded even as of a serious nature were it not for the fact that the wounds produced become infected as a result of lack of immediate attention on the part of the injured employee or of carelessness in protecting them until the services of a physician may be obtained. Following every industrial accident it is of prime importance that infection be prevented in order to reduce the suffering of workmen, lessen the number of cases of permanent partial disability, and save human lives. A recent bulletin issued by the Ohio Industrial Commission<sup>1</sup> states that of 73,525 industrial accidents for which awards were made by the commission for the 12 months ending June 30, 1915, infection was reported in connection with 7,073 accidents. Thus, approximately 1 out of every 10 industrial injuries became infected. Of this number, 39 cases resulted fatally, 161 resulted in permanent partial disability, and 6,873 cases resulted in prolonged temporary disability. Many of this latter number might undoubtedly have suffered comparatively little inconvenience had the proper care and precaution been taken on the occurrence of the injury. That too much importance can not be attached to the necessity of exercising care even after the most trivial injuries is illustrated by the following instances cited in the bulletin:

Deceased scratched finger on nail in a barrel from which he was taking sal soda. Gangrene developed and the arm was amputated. Injured October 30, 1914; died November 8, 1914.

Ran splinter in hand while handling boards. Blood poisoning set in. Injured April 24, 1915; died May 1, 1915.

Thirty of the fatalities occurred in connection with very trivial injuries, cuts, scratches, abrasions, lacerations, and punctures. Of the 39 cases of death, 7 died within the first week, 13 died within the second week, and 8 died within the third week after the accident. These 39 cases represent 8.3 per cent of the total fatalities (482) for which awards were made by the commission.

Awards were made in 1,643 cases of permanent partial disability, infection being contributory to the disastrous result in 161 (9.8 per cent) of these cases. As to the type of disability, particular atten-

<sup>1</sup> Ohio. Industrial Commission. Department of Investigation and Statistics. Report No. 29. Infections following industrial accidents in Ohio. Columbus, Mar. 1, 1917. 12 pp.

tion is called to the fact that of 255 accidents which resulted in total or partial loss of vision in one or both eyes, 46, or 18 per cent, were due to infection. Approximately 31 per cent of the cases of infection in this group were caused by falling and shifting objects, while nearly 30 per cent were caused by machinery.

The balance of the awards (71,400) were made in temporary disability cases, the number of infections among these cases, as already noted, being 6,873, or 9.6 per cent. In this group the largest number of infections, 5,533, or 80.5 per cent, resulted from trivial wounds, while the next largest number, 519, or 7.6 per cent, resulted from foreign bodies in the eyes. Here, also, falling and shifting objects were responsible for the largest number of infections (3,292, or 47.9 per cent), the next largest number (1,271, or 18.5 per cent) being caused by machinery.

Considering infections by industry class, nearly one-half (3,071, or 43.4 per cent) occurred to workers in the metal trades. The bulletin concludes with the following warning:

Don't neglect small cuts, scratches, and punctures.

Thirty men lost their lives within one year following infection from cuts, scratches, abrasions, lacerations, and punctures.

Don't neglect eye injuries. Even slight injuries to the eye may result in loss of vision.

Infections following accidents caused 23 men total loss of vision in one or both eyes; 8 men, more than one-half loss of vision; 9 men, one-half loss of vision; and 6 men, less than one-half loss of vision within one year.

Don't neglect injuries. Infection was allowed to develop within one year in more than 7,000 injuries following accidents or in approximately one out of every 10 accidents.

Infection may develop from the use of tobacco or cobwebs to stop bleeding; use of a pin or dirty penknife to remove splinters, use of a dirty toothpick, dirty handkerchief, or dirty fingers of a fellow employee in attempting to remove a small particle from the eye. Wait and have it removed by a doctor or nurse.

Don't hesitate. Give immediate aseptic dressing to the smallest wound, because neglect may lead to serious consequences.

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#### WORKMEN'S COMPENSATION AND ACCIDENT INSURANCE IN MARYLAND.

Under the Maryland workmen's compensation law employers are required to insure in the State fund or in a stock company, unless they are able satisfactorily to convince the industrial-accident commission that they are in position to carry their own risk. According to the second annual report of the commission for the year ending October 31, 1916,<sup>1</sup> it appears that nearly 9 per cent of the employers

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<sup>1</sup> Second annual report of the State Industrial Accident Commission for the year ending Oct. 31, 1916. Baltimore. [1917.] 62 pp.

insured in the State fund, but the report adds that so far as has been ascertained only three or four companies were ahead of the State fund in volume of business as measured by the amount of premiums received. It is estimated that less than 1 per cent of the employers were self-insured. While a majority of employers effected insurance, it appears from the report that many did not, and several reasons are advanced for this state of affairs.

Some employers have a more or less vague knowledge of the scope of the law and are either indifferent or purposely neglect to inform themselves; others, while seemingly aware of its application, have frankly taken a chance of an accident or of their neglect being discovered in some other way, while instances have developed of employers who are plainly defying the law.

As to the administrative expense the report states that "a rather liberal cost accounting for the past two years indicates that the cost of administration of the fund has not exceeded 10 per cent, this to be compared with cost for stock companies ranging from 30 per cent to 40 per cent."

During the year 31,324 accidents were reported to the commission, 207 of which were fatal. Awards were made in 93 of the 150 claims filed in fatal cases and in 4,282 of the 4,636 claims filed in nonfatal cases. These awards, as well as the total number of accidents reported, are classified according to the character and cause of injury, and the occupation, age, sex, marital condition, and wages of the workmen. The following table shows the benefits which accrued to workmen or their dependents during the year covered by the report:

BENEFITS DERIVED BY BENEFICIARIES OF THE MARYLAND WORKMEN'S COMPENSATION LAW DURING THE YEAR ENDING OCT. 31, 1916.<sup>1</sup>

Payments made for—	Number of awards.	Compensation.		Medical service.	Total.
		Paid.	Outstanding.		
Fatal accidents.....	108	<sup>2</sup> \$30,862.22	\$261,945.67	.....	<sup>2</sup> \$292,807.89
Permanent total disability.....	5	906.60	24,093.40	.....	25,000.00
Permanent partial disability.....	324	43,016.24	31,821.49	.....	74,837.73
Temporary total disability.....	4,360	201,783.42	.....	.....	201,783.42
Temporary partial disability.....	6	153.00	.....	.....	153.00
Medical service in compensation cases.....	.....	.....	.....	\$47,134.24	47,134.24
Medical service in cases that did not reach compensation.....	.....	.....	.....	63,223.10	63,223.10
Total.....	4,803	276,721.48	317,860.56	110,357.34	704,939.38

<sup>1</sup> The report states that payments noted in this table are included on awards made since Nov. 1, 1916, for compensation due prior to Nov. 1, 1916, and this probably accounts for the apparent discrepancy in some of the figures as compared with those noted elsewhere.

<sup>2</sup> Includes \$8,819.37 paid for funeral expenses.

The report of the State accident fund shows a total of 1,095 accidents, for which compensation amounting to \$19,784.18<sup>1</sup> and medical benefits amounting to \$7,278.54<sup>1</sup> were paid, with \$26,760.09 estimated

<sup>1</sup> This does not agree with the amount shown in the following statement. Both are taken from the report and the reason for the discrepancy does not appear.

as outstanding. The following is a statement of the condition of the fund as of date October 31, 1916:

ASSETS.	
Cash on deposit, State treasury	\$36,058.87
Stocks and bonds	59,625.00
Accrued interest on above to Oct. 31, 1916	706.67
Policyholders' accounts	5,762.20
Total assets	\$102,152.74
LIABILITIES.	
Reserve for losses	31,659.34
Reserve for unearned premium	2,824.33
Reserve for special surplus <sup>1</sup>	11,847.56
Reserve for surplus	55,821.51
Total reserves	102,152.74
INCOME AND DISBURSEMENTS.	
<i>Income.</i>	
Net premiums written	71,646.82
Interest on deposits	670.61
Interest on investments	880.00
Total income	73,197.43
<i>Disbursements.</i>	
Losses paid, medical	7,158.60
Losses paid, temporary total disability	12,188.76
Losses paid, permanent total disability	54.80
Losses paid, permanent partial disability	3,264.45
Losses paid, death (dependency)	2,482.11
Losses paid, death (no dependency)	883.50
Total losses paid	26,032.22
Reserve for losses (accidents, Nov. 1, 1915, to Oct. 31, 1916)	26,760.09
Reserve for unearned premiums	2,824.33
Reserve for special surplus <sup>1</sup> (premiums written Nov. 1, 1915, to Oct 31, 1916)	7,164.68
Reserve for surplus (additional account business Nov. 1, 1915, to Oct. 31, 1916)	10,416.11
Total reserves	47,165.21
Total losses and reserves	73,197.43

The report indicates a purpose on the part of the commission to encourage and promote plans for accident prevention, in a general way through its cooperation with insurance carriers and em-

<sup>1</sup> As provided in sec. 23, ch. 800, acts of 1914.



ployers, and particularly in connection with the State accident fund, which is administered by the commission. Attention is called to the fact that on November 6, 1916, a merit-rating plan for the State accident fund was adopted by which credit is given for good accident experience and a charge is made for bad accident experience, by a reduction or an advance, as the case may be, in the premium rate.

#### COMPULSORY WORK LAWS AND LAWS TO PREVENT INTERFERENCE WITH EMPLOYMENT.

A law enacted by the West Virginia Legislature declares it the duty of every able-bodied male resident of the State between 16 and 60 years of age to be habitually and profitably employed, the act to be in effect during the period of the present war and for six months thereafter. This act was reproduced in the MONTHLY REVIEW for August. Not all the labor legislation of the year has as yet come under review by the bureau, but in at least two other States laws have been enacted which bear upon the subject of compulsory employment; another State enacted an emergency law relating to employment, while in two other States the legislatures have sought to prevent interference with employment by a new type of legislation addressed to a situation of recent development in this country.

A law quite similar to the West Virginia statute was passed by the Maryland Legislature at its extra session of this year (ch. 33, approved June 28, 1917). This act applies to able-bodied male persons between the ages of 18 and 50 years, and is to come into effect whenever the governor of the State determines that it is necessary, because of the existence of a state of war, for the protection and welfare of the State that all persons described in the act "be employed in occupations carried on by the State, the counties or the city of Baltimore, or any of their agencies, or be employed in occupations carried on by private persons, firms or corporations, whether agricultural, industrial, or otherwise." The occupations referred to are to be such as the governor finds to be essential and requiring resort to this act for their successful conduct. On proclamation of the act every able-bodied male between the ages fixed, "not then or thereafter regularly or continuously employed or engaged in any useful business, trade, or profession of any kind," must register with the clerk of the court for his county or city. The lists thus procured are to be furnished to the governor, who shall then assign or cause to be assigned such persons to the occupations and employments indicated, the term of any single assignment not to exceed six continuous months. Necessary reassignments are authorized, and all assignments must have regard to the physical capacity of the persons to do

the work contemplated. The governor is to declare and publish necessary rules and regulations, and "persons similarly circumstanced shall, as far as it is possible to do so, be treated alike." Persons able to support themselves by reason of ownership of property or income, and those supported by others, are required to register under the act. Students and all persons fitting themselves to engage in trade or industrial pursuits are exempt.

The wages to be paid shall not be less than the wage or salary paid to others engaged in the same nature of work. Public employment shall be paid for out of the appropriation made for the undertaking; while private employers are required to execute a bond to the State to guarantee the payment of earnings as they fall due. If the employer fails to make payment, the workman shall be paid by the State, the latter then to proceed to recover on the bond of the defaulting employer. The hours of work are limited to the number that lawfully constitutes a day's work in the occupation.

Enforcement is placed in the hands of the sheriffs of the counties, the police department of Baltimore City, and in general of officers, city, county, or municipal, charged with enforcing law. Penalties are provided for failure to register and for failing or refusing to do the work assigned. The law does not apply to persons temporarily unemployed by reason of differences with their employers, nor to persons engaged or employed in seasonal occupations carried on in Baltimore city or Allegany County.

The Kansas Legislature enacted a law (ch. 167, approved Mar. 10, 1917) looking toward the enforcement of suitable employment, but differing from the above in being permanent, as well as in a number of other respects. In fact, it is only a rather drastic vagrancy law and may be fairly assumed to have its origin not in the emergency created by the war but rather in the industrial conditions that affect considerable portions of the West. This law applies to "any person engaged in any unlawful calling whatever, or who shall be found loitering without visible means of support within a community, or who, being without visible means of support, shall refuse to work when work at fair wages is to be procured in the community, or who shall threaten violence or personal injury to fellow workmen or to employers of labor." Such persons are to be deemed vagrants and are subject to penalties of fine or imprisonment.

Not falling exactly within the same category as the laws already noted but arising out of the current emergency is an act of the Legislature of New Hampshire (ch. 146, approved Apr. 12, 1917) forbidding any person, during time of war or invasion, to influence or coerce or attempt to influence or coerce, any person or persons not to work in shops, mills, factories, munition plants, or other industries

or establishments whatever. It is also made unlawful to instigate or encourage, or attempt to instigate or encourage, strikes or lock-outs so long as the industry or establishment is engaged in manufacturing, making, or delivering sustenance, clothing, weapons, munitions, material, or other supplies for the Army or Navy of the United States or the military or naval service of the State.

The remaining laws noted here are of a novel type and are based entirely on industrial conditions developing practically independent of the war, though doubtless stimulated to some extent by the conditions which it has produced. Like the Kansas statute noted above, they undertake to regulate modes of interference with employment by threats or other unlawful acts. The Legislature of Idaho (ch. 145, approved Mar. 14, 1917) enacted a law defining criminal syndicalism as "the doctrine which advocates crime, sabotage, or unlawful methods of terrorism as a means of accomplishing industrial or political reform." The advocacy of such a doctrine is declared a felony, to be punished by imprisonment for not more than 10 years, or a fine of not more than \$5,000, or both. The same penalty attaches where two or more persons assemble for the purpose of advocating or teaching the doctrines of criminal syndicalism, and every person voluntarily participating in such assemblies by his presence, aid, or instigation is subject to the penalty. Persons owning or having charge of buildings which they willfully and knowingly permit to be used for such an assemblage are also punishable by imprisonment for not more than one year, or by a fine of not more than \$500, or both. The offenses enumerated include advocating or teaching, either by word of mouth or in writing, the necessity or propriety of crime, sabotage, violence, or other unlawful methods of terrorism as a means of accomplishing industrial or political reform; the printing, publication, circulation, or display of books, papers, or written matter advocating or teaching the doctrine; openly, willfully, and deliberately justifying the commission of the forbidden acts with intent to encourage the doctrine of criminal syndicalism; and organizing or helping to organize or joining or assembling with any society or group of persons formed to teach or advocate the doctrines of criminal syndicalism.

A practically identical law was passed by the Legislature of Minnesota (ch. 215, approved Apr. 13, 1917). This act defines sabotage as meaning "malicious damage or injury to the property of an employer by an employee." The penalties for individual offenders are reduced in the Minnesota statute to imprisonment for five years as a maximum, or a fine not exceeding \$1,000, or both; the punishment for assemblages, however, is the same as in Idaho, as is that for permitting the use of buildings or rooms for such assemblages.

### MINIMUM WAGES FOR WOMEN IN MERCANTILE ESTABLISHMENTS IN CALIFORNIA.

The Industrial Welfare Commission of California, under date of July 6, 1917, issued an order (effective Sept. 6, 1917) fixing minimum wage rates for all female workers in the mercantile industry.

By the terms of the order no experienced woman worker may be employed at a rate of wages less than \$10 per week (\$43.33 per month). For learners a graded wage scale is provided, the minimum being \$6 per week (\$26 per month) for a beginner under 18, with 50 cents per week increases at six-month intervals until the full \$10 weekly wage is obtained. Moreover, it is provided that the total number of learners in any establishment shall not exceed 25 per cent of the total number of women and minors employed.

This is the second industry covered by the Industrial Welfare Commission, wages and hours for women in the canning industry having been established in February, 1916, and revised in June, 1917.<sup>1</sup>

The order regarding mercantile establishments was dated at San Francisco, July 6, 1917, and its full terms are as follows:

1. No person, firm, or corporation shall employ, or suffer or permit an experienced woman to be employed in the mercantile industry in California at a rate of wages less than \$10 per week (\$43.33 per month.)

2. The wages of learners may be less than the minimum rate prescribed for experienced workers provided:

(a) That learners entering employment under 18 years of age be paid an initial weekly wage of not less than \$6 per week (\$26 per month) for the first six months of employment; for the second six months not less than \$6.50 per week (\$28.17 per month); for the third six months not less than \$7 per week (\$30.33 per month); for the fourth six months not less than \$7.50 per week (\$32.50 per month); and for the fifth six months, or when 18 years of age, not less than \$8 per week (\$34.67 per month).

(b) That learners entering employment 18 years of age and under 20 years of age be paid an initial weekly wage of not less than \$8 per week (\$34.67 per month) for the first six months of employment, not less than \$8.50 per week (\$36.83 per month) for the second six months, not less than \$9 per week (\$39 per month) for the third six months; not less than \$9.50 per week (\$41.17 per month) for the fourth six months, and thereafter shall be deemed experienced workers and shall be paid not less than the minimum rate for experienced workers.

(c) That learners entering employment 20 years of age or over be paid an initial weekly wage of not less than \$8 per week (\$34.67 per month) for the first six months of employment, for the second six months not less than \$8.50 per week (\$36.83 per month), for the third six months not less than \$9 per week (\$39 per month), and thereafter shall be deemed experienced workers and shall be paid not less than the minimum rate for experienced workers.

3. The total number of adult and minor learners in any establishment shall not exceed 25 per cent of the total number of women and minors employed. In

<sup>1</sup> See MONTHLY REVIEW for July, 1917, p. 57.

computing the total number of women and minors "temporary" and "special" workers shall not be included.

4. Where payment of wages is made upon a commission or bonus system wages shall be computed weekly and the time wage plus the bonus or commission shall be not less than the minimum rate for the wage group in which the worker belongs.

5. All adult "special" women employees shall be paid not less than \$1.67 per day. All minor "special" employees shall be paid not less than \$1.25 per day.

6. All "part-time" workers, except waitresses,<sup>1</sup> shall be paid not less than the minimum rate for an eight-hour day.

(a) Students attending accredited vocational, continuation, or cooperative schools may be employed at part-time work on special permits from the commission, and at special rates to be determined by the commission.

7. No person, firm, or corporation shall employ or suffer or permit a woman or minor to work in the mercantile industry more than eight hours in any one day or more than 48 hours in any week.

8. All women and minors now employed in the mercantile industry must be rated and paid in accordance with their experience and age as in the above-mentioned regulations.

9. A license may be issued by the commission to a woman physically disabled by age or otherwise authorizing the employment of such licensee for a wage less than the legal minimum wage; and the commission shall fix a special minimum for such a woman.

10. The commission shall exercise exclusive jurisdiction over all questions arising as to the administration and interpretation of these orders.

A "temporary" worker is a person employed during the holidays for a period not to exceed four (4) weeks. A "special" worker is one who works less than six (6) days a week. A "part-time" worker is one who works less than eight (8) hours per day. A "learner" is a woman or minor who (1) is employed in learning the mercantile industry by an employer who provides the learner with reasonable facilities for such learning, and (2) has received a certificate or has been registered as a learner by the commission.

Provided that an employer may employ a learner for a period not to exceed one week pending application to the commission for a certificate and registration of such learner.

This order shall become effective sixty (60) days from the date hereof.

## EMPLOYMENT OF WOMEN AND CHILDREN IN MAINE.<sup>2</sup>

A published excerpt from the third biennial report of the Maine department of labor and industry contains a chapter on employment of women in stores which presents the results of a study of their conditions, surroundings, scale of wages, health, and treatment, and considers somewhat the inducements, if any, offered by the vocation of saleswoman. The inquiry covered all of the larger de-

<sup>1</sup> Special minimum rates for "part-time" work of waitresses will be determined when the orders are made in the hotel and restaurant industry.

<sup>2</sup> Excerpt from third biennial report of the department of labor and industry, State of Maine, 1915-1916. Waterville, 1917, pp. 50-75.



partment, clothing, dry goods, specialty, and 5 and 10 cent stores in the State and included all occupations in which women are engaged in these stores—office work, bundlers, cashiers, stenographers, book-keepers, messengers, fur sewers, millinery makers, seamstresses, waitresses, and sales people. In all about 1,500 women and many employers were interviewed. Much of the statistical data was secured through schedules returned by employees, although facts as to the 5 and 10 cent stores do not appear in the report.

In general, the investigation revealed the fact that, not including the 5 and 10 cent stores, 48<sup>1</sup> per cent of those interviewed were earning less than \$8 per week "which would probably be a fair minimum wage for these occupations if such a thing is established in the State," and also that wages are relatively lower in the towns than in the cities, but are not enough higher in the cities to make up the extra cost of living or for the necessity of a more up-to-date appearance than is required in the small community. The following table gives the wages earned by 1,243 women, by age groups:

AVERAGE WEEKLY EARNINGS OF 1,243 WOMEN, BY AGE GROUPS, STATE OF MAINE.

Age group.	Number of workers earning—					
	Under \$3.	\$3 to \$6.	\$6 to \$8.	\$8 to \$10.	\$10 to \$15.	\$15 and over.
14 and under 16 years.....	1	5				
16 and under 18 years.....	1	26	15	3		
18 and under 20 years.....	1	37	43	15		4
20 and under 25 years.....	1	56	146	64	20	2
25 and under 30 years.....		18	72	65	48	4
30 and under 35 years.....		3	43	55	51	11
35 and under 40 years.....		3	30	39	52	24
40 and under 45 years.....		1	37	24	32	11
45 and under 50 years.....		1	14	13	32	8
50 and under 55 years.....		1	9	15	20	9
55 and under 60 years.....		1	14	7	8	5
60 and under 65 years.....			8	5	2	3
65 and over.....			2	2	1	
Total.....	4	152	433	307	266	81
Per cent.....	0.32	12.22	34.83	24.71	21.40	6.44

The report suggests the difficulty encountered in making an estimate of living expenses of these women, since many paid no board, others paid very little board, and still others stated that they paid board, whereas conversation with them indicated that this was not true; those living away from home, it was found, paid from \$3.75 to \$8 for board and room.

A study of the relationship between wages and education showed that those with a high-school education averaged higher wages than those graduated from the ninth grade. Considering the bearing that

<sup>1</sup> This is the per cent given in the text of the report. The per cent indicated in the following table, also taken from the report, is 47.37.

experience has upon wages it is shown that the peak of earning capacity was reached after about 20 years of service.

An investigation of welfare work and comfort provided for employees was made in Portland, Lewiston, and Bangor, and the report states that no lunch room was found where meals were actually prepared for the girls, and that in no case was a real rest room or recreation room with couches, books, and good toilet facilities to be found. The existence of one employees' benefit association is noted, the money being raised by taxation and by an annual fair in which employees participated. In the stores in these three cities the wages in the same departments were found to be practically uniform and to vary from an average of less than \$7 per week paid to clerks in the art, stationery, etc., department to about \$25 per week paid to buyers of coats and suits.

Referring to child-labor conditions in the State, the report asserts that on December 31, 1916, there were employed only 743 minors between the ages of 14 and 16 years in all industries, a decrease of 13 per cent from the preceding year. Those desiring to work must obtain permits from the superintendent of schools. Tables are given showing that the number employed between the ages of 14 and 16 is greatly increased in the months of the summer-school vacation, this in itself indicating "that gratifying results have been obtained in keeping children who have not received a primary education out of the factories and other employments while schools are in session."

## WAGES IN EUROPEAN COUNTRIES.

### AUSTRIA.—WAR BONUSES FOR STATE EMPLOYEES.<sup>1</sup>

An Austrian imperial order published on June 2 grants special financial aid to State employees in view of the continued increase in the cost of living. This is the fourth measure of the kind taken during the war, earlier grants (or revisions of grants) having been made in August, 1915, and February and December, 1916. Despite the short time which has elapsed since the order of December last, its provisions have already become inadequate in view of the increased dearness and scarcity of foodstuffs and other necessary commodities.

The new order grants an additional bonus for the period from June 1 to December 31, 1917, payable in a lump sum during the month of June, and varying according to the family circumstances, to State officials (including State railway officials) already drawing

<sup>1</sup> From The Labour Gazette of the British Ministry of Labor, July, 1917, p. 240. (The information for this article was taken from Neue Freie Presse and Die Zeit, June, 1917.)

war bonuses, whose annual salary does not exceed £200 [\$973.30], and all other State servants drawing war bonuses. The amount of the bonus granted is £5 [\$24.33], £7 10s. [\$36.50], £10 [\$48.67], or £12 10s. [\$60.83], according to the family circumstances of the employee. It is officially stated that this special bonus will represent from 43 to 90 per cent of the bonuses payable under the order of December 4, 1916, for persons in receipt of an annual salary of £200 [\$973.30], from 87 to 107 per cent for officials with lower salaries, and from 78 to 116 per cent for other persons entitled to it, i. e., technical employees, etc.

In the case of workmen (as distinguished from "officials") employed on State railways and in other State concerns, the bonus is fixed at 100 per cent of that already payable for the period from June 1 to December 31, 1917, under the order of December 4 last.

It is officially stated that the grant in the near future of a special bonus to retired State servants and their relicts is contemplated.

#### AUSTRIA.—IMPROVED CONDITIONS FOR WAR WORKERS IN VIENNA.<sup>1</sup>

As the outcome of an agitation for higher pay and better conditions of work which broke out among war workers at Vienna in May, a permanent committee, composed of representatives of employers and workmen, was formed on the 26th of the month for the purpose of endeavoring to arrive at a settlement of the points involved. An agreement was at length reached under which all the principal demands of the workers were conceded.

It was agreed that a limitation of the normal working hours to 53½ per week was urgently necessary. Overtime was to be reduced as soon as possible and was to be limited to the first five days of the week, so that work should in any case cease at midday on Saturday. War bonuses were granted to men over 17 years of age. The amount of bonus depends upon the weekly earnings, the limits being 20 kronen (16s. 8d.) [\$4.06], bonus for those earning 50 kronen (£2 1s. 8d.) [\$10.15] for a full week's work, and 7.50 kronen (6s. 3d.) [\$1.52] for those earning not more than 100 kronen (£4 3s. 4d.) [\$20.30]. In addition to these, family bonuses were to be paid, viz, 2s. 6d. [61 cents] per week for a wife and 1s. 8d. [41 cents] per week for every child under 14, but such family bonus is in no case to exceed 12s. 6d. [\$3.04]. A war bonus of 4s. 2d. [\$1.01] was granted to women workers over 18 years of age earning not more than £2 1s. 8d. [\$9.90] per week.

Minimum weekly time wages are to be payable as follows: Trained workers with at least two years' experience, 54s. 2d. [\$13.18]; work-

<sup>1</sup> From The Labour Gazette of the British Ministry of Labor, July, 1917, p. 240. (The information for this article was taken from Die Zeit of May 30 and Arbeiter-Zeitung of June 5.)

ers over 17 with less than two years' experience, 50s. [\$12.17]; untrained auxiliary workers, 41s. 8d. [\$10.14]; women over 18 with at least six weeks' experience, 29s. 2d. [\$7.10]; women workers with less than six weeks' experience, 25s. [\$6.08]; boys under 17, 25s. [\$6.08]; girls under 18, 20s. [\$4.87]; apprentices in their first year of apprenticeship, 8s. 4d. [\$2.03]; in their second, 16s. 8d. [\$4.06].

The agreement is to be regarded exclusively as a war agreement. It came into force with the first payment of wages after May 29, and is to remain in force until two months after the conclusion of peace.

#### FRANCE.—INCREASE IN WAGES OF RAILWAY WORKERS.

The United States vice consul in St. Etienne, France, reports, under date of June 27, 1917, that the wages of railway workers in France, which were advanced in 1916, have again been increased, and that these increases affect a large number of railway workers of the low and medium salary grades. The report says:<sup>1</sup>

The increases that took effect in June are as follows: Wages up to 1,200 francs [\$231.60] advanced 30 per cent; from 1,200 to 1,800 francs [\$231.60 to \$347.40] advanced 30 per cent for the first 1,200 francs [\$231.60] and 15 per cent for the amount from 1,200 to 1,800 francs; wages above 1,800 francs [\$347.40] advanced 30 per cent for the first 1,200 francs [\$231.60], 15 per cent for the amount from 1,200 francs to 1,800 francs [\$231.60 to \$347.40], and 10 per cent for the amount from 1,800 to 3,600 francs [\$347.40 to \$694.80]. Certain further augmentations of wages to employees having dependent children above a stated number which were allowed in the 1916 schedule are to remain in force.

Wages for certain employees of the State in the post, telegraph, and telephone departments have also been recently increased 360 francs [\$69.48] to workers receiving up to 3,600 francs [\$694.80] per annum, and 240 francs [\$46.32] to those receiving 3,600 to 5,000 francs [\$694.80 to \$965] in addition to 100 francs [\$19.30] more for each of the first two dependent children, and 200 francs [\$38.60] for each child above this number.

#### GERMANY.—WAGES OF GERMAN MINERS, 1914-1917.<sup>2</sup>

The *Deutscher Reichsanzeiger* for June 19 contains a statement giving statistics of wages of German miners during the first quarter of 1917. From a comparison of these figures with similar data from the corresponding statement for the second quarter of 1914 it is possible to get some idea of the movement of wages in industry

<sup>1</sup> U. S. Department of Commerce. Bureau of Foreign and Domestic Commerce. Commerce Reports. No. 171. Washington, July 24, 1917, p. 293.

<sup>2</sup> From the *Labour Gazette* of the British Ministry of Labor, July, 1917, p. 240.

during the course of the war. In the table below the comparison is limited to adult male workers. It should be borne in mind, however, that the composition of the classes of workmen to which the figures relate has undergone considerable change between the two periods. A large proportion of hewers and trammers has been called up for service in the Army, and their places have been filled by less skilled men. As a consequence the output of coal, etc., per shift (and consequently the shift earnings) in the latest quarter was less than would have been the case had this change not taken place.

The following table shows the average sum earned per shift in the first quarter of 1917 by men employed in the various branches of the mining industry in Germany and the percentage of increase in earnings between the second quarter of 1914 and the first quarter of 1917:

Mining district.	Underground workers.				Surface workers.	
	Hewers and tram- mers.		Others.			
	Net earnings per shift, first quarter of 1917.	Per cent of in- crease over second quarter of 1914.	Net earnings per shift, first quarter of 1917.	Per cent of in- crease over second quarter of 1914.	Net earnings per shift, first quarter of 1917.	Per cent of in- crease over second quarter of 1914.
<i>Coal.</i>						
Upper Silesia.....	\$1.71	47.0	\$1.20	41.7	\$1.10	41.7
Lower Silesia.....	1.28	35.6	1.13	34.7	.96	26.2
Dortmund.....	2.23	50.7	1.48	36.5	1.41	35.0
Saarbrücken (State mines).....	1.69	39.4	1.32	33.7	1.26	57.0
Aix-la-Chapelle.....	1.79	38.3	1.33	28.4	1.23	25.0
Lower Rhine, left bank.....	2.19	49.0	1.65	38.1	1.42	35.1
<i>Lignite.</i>						
Halle.....	1.32	32.1	1.09	38.4	1.12	34.1
Rhine, left bank.....	1.52	36.6	1.39	32.3	1.34	37.4
<i>Metalliferous ores.</i>						
Copper: Mansfield.....	1.73	89.3	1.56	71.8	1.40	62.7
Other:						
Oberharz.....	1.75	77.2	1.62	69.0	1.23	60.9
Siegen.....	1.83	50.6	1.36	37.0	1.31	34.7
Nassau and Wetzlar.....	1.24	40.5	1.10	31.3	1.07	33.9
Other Rhine, right bank.....	1.56	45.1	1.20	27.4	1.20	41.4
Other Rhine, left bank.....	1.23	39.3	1.04	36.9	1.02	40.7
<i>Salt.</i>						
Halle.....	1.48	30.7	1.24	25.4	1.13	27.2
Clausthal.....	1.52	27.5	1.26	26.0	1.17	23.2

Among coal miners, hewers, and trammers show the highest rate of increase between the two periods; in Dortmund the rise for these workers amounted to over 50 per cent, and on the left bank of the Rhine to 49 per cent. Taking the industries as a whole, the greatest increase is shown by metal miners and the least by salt miners.



As regards the actual level of earnings in the first quarter of 1917, coal miners stand first as a class.

**HOLLAND.—WAGES AND COST OF LIVING DURING WAR PERIOD: OFFICIAL REPORT.<sup>1</sup>**

The following particulars are taken from the concluding portion of a report<sup>2</sup> upon economic conditions in Holland issued by the Dutch ministry of agriculture, commerce, and industry on May 11. They are based on data collected by the factory inspection department.

(1) *Wages*.—Out of 336,000 work people employed in private industrial undertakings, 76,750 had their wages increased by (or received war bonuses amounting to) 1 to 10 per cent, 133,700 by 11 to 20 per cent, 73,150 by 21 to 30 per cent, and 34,000 by over 31 per cent. The general average increase among these 336,000 industrial work-people is estimated at 13 per cent.

The following table shows the number of persons covered by the inquiry in each group of trades and the percentage of these who received increases (or war bonuses) of varying amounts:

Trade group.	Number of work-people covered by the returns.	Per cent of workpeople whose wages were increased by, or who received war bonuses amounting to—				Total.
		1 to 10 per cent of wages.	11 to 20 per cent of wages.	21 to 30 per cent of wages.	Over 31 per cent of wages.	
Building.....	84,500	30.8	54.4	11.8	0.6	97.6
Mining and turf getting.....	30,000	.....	.....	40.0	60.0	100.0
Metal.....	44,700	14.1	43.4	24.2	6.0	87.7
Textile.....	29,900	35.1	24.4	33.4	6.7	99.6
Clothing and cleaning.....	22,300	22.4	58.7	7.2	5.4	93.7
Printing.....	15,700	7.6	27.4	54.8	10.2	100.0
Paper making.....	4,200	11.9	16.7	64.3	.....	92.9
Woodworking.....	18,400	9.2	40.8	24.5	20.1	94.6
Chemical.....	7,000	37.2	28.6	17.1	15.7	98.6
Pottery, glass, etc.....	22,500	24.0	30.1	10.7	3.6	68.4
Baking.....	3,700	16.2	67.6	8.1	.....	91.9
Flour milling.....	500	10.0	80.0	10.0	.....	100.0
Dairying.....	2,900	10.3	55.2	27.6	3.5	96.6
Tobacco.....	17,800	25.3	59.5	15.2	.....	100.0
Other food.....	11,200	30.4	39.3	19.6	9.8	99.1
Gas and electricity.....	6,000	8.3	83.4	8.3	.....	100.0
Leather, oilcloth, and rubber.....	6,200	1.6	32.3	43.5	19.4	96.8
Diamond working.....	8,000	100.0	.....	.....	.....	100.0
Art.....	500	20.0	20.0	20.0	.....	60.0
Total.....	336,000	22.8	39.9	21.7	10.1	94.5

The difference between the figure shown in the "total" column and 100 indicates the proportion of the 336,000 workpeople who either received no increase in wages (or war bonus) or whose wages were reduced. The number of these was 18,400, or 5.5 per cent of the total.

<sup>1</sup> From The Labour Gazette of the British Ministry of Labor, July, 1917, p. 238.

<sup>2</sup> Nota betreffende den economischen toestand, No. 440. Session 1916-17. The Hague.

The report states that, on the average, agricultural wages have increased by 50 per cent since 1914. In some localities the increase has even attained 100 per cent for certain occupations.

It may be stated that, according to the Dutch census of 1909, the populations employed in industry and agriculture formed respectively 36 and 27 per cent of the total occupied population.

(2) *Cost of living.*—According to the same report, the cost of living of the working classes in the large towns has increased during the war period by from 15 to 25 per cent. In the Provinces the advance has been about 50 per cent on the average, and in some places as much as 100 per cent.

#### SWITZERLAND.—WAGES OF WOODWORKERS.<sup>1</sup>

In March, 1917, the Woodworkers' Federation of Switzerland undertook a statistical inquiry into the current average wages of woodworkers in the various sections of the federation. The results of this inquiry were published in the official organ of the federation. Below are shown the wages thus ascertained in a number of the larger towns:

AVERAGE WAGES PER HOUR OF WOODWORKERS IN SWITZERLAND, MARCH, 1917.

Name of town.	Average rate of wages per hour.	Name of town.	Average rate of wages per hour.
	<i>Cents.</i>		<i>Cents.</i>
Basel.....	15.6	Rorschach.....	13.0
Berne.....	14.6	Rheintal.....	11.4
Biel.....	13.5	Rheinfelden.....	11.3
Brugg.....	14.6	Romanshorn.....	11.7
Baden.....	12.6	Rapperswil.....	12.2
Chur.....	12.5	Solothurn.....	13.2
Davos.....	14.2	St. Gallen.....	14.3
Engadin.....	13.8	Schaffhausen.....	13.8
Herisau.....	12.2	Uzwil.....	14.5
Kreuzlingen.....	13.5	Winterthur.....	14.5
Lucerne.....	14.2	Zug.....	13.2
Oerlikon.....	15.4	Zurich.....	17.5

The preceding wages are in the main those of carpenters and joiners. In a number of towns the inquiry included also special branches of woodworking, and it was found that the average wage of inlaid-floor makers was 19.3 cents in Basel and 22.3 cents in Berne and Zurich; that the average wage of lathers was 17 cents in Berne and 23.3 cents in Zurich, and of upholsterers 16.9 cents in Berne, 16.5 cents in St. Gallen, and 19.1 cents in Zurich. Basket makers and sawyers receive the lowest wages, averaging from 10.2 to 11.8 cents per hour. In the smaller towns the average wages of carpenters and joiners are lower than those shown in the above

<sup>1</sup> Data from Bulletin der Internationalen Union der Holzarbeiter. Berlin, May, 1917. No. 3/14, p. 40.

table. Hence the *Holzarbeiter-Zeitung* on the basis of the above figures comes to the following conclusion: (1) That the average current wages are not in proper relation to the present high cost of living; (2) that technical and mechanical development of the Swiss wood-working industries is making rapid progress, more and more eliminating the skilled craftsman; (3) that therefore, besides shorter hours of labor, the woodworkers' most important demand must be for the fixing of an average wage; and (4) that a strong trade-union organization is a vital question for each individual woodworker.

### RESTRICTIONS UPON THE FREEDOM OF LABOR MOVEMENT IN GREAT BRITAIN DURING THE WAR.

Among the most interesting provisions of British war legislation affecting labor are those designed to promote continuity of employment. During the war a workman is not free to sell his labor in the market of his own choice, nor is the employer free to engage labor where he can find it. Both are subject to close governmental control.

Such control was considered necessary in order to prevent indiscriminate migration of labor, whether it took place spontaneously or in consequence of inducements held out by rival employers. The war itself fostered such migration on a large scale, the heavy enlistments in the army causing a labor shortage in munitions work at a time when labor was imperatively needed.

#### REGULATION OF APRIL, 1915.

The first attempt of the Government to interfere with the free movement of labor was an order in council dated the 29th of April, 1915, making a regulation under the Defense of the Realm Acts in the following terms:

The occupier of a factory or workshop the business carried on in which consists wholly or mainly in engineering, shipbuilding, or the production of arms, ammunition, or explosives, or of substance required for the production thereof, shall not, nor shall any person on behalf of the occupier of such a factory or workshop, either directly or indirectly, by canvassing, advertisement, or otherwise, take any steps with a view to inducing—

(a) Any person employed in any other factory or workshop, being a person engaged on work for any Government department or otherwise serving war purposes, to leave his employment; or

(b) Any person resident in the United Kingdom at a distance of more than 10 miles from the occupier's factory or workshop, to accept employment therein, otherwise than by notifying vacancies to a Board of Trade labor exchange; and in the event of any person contravening the provisions of this regulation he shall be guilty of an offense against these regulations. (Defense of the Realm (Consolidated) Regulations 8B.)

Three points of interest emerge so far as this regulation is concerned:

1. By the regulation the offense could be committed only by employers in a limited number of trades, i. e., "engineering, shipbuilding, or the production of arms, ammunition, or explosives, or of substances required for the production thereof." It was the employers in these trades who were supposed to be likely to steal labor.

2. The practice struck at by the regulation was enticement. It was hoped that if there were no enticement the man would effectually be prevented from leaving his employment.

3. It was the employer, not the workman, who was made liable to the penalty. It was felt that any direct attempt to prevent the workman from seeking or obtaining employment would be resented as an interference with the liberty of the subject.

It appears that, on the whole, the regulation failed of its effect. In the first place it was found that the enumeration of trades was not sufficient and that the leakage from the establishments covered by the regulation into the building and other outside trades was so great as to constitute a serious defect.

A second difficulty, of even greater importance, was that the regulation could not readily be enforced. Not only was the idea of "inducement" not understood by the employers but the offense could not be proved before the courts.

Finally it was found that employers were bringing men from a distance to within the 10-mile radius although overt negotiations were only begun within this area.

The principle of creating an offense for the employer only was believed to be a sound one and it was adopted in the legislation which followed. But the regulation itself was of limited effect, and it was to correct its ineffectiveness that the system of "leaving work" certificates was introduced as part of the Munitions of War Act of 1915.

#### LEAVING CERTIFICATES UNDER THE ORIGINAL ACT.

The terms of section 7 of the Munitions of War Act of 1915 were as follows:

(1) A person shall not give employment to a workman who has within the last previous six weeks or such other period as may be provided by order of the Minister of Munitions as respects any class of establishment, been employed on or in connection with munitions work in any establishment of a class to which the provisions of this section are applied by order of the Minister of Munitions, unless he holds a certificate from the employer by whom he was last so employed that he left work with the consent of his employer or a certificate from the munitions tribunal that the consent has been unreasonably withheld.

(2) If any workman or his trade-union representative complains to a munitions tribunal in accordance with rules made with respect to those tribunals that the consent of any employer has been unreasonably withheld that tribunal may, after examining into the case, if they think fit, grant a certificate which shall, for the purpose of this section, have the same effect as a certificate from the employer.

(3) If any person gives employment in contravention of the provisions of this section, he shall be guilty of an offense under this act.

The act became law on the 2d of July, 1915, and the order which was necessary to bring the section into operation was signed by the minister on July 14. By the order the provisions of the section were applied to the establishments which had already come under the regulation; that is to say, to "Any establishment being a factory or workshop the business carried on in which consists wholly or mainly in engineering, shipbuilding, or the production of arms, ammunition, or explosives, or of substances required for the production thereof." As the order and the regulation were so intimately connected the administration of the latter was transferred on August 13 from the Board of Trade Labor Exchange and Unemployment Insurance Department to the Ministry of Munitions.

Before breaches of the section could be prevented it was necessary to bring the munitions tribunals into operation. The first general tribunal met on July 21 and the first local tribunal on August 6. During August 36 workmen applied for certificates, and August 21 the first complaint was heard by one employer against another. In the following month 217 cases were heard by the local and 13 by the general tribunals. At the end of August, 1915, the department issued memoranda for the guidance of workmen and employers.

From the beginning there arose certain difficult questions of interpretation. Thus where the regulation had used the word "person" the section used "workman." A demand for skilled clerical workers, and in particular for draftsmen, was a natural concomitant of the demand for workmen, and the need of retaining their services was equally urgent; but the word "workman" had to be interpreted in its usual sense—a man or woman who was mainly a manual worker. This did not cover foremen whose chief occupation was supervision.

Another difficulty of interpretation concerned the meaning of the words "munitions work." It was felt that this term must not be interpreted loosely, for while the great bulk of the work carried on in the country had an indubitable relation to the war it was not desired to restrict the liberty of the industrial population generally. A definition of munitions work, as "the manufacture or repair of arms, ammunition, ships, vehicles, aircraft, or other articles required for use in war, or of the metals, machines, or tools required for that manufacture or repair," was included in section 3.



## OPPOSITION OF LABOR.

No section of the act of 1915 appears to have been less liked by the workpeople than section 7. They complained that in many cases their abilities were wasted. All over the country factories were being built for munitions work or were installing new munition plants. There were not enough experienced foremen and managers to be had, and employers, therefore, turned to skilled workmen accustomed to working this type of machinery. In many cases, however, their employers and the tribunals refused to release them, and in this way, the men claimed, used the provisions of the act against the national advantage. It was also complained that skilled men who had been put for some temporary reason onto unskilled or semi-skilled work were being held to it and prevented from taking their proper jobs again. Difficulties also arose in cases where men were suspended from work as a disciplinary measure or where employees unable to leave suffered ill treatment, while attention was drawn by labor critics to the contract between the inability of the workmen (except under the penalty of six weeks' idleness) to change his employment with the unrestricted right of the employer to dismiss him. It was also a ground for complaint that employers in granting leaving certificates indorsed them with observations on the men's conduct, and so rendered reemployment more difficult to obtain. Exception was also taken to the legal atmosphere of the tribunals and to the variation in judgments which under the original act there was no appellate machinery to remedy.

Apart from these grievances it had become clear that an amending act was necessary owing to interpretation difficulties which had arisen, notably in connection with the definition of munitions work. Accordingly, in the munitions of war (amendment) act of 1916, the opportunity was taken to remedy defects of which the workpeople complained.

## LEAVING CERTIFICATES UNDER THE AMENDED ACT OF 1916.

The Munitions of War (Amendment) Act became law on January 27, 1916. Section 7, with the exception of subsection 3 of the original act was replaced by the new section 5, the principal provisions of which are as follows:

A person shall not give employment to a workman who has within the last previous six weeks, or such other period as may be provided by order of the Minister of Munitions as respects any class of establishment, been employed on or in connection with munitions work in any establishment of a class to which the provisions of this section are applied by order of the Minister of Munitions, unless he holds a certificate from the employer by whom he was last so employed or from a munitions tribunal that he is free to accept other employment.

If any workman or his trade-union representative complains to a munitions tribunal, in accordance with rules made with respect to those tribunals, that

an employer has unreasonably refused or neglected to issue such a certificate as aforesaid, that tribunal may, after examining into the case, if it thinks fit, itself issue such a certificate or order the issue of such a certificate by the employer.

Where a workman employed on or in connection with munitions work in any establishment of a class to which the provisions of section 7 of the principal act are for the time being applied by an order made thereunder is dismissed or discharged by his employer, the employer shall forthwith give him such a certificate as aforesaid, and if he fails to do so, a munitions tribunal may, in addition to issuing or ordering the issue to him of such a certificate, order the payment to him by the employer of such sum, not exceeding 5 pounds, as the tribunal may think fit, unless the tribunal is of opinion that the workman was guilty of misconduct for the purpose of obtaining dismissal or discharge.

This subsection shall apply to a workman who applies for a certificate on the ground that he has for a period of more than two days been given no opportunity of earning wages, or who leaves his employment on account of conduct on the part of the employer, or any agent of the employer, which would justify the immediate termination by the workman of his contract of service, in like manner as if he had been dismissed or discharged by his employer.

Where a contract of service with a workman employed on or in connection with munitions work in any establishment of a class to which the provisions of section 7 of the principal act are for the time being applied by an order made thereunder is terminated by dismissal, and less than one week's notice, or wages in lieu of notice, has or have been given, the employer shall, subject to the provisions of this subsection, within 24 hours of giving notice of dismissal to the workman report the matter in such manner as may be prescribed by rules made by the Minister of Munitions, and such rules shall provide for the determination by a munitions tribunal (in case of difference) of the amount, if any, and not in any case exceeding 5 pounds (\$24.33), which is to be paid by the employer to the workman in lieu of notice, and for the payment of the sum so determined to the workman, unless the tribunal is of opinion that, owing to the discontinuous or temporary nature of the employment or misconduct of the workman, the employer had reasonable cause for dismissing the workman without a week's notice.

\* \* \* \* \*  
The Minister of Munitions may make rules for carrying section 7 of the principal act as amended by this section into effect, and in particular may by such rules provide—

(a) For the issue, form, custody, duration, delivery up, and replacement in case of loss or destruction, of certificates;

(b) For the issue of certificates to persons not engaged on or in connection with munitions work;

(c) For prohibiting the insertion in a certificate issued by an employer of any matter other than the prescribed particulars; and may provide for any breach of such rules being punishable as an offense under the principal act with a fine not exceeding 5 pounds (\$24.33).

#### DIFFICULTIES REMEDIED.

It will be seen that points regarding which chief complaint had been made were dealt with. The attempt was made to secure workmen against neglect on the part of the employer to issue a certificate,

and against the possibility of not being employed because they had not come under the section at all. They were given a right to a certificate on dismissal, and to compensation not exceeding £5 (\$24.33) if it was improperly refused. Suspensions were put an end to by allowing men a certificate who had been given no opportunity of earning wages during a period of more than two working days, or whose employer had been guilty of grave misconduct. Dismissed workmen were to have a week's notice or compensation up to £5 unless owing to the discontinuous or temporary nature of their employment or their misconduct the tribunal did not think this reasonable. Ship repairers were exempted from this subsection, and the minister was empowered to exempt other classes of workers if the nature of their employment seemed to warrant it.

Provision was also made for the employment of war munition volunteers who had been allotted without a certificate to a controlled establishment by the Minister of Munitions, for workmen who desired to undertake work where their abilities would be of greater national service, and for apprentices who had served their term and wished to obtain the full rate of wages for skilled workmen in their trade. The minister had power to make rules under the section and their breach could be punished by a fine.

The new act (section 12) cleared up the difficulty which had existed with regard to the word "workman." The new rules also made it impossible for employers to mark certificates, and generally provided that the policy of the department with regard to the issue of certificates should be carried out.

In spite of these changes, however, the leaving-certificate system has been strongly criticised and opposed and at present (August, 1917) there is a widespread movement for its abolition.

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#### PROPOSED JOINT STANDING INDUSTRIAL COUNCILS IN GREAT BRITAIN.

The subcommittee of the reconstruction committee on the relations between employers and employed in Great Britain has submitted to the Prime Minister an interim report on joint industrial councils.<sup>1</sup>

It is proposed that these councils shall be formed in the various industries where they do not already exist, composed of representatives of employers and employed, regard being paid to the various sections of the industry and the various classes of labor engaged, for the purpose of considering appropriate matters affecting the indus-

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<sup>1</sup> Great Britain. Reconstruction committee. Subcommittee on relations between employers and employed. Interim report on joint standing industrial councils. London, Mar. 8, 1917. 8 pp. Price, 1d.

try and particularly the establishment of a closer cooperation between employers and workers. It is suggested that the question of demobilization is one that will call for early attention.

One of the chief factors in the problem, as it at first presents itself, consists of the guarantees given by the Government, with parliamentary sanction, and the various undertakings entered into by employers, to restore the trade-union rules and customs suspended during the war. While this does not mean that all the lessons learned during the war should be ignored, it does mean that the definite cooperation and acquiescence by both employers and employed must be a condition of any setting aside of these guarantees or undertakings, and that, if new arrangements are to be reached, in themselves more satisfactory to all parties but not in strict accordance with the guarantees, they must be the joint work of employers and employed.

The national industrial councils, in the opinion of the subcommittee, should not be regarded as complete in themselves. Not only should there be cooperation between the trade organizations, but the activity and support of employers and employed in the districts and in individual establishments should be enlisted. "What is needed is a triple organization—in the workshops, the districts, and nationally." To this end it is proposed that each national industrial council should consider the advisability of creating or developing out of the existing machinery for negotiation in its particular industry, district councils representative of trade-unions and of the employers' association in the industry, and of instituting in particular plants works committees representative of the management and of the workers employed, to act in close cooperation with the district and national machinery.

It is regarded as essential, in the formation of these committees and district councils, that the support of trade-unions and employers' associations be secured if workpeople are to have a greater share in the consideration of matters affecting their industry as contemplated by the establishment of these industrial councils.

Among the questions with which the national councils should deal or assign to district councils or works committees, the report suggests the following:

1. The better utilization of the practical knowledge and experience of the workpeople.
2. Means for securing to the workpeople a greater share in and responsibility for the determination and observance of the conditions under which their work is carried on.
3. The settlement of the general principles governing the conditions of employment, including the methods of fixing, paying, and readjusting wages, having regard to the need for securing to the workpeople a share in the increased prosperity of the industry.
4. The establishment of regular methods of negotiation for issues arising between employers and workpeople with a view both to the prevention of differences and to their better adjustment when they appear.

5. Means of insuring to the workpeople the greatest possible security of earnings and employment without undue restriction upon change of occupation or employer.

6. Methods of fixing and adjusting earnings, piecework prices, etc., and of dealing with the many difficulties which arise with regard to the method and amount of payment apart from the fixing of general standard rates, which are already covered by paragraph 3.

7. Technical education and training.

8. Industrial research and the full utilization of its results.

9. The provision of facilities for the full consideration and utilization of inventions and improvements designed by workpeople and for the adequate safeguarding of the rights of the designers of such improvements.

10. Improvements of processes, machinery, and organization, and appropriate questions relating to management and the examination of industrial experiments, with special reference to cooperation in carrying new ideas into effect and full consideration of the workpeople's point of view in relation to them.

11. Proposed legislation affecting the industry.

The report emphasizes the necessity of adequate organization on the part of employers and employed if there is to be permanent improvement in their mutual relations.

The proposals outlined for joint cooperation throughout the several industries depend for their ultimate success upon their being such organization on both sides, and such organization is necessary also to provide means whereby the arrangements and agreements made for the industry may be effectively carried out.

Suggestions as to profit sharing, copartnership, or particular systems of wages are omitted, since the committee is convinced "that a permanent improvement in the relations between employers and employed must be founded upon something other than a cash basis. What is wanted is that the workpeople should have a greater opportunity of participating in the discussion about and adjustment of those parts of industry by which they are most affected."

The schemes recommended in this report are intended not merely for the treatment of industrial problems when they have become acute, but also, and more especially, to prevent their becoming acute. We believe that regular meetings to discuss industrial questions, apart from and prior to any differences with regard to them that may have begun to cause friction, will materially reduce the number of occasions on which, in the view of either employers or employed, it is necessary to contemplate recourse to a stoppage of work.

It is explained that copies of this report have been sent to employers' associations and to trade-unions in the organized industries in order to get their general criticisms and suggestions, and that if the scheme is adopted by the Government each of the trades affected will be invited to discuss the best method of putting it into operation.



NEW APPRENTICESHIP SCHEME IN GLASGOW.<sup>1</sup>

The Glasgow Master Wrights' Association at a recent date adopted a new scheme of apprenticeship, which, in conjunction with the local education authority, will be put into effect. The scheme makes provision for suitable boys to start to learn a trade under practical conditions as soon as they leave the day school, and the Employees' Trade Union is to be interested in the scheme if possible. The period of apprenticeship will extend over six years—four years of which the boys will serve as apprentices and two years as improvers. In the case of a boy who has satisfactorily completed a course at a day technical school and has obtained a certificate of proficiency, the period so spent shall be reckoned as the two first apprenticeship years, and the apprentice shall start at the third-year rate of wages.

Before entering the period of apprenticeship the boy shall be employed on trial for a period of not less than eight weeks at the recognized rate of pay.

The training shall be of two kinds:

I. The employer shall undertake that every opportunity shall be given the boy to learn the trade to which he is apprenticed.

II. All the apprentices who have not obtained certificates of proficiency from a day technical school shall be bound, during the first four years, to attend, during the employer's time, a day continuation school, for a minimum of 12 school hours per week, at such times as may be found most convenient to the employer, and without deduction from wages. All apprentices shall be encouraged to qualify for the committee's certificate and bonus.

Holidays shall be given, without deduction of wages, on all holidays and at such other times as the employers' works are closed. Overtime by apprentices shall be discouraged.

The following is the proposed table of wages:

Apprentices, first year, 8s. 6d. (\$2.07) per week; bonus 2s. (\$0.49).

Apprentices, second year, 10s. 6d. (\$2.56) per week; bonus 2s. (\$0.49).

Apprentices, third year, 14s. (\$3.41) per week; bonus 2s. 6d. (\$0.61).

Apprentices, fourth year, 18s. (\$4.38) per week; bonus 3s. (\$0.73).

Improver, fifth year, 26s. (\$6.33).

Improver, sixth year, 34s. (\$8.27).

The sums above mentioned as bonuses are to be applied in whole or in part payment to such apprentices as shall have satisfied the examining committee, as regards the progress made in continuation school work, and also in the employers' workshop, due consideration being given in the latter instance, to a certificate from the employer.

An apprenticeship committee shall be formed of three representatives from the Master Wrights' Association, and a representative ap-

<sup>1</sup> From The Christian Science Monitor, Boston, July 18, 1917.

pointed by the Joiners' Trade Union. A subcommittee shall likewise be formed, as above, but having added thereto one representative from the local education authority, for the purpose of adjudicating on the work done by the apprentices, which work shall be examined periodically.

### WOMEN'S WAR-TIME WORK IN GERMAN METAL TRADES.

In the months of August and September, 1916, an investigation was made by the federation of German metal workers to determine the conditions of women's war-time work in the German metal trades, and some of the results of the inquiry are made available through publication in *Soziale Praxis*<sup>1</sup> of April 19, 1916, as reviewed in the *British Labor Gazette*<sup>2</sup> for July, 1917.

The inquiry covered 2,594 establishments located in 207 towns and villages and employing 266,530 women and girls, an increase of 202,960, or 319.3 per cent over the number employed before the war. Sixty-five per cent of the factories, employing 82.2 per cent of the females, were engaged on war work. In the case of 97,000 women who worked on the single-shift system it was found that 79 per cent worked from 11 to 12 hours per day, that in 1,017 establishments overtime was worked by 69,427 women, of whom 87.5 per cent were engaged on war work, and that in 364 establishments performing Sunday work 34,712 women were so employed, 98 per cent of them being on war work.

The length of shifts worked was ascertained in respect of 98.8 per cent of the factories and of 98.1 per cent of the workers, the basis taken being the number of hours worked per week, since in most concerns a system of multiple shifts prevailed. The result is set forth in the following table, in which the establishments and workers are designated as those engaged on war work and those not so engaged:

PER CENT OF WORKERS EMPLOYED EACH SPECIFIED NUMBER OF HOURS PER WEEK IN GERMAN METAL TRADES.

Hours per week.	Per cent of establishments.		Per cent of workwomen.	
	War industry.	Peace industry.	War industry.	Peace industry.
Up to 48.....	6.4	2.8	12.0	2.4
48 to 51.....	2.1	3.2	3.2	2.0
51 to 54.....	14.1	33.7	13.3	34.7
54 to 57.....	24.0	27.8	14.9	23.9
57 to 60.....	33.3	26.7	26.8	28.8
60 hours.....	11.1	4.4	8.6	5.1
Various.....	9.0	1.4	21.2	3.1

<sup>1</sup> *Soziale Praxis und Archiv für Volkswohlfahrt*. Berlin, Apr. 19, 1916.

<sup>2</sup> *The Labour Gazette of the British Ministry of Labour*, July, 1917, pp. 235, 236.

That the wages of women workers appear to be low is indicated by the following quotation:

In consequence of women's lack of training in trade-union usages many of them have to put up with strange deductions from their wages. Thus in one establishment there is a custom that piecework wages must not exceed the average time wages by more than 75 per cent. Should a woman, through diligence and skill, earn a larger sum, the piecework rate is reduced in her case. The result is that women workers avoid earning more than 75 per cent above the standard time rate.

As to wages received by women performing the same work as that done by men, the inquiry disclosed that in 57.2 per cent of the concerns listed covering 73.2 per cent of the workwomen, only about 9 per cent were paid the rates corresponding to those obtained by men for identical work. It was found that the work being done by the women was extremely severe, the data obtained in this connection being gathered from 897 "war" factories and 601 "peace" factories. In 20.8 per cent of the former and 11.9 per cent of the latter the work was declared to be too hard for the women, as the following excerpt from the report indicates:

Even for men, and still more for women, work at flanging machines is too hard. \* \* \* At these machines projectiles weighing from 22 pounds to 82 pounds have to be lifted breast high from the floor and clamped to the bed; then unclamped and placed again on the floor. This entails a great physical strain. \* \* \* In order to earn a wage of 3 marks (\$0.71) a day a woman must perform this strenuous operation 75 or even 100 times. \* \* \* The women complain very much of abdominal pains caused by frequently having to lift (without any tackle) shells weighing 52 pounds. \* \* \* In the foundry women must do any work that may need to be done. They have, for instance, to push the casting pans about—work that overtaxes their strength. One woman sustained a rupture of the groin through performing this work. \* \* \* At steam hammers the persons employed are chiefly women, although plenty of men are available. Women have to draw bomb castings (weighing about 88 pounds) in a state of incandescence from the furnace to the hammer. A continuous effort is made to employ women at the hardest and most dangerous jobs—at steam hammers, shaping machines, core making, pneumatic lifts, transporting heavy cores, casting with pans and with hand ladles. \* \* \* One result of the hard work in this establishment is that of 42 women nearly one-third have been disabled by illness.

An effort was made to ascertain whether, and if so, to what extent, the authorities had made concessions to employers in regard to compliance with the ordinary regulations for the protection of health and the avoidance of accidents. Sixty-eight per cent of the concerns made reply to this question; 614 answered in the affirmative, and 1,148 answered in the negative.

LABOR IN THE TEXTILE TRADES IN GERMANY AND CERTAIN  
ADJACENT NEUTRAL COUNTRIES.<sup>1</sup>

## GERMANY.

The effects of the war upon employment in the textile industries in Germany are partially revealed by the monthly returns on unemployment furnished to the German Department of Labor Statistics by the largest of the federations of textile workers' unions. These returns are summarized below in such a way as to allow of a comparison of four periods, viz, (a) the first seven months of 1914; (b) the year 1915; (c) the year 1916; and (d) the first quarter of the present year.

Period.	Mean percentage of textile operatives unemployed.		
	Males.	Females.	Both sexes.
January to July, 1914.....	1.6	1.0	1.3
January to December, 1915.....	3.7	9.9	7.0
January to December, 1916.....	7.0	17.9	13.4
January to March, 1917.....	5.8	11.9	9.7

The shortage of raw materials did not reach proportions calculated to produce anxiety in Germany until about the middle of 1915. As regards the cotton industry in particular, a writer in the *Frankfurter Zeitung* of January 11, 1917, states that "when war broke out there was no real shortage of raw materials \* \* \* large quantities of cotton continued to enter the country, and army orders were so extensive that for a long period the mills worked overtime."

With the tightening of the blockade the situation changed, and by an order dated August 12, 1915, the Federal Council limited the number of days to be worked per week in textile factories to a maximum of 5, while the daily working time was not to exceed the average daily hours worked in June, 1915, but in no case 10 hours. The factories affected by this order were those making articles of cotton, wool, artificial wool, flax, hemp, and jute. The whole of the loss of employment resulting from this measure is not reflected in the above table, which relates only to total unemployment. Moreover, a special inquiry made early in 1916 as to the extent of unemployment in the textile trades in Germany showed that the majority of textile factories were working much shorter time than the permissible maximum.<sup>1</sup> The same inquiry showed that the factories that were not adapted for army work, e. g., embroidery, machine knitting and velvet, were almost at a standstill.

<sup>1</sup> From the British Board of Trade Labour Gazette, June, 1917, p. 197.

<sup>2</sup> Der Arbeitsnachweis für Deutschland, Jan. 20, 1916.

Immediately after the publication of the order for restricting output a scheme was elaborated by the imperial authorities for granting relief to persons thrown out of employment in consequence. Under this scheme the burden of the cost of such relief is borne in fixed proportions by the Imperial Treasury, the Federal States, the communes, and the employers.

The above-named Federal order restricting work in textile factories was only one of a series, of which the general effect has been to bring by degrees under State control the distribution of all stocks of textile materials, whether raw, semimanufactured, or finished. The various measures adopted by the authorities for the purpose of relieving unemployment in the trades affected have failed to prevent the development of great distress in the chief centers of the textile industry, more especially in those dependent on export business, viz, Saxony and Thuringia. The *Vossische Zeitung* of March 11th reports concerning a meeting of Saxon textile workers held at Dresden to discuss grievances. With regard to the unemployment relief, it was complained that the authorities were taking the view that the operations of the national civilian service law rendered such relief unnecessary, and that it was being denied to textile workers who were employed for five days per week on national service work. Another grievance was that textile workers were officially classified as "light workers," and therefore rationed on the lowest scale.

Under the operation of the national civilian service law steps have been taken for the compulsory closing down of all except the largest factories in the textile trades and for the compulsory fusion of the latter. According to the *Rheinisch-Westfälische Zeitung* of February 20, less than 100 out of a total of 2,000 cotton-weaving mills were to be allowed to continue working. As to the extent to which this process has by now been carried no information is yet available.

#### HOLLAND.

Employment in the textile trades in Holland throughout the course of the war has been subject to considerable fluctuations. The monthly returns made to the Dutch Government Statistical Office by trade-unions and municipal unemployment funds connected with the textile trades show that the percentage of workpeople unemployed in the textile trades, which was 0.1 or 0.2 in the early months of 1914, did not fall below 10 per cent from the outbreak of the war until November, 1915, and in two months—September and October, 1914—was above 40 per cent. By June, 1916, the percentage had fallen to 0.5, but in recent months it has risen rapidly. In November, 1916, the unemployed percentage in the textile trades was 2.1, in December 8.9, in January (1917), 18.1, in February 26.7, and in March 35.4.



According to an official Dutch report on the condition of the various branches of the textile industry in 1915, the lack of raw materials was severely felt throughout the whole of that year. How far the improvement shown by the unemployment figures for 1916 is due to the removal of this difficulty does not appear from the corresponding report for that year, which simply refers to the difficulty as one that had to be encountered "more or less everywhere."

It is clear that the position has changed very much for the worse since the beginning of the present year, and a Report of the Dutch Ministry of Agriculture, Trade, and Commerce on the Economic Situation of Holland in February, 1917,<sup>1</sup> states that the textile industry is experiencing serious obstacles by reasons of the fact that the import of raw cotton and of cotton yarns has practically come to an end. From the same report it appears that among a total of 29,900 textile workers as to whom information was obtained concerning changes in wages during the period of the war, 10,500 obtained advances ranging from 1 to 10 per cent, 7,300 obtained advances ranging from 11 to 20 per cent, 10,000 obtained advances ranging from 21 to 30 per cent, and 2,000 obtained advances exceeding 30 per cent. Of the remaining 100 it was recorded that their wages had either been reduced or remained unchanged.

#### DENMARK.

In Denmark, until quite recently, the effects of the war on employment in the textile industries have on the whole been favorable, and at the end of last year unemployment among Danish textile operatives was practically nonexistent, the percentage of unemployment among members of the Danish Textile Operatives' Union in the last quarter of 1916 being only 0.5. It would appear that up to that time supplies of raw material were adequate. Since the beginning of 1917, however, the situation has changed for the worse, and, according to the Danish press, it had become alarming in the latter part of February, owing to the lack of raw materials caused by the German submarine campaign.

The change for the worse is reflected in the unemployment returns of the textile workers' unions, the percentage reported out of work being 2.9 in February, 7.3 in March, 13.1 in May, the last of these figures being obtained by means of a special inquiry carried out by the Government Statistical Office independently of the usual monthly collection of data from the trade unions.

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<sup>1</sup> Nota betreffende den economischen toestand, Zitting, 1916-17.

## SWEDEN.

From such statistical information as is available, it would appear that up to the end of 1916 employment in Swedish textile trades was, on the whole, free from serious interruption due to failure of supplies of raw materials or fuel resulting from the war. The monthly returns on unemployment furnished by the trade unions of textiles operatives to the Swedish Department of Labor Statistics show that after the setback in the latter part of 1914 consequent upon the outbreak of war a recovery took place, and the average monthly level of unemployment in 1915 and 1916 was not very different from that in the first seven months of 1914, being 3.7 in January-July, 1914; 3.8 in 1915; and 3.1 in 1916. The fluctuations in the monthly percentages were, however, very considerable, and in 1916 ranged from 0.6 in February to over 11 in August and November, the percentage for December being 1.4. Later figures are not available, but since the beginning of 1917, work in the textile trades has been seriously hampered by interruptions in the supply of raw materials and fuel.

With regard to the movement of wages during the war, a special investigation made last autumn by the Swedish Department of Labor Statistics showed that the increase in average earnings in July, 1916, as compared with July, 1914, averaged 14.7 per cent in cotton spinning and weaving, 9 per cent in flax and jute spinning and weaving, and 10.5 per cent in wool spinning and weaving.

## AMENDMENT OF THE AUSTRIAN SICKNESS INSURANCE LAW.

The Austrian workmen's sickness insurance law of March 30, 1888, has been radically amended by an imperial decree promulgated January 4, 1917 (*Reichsgesetzblatt* No. 6),<sup>1</sup> and came into force three months after the date of its promulgation. The amending decree extends the scope of the insurance and substantially increases the benefits of the insured. A brief outline of the principal changes made in the law is given below.<sup>2</sup>

The most radical changes were made in article 6 of the original law, giving the scope of the insurance and the minimum benefits. The original text in describing the scope of the law did not mention the granting of maternity benefits as coming within its scope, although maternity benefits were paid in the form of sick benefits.

<sup>1</sup> Bulletin des Internationalen Arbeitsamtes. Vol. 16, Nos. 3 to 5. Jena, 1917. pp. 49-58.

<sup>2</sup> For the provisions of the original law, see Twenty-fourth Annual Report of the Commissioner of Labor, vol. 1. Washington, 1911, pp. 225 ff.

The amended text explicitly states that the granting of maternity benefits is one of the objects of the insurance.

In its present form the law provides the following minimum benefits:

1. From the beginning of the sickness free medical treatment, inclusive of obstetrician's and midwife's aid as well as free medicines and therapeutical appliances.

2. If the sick person is unable to work, beginning from the third day of sickness a daily pecuniary sick benefit amounting to:

0.60 crown (\$0.12) in wage class 1;<sup>1</sup> 0.90 crown (\$0.18) in wage class 2; 1.20 crowns (\$0.24) in wage class 3; 1.50 crowns (\$0.30) in wage class 4; 1.80 crowns (\$0.37) in wage class 5; 2.10 crowns (\$0.43) in wage class 6; 2.50 crowns (\$0.51) in wage class 7; 3 crowns (\$0.61) in wage class 8; 3.60 crowns (\$0.73) in wage class 9; 4.20 crowns (\$0.85) in wage class 10; 5 crowns (\$1.02) in wage class 11.

Sundays or holidays are not to be counted as first or last day of sickness. The benefits shown under Nos. 1 and 2 are to be granted as long as the sickness lasts, not to exceed 26 weeks. The pecuniary sick benefit is payable at the end of each week of sickness.

3. Women in confinement receive, while not working at their employment, a maternity benefit equal to the daily pecuniary sick benefit for a period not to exceed six weeks (formerly four weeks) after delivery.

4. Women in confinement who themselves wet-nurse their children in addition receive a nursing premium equivalent to half the daily pecuniary sick benefit for a period not to exceed 12 weeks after delivery. (This benefit is entirely new.)

5. In case of the death of the insured his survivors receive a funeral benefit equivalent to 30 times (formerly 20 times) his average daily earnings, but not less than 60 crowns (\$12.18) or, if there are no survivors, the sick fund defrays the actual burial costs.

The first day of sickness is to be considered the day on which the insured reports himself or is reported to the fund as being sick. Sick benefits may not be claimed for periods preceding the date of this report by two weeks or more. For periods preceding the report by less than two weeks sick benefits may be granted only if the insured was prevented from making a report in time and if he can prove disability caused by sickness and that he was under medical treatment.

The decree further provides that it may be made obligatory for sick fund members to apply to specified physicians for medical treatment and that the sick funds in such a case shall be justified in declining to pay the costs of treatment if other physicians' services

<sup>1</sup> For description of wage classes, see p. 141.

than those designated by the fund have been obtained by the insured. The individual sick funds or federations of sick funds are to conclude written agreements with the physicians appointed for the treatment of members which must state the rights and duties of both parties and the compensation of the physicians for their services. Sick funds which have not made contractual arrangements with physicians may be permitted to increase the pecuniary benefit by at least 0.75 crown (\$0.15) a day as a substitute for free medical treatment. Disputes between sick funds and their physicians arising out of the interpretation of contracts are to be decided by special boards of conciliation, and the decisions shall be binding only if accepted by both parties. In case of failure of conciliation the dispute is to be finally decided by the arbitration court of the accident insurance institute having jurisdiction over the district of the sick fund or federation of sick funds in question.

For the purposes of the insurance the decree divides the insured into 11 wage classes, according to the following scheme:

Wage class.	Earnings.			As average daily earnings are considered.
	Daily	Weekly.	Monthly.	
1.....	Not over \$0.254.....	Not over \$1.52.....	Not over \$6.34.....	\$0.203
2.....	Over \$0.254 to \$0.355...	Over \$1.52 to \$2.13....	Over \$6.34 to \$8.88....	.305
3.....	Over \$0.355 to \$0.457...	Over \$2.13 to \$2.74....	Over \$8.88 to \$11.42....	.406
4.....	Over \$0.457 to \$0.558...	Over \$2.74 to \$3.35....	Over \$11.42 to \$13.96...	.508
5.....	Over \$0.558 to \$0.660...	Over \$3.35 to \$3.96....	Over \$13.96 to \$16.49...	.609
6.....	Over \$0.660 to \$0.761...	Over \$3.96 to \$4.57....	Over \$16.49 to \$19.03...	.711
7.....	Over \$0.761 to \$0.914...	Over \$4.57 to \$5.48....	Over \$19.03 to \$22.84...	.836
8.....	Over \$0.914 to \$1.117...	Over \$5.48 to \$6.70....	Over \$22.84 to \$27.91...	1.015
9.....	Over \$1.117 to \$1.320...	Over \$6.70 to \$7.92....	Over \$27.91 to \$32.99...	1.218
10.....	Over \$1.320 to \$1.523...	Over \$7.92 to \$9.14....	Over \$32.99 to \$38.06...	1.421
11.....	Over \$1.523.....	Over \$9.14.....	Over \$38.06.....	1.685

Regularly granted shares of profits, premiums (bonuses), and compensation in kind are also to be considered as earnings. Apprentices and learners who are not in receipt of a salary or money wages belong in wage class 1. To what wage class an insured person is to be assigned is governed by his time wages. If compensation is paid on a piecework or contract basis, the usual average weekly or monthly earnings govern the assignment to a wage class.

The decree makes it permissible that sick funds may provide in their by-laws higher sick benefits than the legally prescribed minimum benefits within the following limits:

(1) The daily pecuniary sick benefit may in wage class 1 be increased up to 0.80 crown (\$0.16) and in the other wage classes up to 90 per cent of the lowest daily earnings in each class, but not beyond 5.50 crowns (\$1.12). The funeral benefit may be increased to 45 times the average daily earnings.

(2) A special wage class with a daily pecuniary sick benefit of 6 crowns (\$1.22) may be introduced for insured persons earning in excess of 9 crowns (\$1.83) daily or 54 crowns (\$10.96) weekly or 225 crowns (\$45.68) monthly.

(3) The period during which sick benefits are granted may be extended beyond 26 weeks up to one year.

(4) Female insured persons who are in the last stage of pregnancy and on account of their condition abstain from wage work may be granted the daily pecuniary sick benefit before delivery during a period not in excess of four weeks.

(5) The granting of wet-nursing premiums may be extended for a period not to exceed 26 weeks.

(6) Sick persons or women in confinement remaining under care at home may with their consent be furnished trained nurses. Women in confinement may with their consent be placed in a lying-in hospital or some similar institution. In these instances the costs may be deducted from the pecuniary sick benefit up to one-half the amount of the latter.

The by-laws of a sick fund may grant a claim of sick benefits (family insurance) to such members of the family of insured persons as are not themselves subject to insurance. Family insurance may include medical treatment, funeral, and maternity benefits. Family insurance may not be obtained by insured persons with a taxable annual income in excess of a specified amount—4,800 crowns (\$974.40) in Vienna, 4,200 crowns (\$852.60) in first-class cities, etc. In certain districts family insurance may be made obligatory for sick funds within these districts.

The decree further provides that special funds may be created for purposes connected with sickness insurance. The resources of such funds may be used for extraordinary optional benefits, such as care in convalescent homes and in the preventive combating of tuberculosis, alcoholism, venereal diseases, etc. Special contributions may be assessed from the insured for the accumulation of such funds. The collection of contributions from employers for this purpose is permissible only if a majority of the representatives of the latter have voted in favor of such contributions at the general meeting.

Other matters which the decree leaves to regulation through the by-laws of the individual sick funds are the following:

(1) That sick insured persons who during their sickness live outside of the district of their sick fund may in place of medical care be granted an increase of the daily pecuniary sick benefit, this increase to amount to 0.75 crown (\$0.15).

(2) That insured persons who purposely make themselves sick or become sick through their participation in brawls or as the conse-



quence of inebriety may be entirely or partially deprived of the pecuniary sick benefit.

(3) That the pecuniary benefit of an insured person who, in addition to the sick fund, is insured elsewhere against sickness and does not notify his sick fund of this other insurance relation within three days after being taken sick may be reduced by an amount which, combined with the pecuniary benefit received by him from some other insurance, will not exceed his money wages.

(4) That insured persons who have a claim on their employer for payment of full wages or salary during sickness may be excluded from receiving a pecuniary sick benefit or be granted only a part of it, in which case the contributions for such insured persons shall be correspondingly reduced.

(5) That only such women in confinement be granted a maternity benefit as within the 12 months preceding delivery were employed at least 6 months in an occupation subject to insurance.

Now, as before, the means for the support of the various sick funds are to be procured by assessments levied in the form of a percentage of the wages of the insured persons. The workman's and employer's share of the assessment have been left unchanged by the decree, the workman paying two-thirds and the employer one-third of the rate fixed by the fund. The entire weekly assessment for an insured person may not exceed four-tenths of the average daily earnings in the wage class to which he has been assigned. The contributions of insured persons and employers may be used only for the defraying of the benefits fixed by the decree and the by-laws of the individual funds, costs of administration, maintenance of a reserve, and possible contributions to a federation of sick funds. Contributions of insured persons in the various wage classes are to be assessed in equal proportion to the average earnings. In determining the contributions the costs of medical care may, however, be computed without reference to wage classes.

The decree permits, however, that the by-laws may grade the contributions according to groups of members in which experience has shown that the sickness risk varies considerably. Such a grading may be effected by sex, occupation, industry groups, and for temporarily employed persons and apprentices. Higher contributions may be assessed for persons employed in construction work on roads, railroads, canals, rivers, and dams. Grading of contributions according to age is permissible only in the case of voluntarily insured persons.

Article 27 of the original law is amended by the decree to provide that for persons employed in an establishment the equipment of which does not correspond with existing sanitary regulations, the

sickness insurance contributions may be increased up to 50 per cent during the period in which the insanitary conditions exist. This increase is to be borne by the employer alone. The order for such an increase is to be issued by the directorate of the sick fund and may be appealed within 14 days to the supervisory insurance authorities. The latter may ex officio order such an increase. If the establishment in question is an industrial establishment, the factory inspector shall be heard before an increase of contributions is ordered.

Other amendments contained in the decree deal with the reserve—which is to be accumulated to the amount of the average expenditures of the last three years and maintained at that amount—with other financial matters, and with the dissolution of district sick funds.

The decree makes no change in the organization of the various kinds of carriers of the insurance, but provides that sick funds which have their headquarters within the administrative district of the same political provincial authority may for common purposes combine into federations or join such federations, provided this has been resolved by the funds' general meetings. In the case of establishment and miners' sick funds the consent of the employer is also required. As common purposes the decree enumerates the conclusion of common agreements with physicians, pharmacists, and hospitals, the acquisition of curative and therapeutic appliances, the common supervision of sick members, the erection and operation of common hospitals, sanitariums, convalescent homes, and pharmacies, the employment of common administrative and supervisory officials, and the compilation of statistics. Such federations of sick funds are to be subject to the supervision of the provincial political authorities and in the next instance to the ministry of the interior, who also approves the by-laws of federations.

In connection with the amendment of the sickness insurance law with respect to maternity benefits there has also been amended article 94, paragraph 5 of the Industrial Code (Imperial decree of Jan. 4, 1917, R. G. Bl. No. 7). In its amended form this paragraph provides that women in confinement may not be admitted to regular industrial employment until six weeks (formerly four weeks) after delivery.

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#### MINIMUM COST OF LIVING OF WORKMEN'S FAMILIES IN BASEL, SWITZERLAND.

Under date of June 14, 1917, the United States consul in Basel, Switzerland, reports that one of the largest ribbon manufacturers in that city, employing about 1,000 adult and juvenile workers of both

sexes, has worked out a table showing the minimum cost of living of workmen's families. This was done with the object of ascertaining what unemployment benefits would have to be paid to workers if, in case of shortage of raw materials, the factories were compelled to close down. The minimum annual budgets computed by this manufacturer for families of various sizes have been accepted by the municipal authorities for use in case a long suspension of work should compel workers to seek governmental aid. It is generally understood that the funds required to meet the actual needs of the workers during unemployment will be divided between the employers and the Swiss Government.

In arriving at the figures shown in the following table, the amount and cost of only the cheapest articles necessary to sustain life and provide comfort were considered.

MINIMUM ANNUAL FAMILY BUDGET OF WORKMEN'S FAMILIES IN BASEL, SWITZERLAND, COMPUTED ON THE BASIS OF PRICES CURRENT MAR. 31, 1917.

Expense item.	One single person (female).	One married couple (2 bread-winners).	One couple with 1 child (2 adult bread-winners).	One couple with 2 children of 6 and 8 years (2 adult bread-winners).	One couple with 3 children of 6, 8, and 10 years (2 adult bread-winners).	One couple with 4 children of 8, 12, 14, and 16 years (2 adult and 1 juvenile bread-winners).
Rent.....	\$46.32	\$54.04	\$54.04	\$69.48	\$69.48	\$84.92
Food (5 meatless days weekly).....	92.25	179.10	212.30	244.33	277.92	301.47
Sick funds.....	3.47	6.95	6.95	8.68	9.65	11.58
Washing.....	1.93	2.90	2.90	3.86	4.83	6.75
Gas.....	4.83	5.79	5.79	7.72	8.68	10.61
Wood and coal.....	5.79	5.79	5.79	9.65	9.65	10.61
Shoes.....	6.75	15.44	17.37	19.30	21.23	25.09
Clothing.....	11.58	27.02	28.95	34.74	36.67	44.39
Newspapers.....	.....	1.54	1.54	1.54	1.54	1.54
Income tax.....	.....	2.70	2.70	2.70	2.70	6.17
Sundries.....	6.95	19.30	19.30	25.09	27.02	28.95
Total per annum.....	179.87	320.57	357.63	427.09	469.37	532.08

#### WORK OF THE FEDERAL, STATE, AND MUNICIPAL EMPLOYMENT OFFICES IN THE UNITED STATES AND PROVINCIAL EMPLOYMENT BUREAUS IN CANADA.

Data are presented in the table below for the operations of public employment offices for the month of July, 1917. Following the plan adopted in the MONTHLY REVIEW for July, 1917, Federal employment offices are combined in the same table with State and municipal employment offices. Data presented for the United States represent Federal employment offices in 28 States and the District of Columbia; Federal-State employment offices in 2 States; Federal-State-county-municipal employment offices in 1 State; Federal-municipal offices in 1 State; State employment offices in 17 States; State-

county-municipal offices in 1 State; State-municipal offices in 3 States; municipal employment offices in 6 States; municipal employment offices in 7 States, and municipal private employment offices in 1 State. Data for 2 Canadian employment bureaus are shown.

## OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917.

## UNITED STATES.

State, city, and kind of office.	Applications from employers.	Persons asked for by employers.	Persons applying for work.		Persons referred to positions.	Positions filled.
			New registrations.	Renewals.		
Alabama:						
Mobile (Federal)—						
July, 1916.....	(1)	(1)	<sup>2</sup> 10	(1)	(1)	(1)
July, 1917.....	(1)	(1)	<sup>2</sup> 8	(1)	(1)	(1)
Arkansas:						
Little Rock (State)—						
July, 1917.....	104	1,207	436	35	501	466
California:						
Fresno (municipal)— <sup>3</sup>						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Los Angeles (Federal)—						
July, 1916.....	(1)	(1)	<sup>2</sup> 103	(1)	(1)	(1)
July, 1917.....	2	3	102	(1)	3	3
Los Angeles (State-municipal)—						
July, 1916 <sup>3</sup> .....	2,547	4,401	2,159	(1)	4,478	4,070
July, 1917 <sup>3</sup> .....	4,291	9,409	2,962	(1)	8,521	7,637
Oakland (State)—						
July, 1916.....	729	994	541	322	958	737
July, 1917.....	1,319	2,476	1,232	(1)	1,554	1,227
Sacramento (Federal)—						
July, 1917.....	3	3	<sup>2</sup> 21	(1)	(1)	(1)
Sacramento (State)—						
July, 1916.....	340	959	801	259	831	777
July, 1917.....	555	1,532	1,137	(1)	1,168	1,067
Sacramento (municipal)—						
July, 1916.....	191	379	63	(1)	379	(1)
July, 1917.....	266	410	71	(1)	(1)	373
San Diego (Federal)—						
July, 1916.....	335	778	<sup>2</sup> 1,017	(1)	803	767
July, 1917.....	702	1,331	875	(1)	1,259	971
San Francisco (Federal)—						
July, 1916.....	193	412	<sup>2</sup> 1,248	(1)	654	378
July, 1917.....	567	1,711	<sup>2</sup> 1,570	(1)	1,359	1,091
San Francisco (State)—						
July, 1916.....	1,295	2,439	2,306	345	2,416	1,725
July, 1917.....	3,125	5,857	4,732	(1)	5,428	4,064
Santa Barbara (Federal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Total:						
July, 1916.....					<sup>4</sup> 10,519	<sup>5</sup> 8,454
July, 1917.....					<sup>5</sup> 12,295	<sup>4</sup> 16,433
Colorado:						
Colorado Springs (State)—						
July, 1916.....	(1)	1,242	1,025	(1)	858	(1)
July, 1917.....	986	986	771	(1)	(1)	687
Denver (Federal)—						
July, 1916.....	3	3	<sup>2</sup> 27	(1)	8	(1)
July, 1917.....	(1)	(1)	<sup>2</sup> 136	(1)	136	136
Denver No. 1 (State)—						
July, 1916.....	(1)	374	355	(1)	339	(1)
July, 1917.....	963	963	648	(1)	(1)	574
Denver No. 2 (State)—						
July, 1916.....	(1)	270	346	(1)	249	(1)
July, 1917.....	893	893	437	(1)	(1)	394
Denver (county-municipal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)

<sup>1</sup> Not reported.<sup>3</sup> Includes Los Angeles district, 8 counties.<sup>5</sup> Four offices not reported.<sup>2</sup> Number applying for work.<sup>4</sup> One office not reported.

## MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 147

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
Colorado—Concluded.						
Pueblo (State)—						
July, 1916.....	(1)	502	533	(1)	497	(1)
July, 1917.....	673	673	609	(1)	(1)	600
Total:						
July, 1916.....					1,951	(1)
July, 1917.....					2 136	2,391
Connecticut:						
Bridgeport (State)—						
July, 1916.....	(1)	978	<sup>3</sup> 1,190	(1)	(1)	875
July, 1917.....	(1)	744	<sup>3</sup> 885	(1)	(1)	667
Hartford (State)—						
July, 1916.....	(1)	776	<sup>3</sup> 1,027	(1)	(1)	553
July, 1917.....	(1)	1,105	<sup>3</sup> 1,408	(1)	(1)	889
New Haven (State)—						
July, 1916.....	(1)	741	<sup>3</sup> 907	(1)	(1)	601
July, 1917.....	(1)	882	<sup>3</sup> 1,103	(1)	(1)	762
Norwich (State)—						
July, 1916.....	(1)	230	<sup>3</sup> 248	(1)	(1)	224
July, 1917.....	(1)	316	<sup>3</sup> 379	(1)	(1)	305
Waterbury (State)—						
July, 1916.....	(1)	156	<sup>3</sup> 159	(1)	(1)	109
July, 1917.....	(1)	189	<sup>3</sup> 196	(1)	(1)	139
Total:						
July, 1916.....					(1)	2,362
July, 1917.....					(1)	2,762
Delaware:						
Wilmington (Federal)—						
July, 1916.....	21	524	<sup>3</sup> 101	(1)	27	13
July, 1917.....	15	248	<sup>3</sup> 147	(1)	119	100
District of Columbia:						
Washington (Federal)—						
July, 1917.....	177	548	<sup>3</sup> 427	(1)	345	246
Florida:						
Jacksonville (Federal)—						
July, 1916.....	(1)	(1)	<sup>3</sup> 732	(1)	515	515
July, 1917.....	1	200	<sup>3</sup> 20	(1)	9	(1)
Miami (Federal)—						
July, 1916.....	1	2	<sup>3</sup> 14	(1)	2	2
July, 1917.....	4	8	<sup>3</sup> 31	(1)	7	7
Total:						
July, 1916.....					517	517
July, 1917.....					16	47
Georgia:						
Savannah (Federal)—						
July, 1916.....	2	106	<sup>3</sup> 362	(1)	106	106
July, 1917.....	1	2,000	<sup>3</sup> 180	(1)	50	38
Idaho:						
Boise (municipal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Moscow (Federal)—						
July, 1917.....	29	29	<sup>3</sup> 25	(1)	25	25
Total:						
July, 1917.....						
Illinois:						
Chicago (Federal)—						
July, 1916.....	220	1,702	<sup>3</sup> 1,096	(1)	1,050	1,022
July, 1917.....	464	2,708	<sup>3</sup> 2,203	(1)	1,907	1,716
Chicago (State)—						
July, 1916.....	(1)	8,275	<sup>3</sup> 9,586	(1)	(1)	7,781
July, 1917.....	4,502	13,317	13,322	1,304	13,814	11,012

<sup>1</sup> Not reported.<sup>2</sup> Four offices not reported.<sup>3</sup> Number applying for work.<sup>4</sup> One office not reported.



## 148 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
Illinois—Concluded.						
East St. Louis (State)—						
July, 1916.....	(1)	1,518	<sup>2</sup> 1,576	(1)	(1)	1,095
July, 1917.....	824	2,069	492	468	930	879
Peoria (State)—						
July, 1916.....	(1)	1,246	<sup>2</sup> 823	(1)	(1)	759
July, 1917.....	922	1,521	297	828	1,069	1,050
Rock Island-Moline (State)—						
July, 1916.....	(1)	767	<sup>2</sup> 702	(1)	(1)	608
July, 1917.....	509	1,198	573	320	826	756
Rockford (State)—						
July, 1916.....	(1)	1,080	<sup>2</sup> 895	(1)	(1)	763
July, 1917.....	779	1,532	811	233	857	791
Springfield (State)—						
July, 1916.....	(1)	795	<sup>2</sup> 721	(1)	(1)	654
July, 1917.....	544	681	495	347	670	624
Total:						
July, 1916.....					<sup>3</sup> 1,050	12,682
July, 1917.....					20,073	16,828
Indiana:						
Evansville (State)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Fort Wayne (State)—						
July, 1916.....	381	799	460	115	575	485
July, 1917.....	355	776	72	672	744	744
Indianapolis (Federal)—						
July, 1916.....	62	857	<sup>2</sup> 866	(1)	737	660
July, 1917.....	154	1,031	<sup>2</sup> 1,503	(1)	1,040	946
Indianapolis (State)—						
July, 1916.....	677	766	566	113	559	576
July, 1917.....	1,476	1,562	1,428	125	1,558	1,484
South Bend (State)—						
July, 1916.....	279	878	389	39	392	316
July, 1917.....	135	608	675	30	600	549
Terre Haute (State)—						
July, 1917.....	174	322	211	82	293	293
Total:						
July, 1916.....					2,263	2,037
July, 1917.....					<sup>4</sup> 4,235	<sup>4</sup> 4,016
Iowa:						
Des Moines (State)—						
July, 1916.....	34	105	54	12	40	11
July, 1917.....	92	428	235	27	260	213
Kansas:						
Topeka (State)—						
July, 1916.....	60	72	90	(1)	79	61
July, 1917.....	63	70	81		58	53
Kentucky:						
Louisville (State)—						
July, 1916.....	364	364	(1)	(1)	364	364
July, 1917.....	203	203			195	195
Louisville (municipal-private)—						
July, 1916.....	(1)	285	360	617	282	145
July, 1917.....	159	408	162	350	328	146
Total:						
July, 1916.....					646	509
July, 1917.....					523	341
Louisiana:						
New Orleans (Federal)—						
July, 1917.....	66	1,118	<sup>2</sup> 273	(1)	627	542

<sup>1</sup> Not reported. <sup>2</sup> Number applying for work. <sup>3</sup> Six offices not reported. <sup>4</sup> One office not reported.

## MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 149

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
Maine:						
Portland (Federal)—						
July, 1917.....	3	8	1 2	(2)	2	.....
Maryland:						
Baltimore (Federal)—						
July, 1916.....	42	110	1 156	(2)	192	180
July, 1917.....	64	205	285	(2)	346	266
Massachusetts:						
Boston (Federal)—						
July, 1916.....	7	141	1 54	(2)	14	14
July, 1917.....	138	1,427	1 2,740	(2)	1,509	609
Boston (State)—						
July, 1916.....	2,065	2,309	3 1,185	(2)	4 3,052	1,396
July, 1917.....	2,016	2,368	3 1,689	(2)	4 3,774	1,496
New Bedford (Federal)—						
July, 1917.....	(2)	(2)	(2)	(2)	(2)	(2)
Springfield (State)—						
July, 1916.....	990	1,282	3 665	(2)	4 1,598	981
July, 1917.....	1,004	1,492	783	(2)	4 1,763	1,068
Worcester (State)—						
July, 1916.....	975	1,246	3 507	(2)	4 1,210	639
July, 1917.....	972	1,258	3 630	(2)	4 1,350	713
Total:						
July, 1916.....					5,874	3,030
July, 1917.....					5 8,401	3,836
Michigan:						
Battle Creek (State)—						
July, 1916.....	110	293	1 146	(2)	126	126
July, 1917.....	99	275	275	(2)	275	275
Bay City (State)—						
July, 1916.....	62	250	1 116	(2)	116	109
July, 1917.....	73	237	117	(2)	101	88
Detroit (Federal)—						
July, 1916.....	153	1,269	1 1,072	(2)	1,063	1,044
July, 1917.....	26	289	400	(2)	106	103
Detroit (State)—						
July, 1916.....	1,179	5,196	1 5,151	(2)	5,151	5,151
July, 1917.....	1,200	6,469	6,880	(2)	(2)	6,434
Flint (State)—						
July, 1916.....	437	1,028	1 918	(2)	918	918
July, 1917.....	644	1,246	137	(2)	(2)	834
Grand Rapids (State)—						
July, 1916.....	512	929	1 1,006	(2)	994	994
July, 1917.....	747	898	853	(2)	(2)	819
Jackson (State)—						
July, 1916.....	341	837	1 806	(2)	806	793
July, 1917.....	472	793	694	(2)	676	654
Kalamazoo (State)—						
July, 1916.....	464	480	1 464	(2)	464	464
July, 1917.....	210	347	397	(2)	321	301
Lansing (State)—						
July, 1916.....	88	247	1 216	(2)	204	197
July, 1917.....	134	448	356	(2)	341	341
Muskegon (State)—						
July, 1916.....	40	337	1 220	(2)	220	204
July, 1917.....	49	212	151	(2)	127	127
Saginaw (State)—						
July, 1916.....	156	1,018	1 861	(2)	861	861
July, 1917.....	129	650	488	(2)	488	488
Sault Ste. Marie (Federal)—						
July, 1916.....	8	81	1 77	(2)	64	63
July, 1917.....	3	125	57	(2)	34	33
Total:						
July, 1916.....					10,987	10,924
July, 1917.....					6 10,497	2,329

<sup>1</sup> Number applying for work.<sup>2</sup> Not reported.<sup>3</sup> Number who were registered.<sup>4</sup> Number of offers of positions.<sup>5</sup> One office not reported.<sup>6</sup> Three offices not reported.

## 150 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
<b>Minnesota:</b>						
Duluth (State)—						
July, 1916.....	(1)	(1)	(1)	(1)	(1)	1,203
July, 1917.....	(1)	(1)	(1)	(1)	(1)	1,313
Minneapolis (Federal)—						
July, 1916.....	118	128	2 70	(1)	60	60
July, 1917.....	21	21	17	(1)	3	3
Minneapolis (State)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
St. Paul (State)—						
July, 1916.....	(1)	(1)	(1)	(1)	(1)	1,351
July, 1917.....	(1)	(1)	(1)	(1)	(1)	1,058
Total:						
July, 1916.....					3 60	4,713
July, 1917.....					3 3	2,374
<b>Mississippi:</b>						
Gulfport (Federal)—						
July, 1916.....	1	1	2 47	(1)	(1)	(1)
July, 1917.....	1	6	2 36	(1)	1	1
<b>Missouri:</b>						
Kansas City (Federal-State)—						
July, 1916.....	511	1,550	2 1,428	(1)	1,047	826
July, 1917.....	1,042	2,792	1,354	968	4 2,169	2,008
St. Joseph (State)—						
July, 1916.....	(1)	1,288	21,020	(1)	(1)	1,019
July, 1917.....	1,293	1,615	1,005	610	1,615	1,101
St. Louis (Federal-State)—						
July, 1916.....	14	117	2 200	(1)	50	45
July, 1917.....	342	6,406	2 2,267	(1)	2,012	1,997
Total:						
July, 1916.....					5 1,067	1,890
July, 1917.....					5,796	5,106
<b>Montana:</b>						
Butte (municipal)—						
July, 1916.....	300	350	450	(1)	460	350
July, 1917.....	(1)	439	2 526	(1)	(1)	379
Helena (Federal)—						
July, 1916.....	3	3	2 27	(1)	8	(1)
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Total:						
July, 1916.....						
July, 1917.....						
<b>Nebraska:</b>						
Lincoln (municipal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Omaha (Federal-State-county-municipal)—						
July, 1917.....	878	1,537	735	440	1,192	952
Total:						
July, 1916.....						
July, 1917.....						
<b>Nevada:</b>						
Reno (Federal)—						
July, 1917.....	104	745	2 816	(1)	690	681

1 Not reported.

2 Number applying for work.

3 Two offices not reported.

4 Not including 3,371 harvest hands referred to positions by the Kansas City office and its agents in Mitchell, S. Dak.; Sioux City, Iowa; and Wichita, Kans.

5 One office not reported.

## OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
New Hampshire:						
Manchester (Federal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
New Jersey:						
Jersey City (Federal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Newark (Federal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Orange (Federal)—						
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Total:						
July, 1917.....						
New Mexico:						
Albuquerque (Federal)—						
July, 1916.....	(1)	(1)	2 3	(1)	(1)	(1)
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
New York:						
Albany (State)—						
July, 1916.....	545	770	452	176	651	384
July, 1917.....	807	1,145	572	298	880	606
Buffalo (Federal)—						
July, 1916.....	93	850	2 698	(1)	694	517
July, 1917.....	1,217	1,088	2 1,550	(1)	2,128	1,594
Buffalo (State)—						
July, 1916.....	836	1,564	917	61	1,402	1,052
July, 1917.....	1,240	1,660	1,367	172	2,163	1,598
New York City (Federal)—						
July, 1916.....	245	956	2 1,128	(1)	510	494
July, 1917.....	4,187	7,639	7,807	(1)	5,407	3,809
New York City (State)—						
July, 1916.....	1,287	1,863	1,166	475	1,984	1,085
July, 1917.....	1,798	2,917	1,703	739	2,869	1,934
New York City (municipal)—						
July, 1916.....	1,944	2,157	2,188	(1)	3,048	1,800
July, 1917.....	2,150	2,350	2,598	1,730	3,279	2,042
Rochester (State)—						
July, 1916.....	1,079	1,860	717	114	1,335	663
July, 1917.....	1,871	2,882	1,481	417	2,398	1,491
Syracuse (State)—						
July, 1916.....	554	703	399	56	616	501
July, 1917.....	1,337	1,852	940	252	1,648	1,251
Total:						
July, 1916.....					10,240	6,496
July, 1917.....					20,772	14,325
Ohio:						
Akron (State-municipal)—						
July, 1916.....	(1)	1,951	627	1,314	1,573	1,314
July, 1917.....	(1)	3,240	1,174	1,796	2,370	2,061
Athens (State-municipal)—						
July, 1917.....	(1)	144	109	48	90	75
Canton (State-municipal)—						
July, 1917.....	(1)	531	613	277	595	351
Chillicothe (State-municipal)—						
July, 1917.....	(1)	7,595	8,034	57	7,370	7,124
Cincinnati (State-municipal)—						
July, 1916.....	(1)	1,564	1,221	2,509	1,387	932
July, 1917.....	(1)	2,210	2,892	3,787	2,191	1,504
Cleveland (Federal)—						
July, 1916.....	21	201	2 125	(1)	88	12
July, 1917.....	34	217	2 129	(1)	87	30
Cleveland (State-municipal)—						
July, 1916.....	(1)	7,297	2,809	6,661	6,335	5,202
July, 1917.....	(1)	8,042	3,841	8,018	7,528	5,966
Columbus (State-municipal)—						
July, 1916.....	(1)	2,826	892	1,892	2,227	1,827
July, 1917.....	(1)	3,243	1,168	2,595	2,732	2,217

<sup>1</sup> Not reported.<sup>2</sup> Number applying for work.

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OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
Ohio—Concluded.						
Dayton (State-municipal)—						
July, 1916.....	(1)	1,069	677	1,032	914	817
July, 1917.....	(1)	1,786	1,813	1,738	1,674	1,479
Hamilton (State-municipal)—						
July, 1917.....	(1)	130	358	31	127	88
Lima (State-municipal)—						
July, 1917.....	(1)	521	557	141	463	399
Mansfield (State-municipal)—						
July, 1917.....	(1)	187	201	67	174	119
Marietta (State-municipal)—						
July, 1917.....	(1)	207	221	106	193	149
Marion (State-municipal)—						
July, 1917.....	(1)	388	396	169	331	196
Portsmouth (State-municipal)—						
July, 1917.....	(1)	289	929	167	231	106
Springfield (State-municipal)—						
July, 1917.....	(1)	350	603	160	222	161
Steubenville (State-municipal)—						
July, 1917.....	(1)	711	393	311	581	466
Tiffin (State-municipal)—						
July, 1917.....	(1)	268	206	111	201	155
Toledo (State-municipal)—						
July, 1916.....	(1)	5,118	1,386	1,747	2,438	2,068
July, 1917.....	(1)	3,675	1,794	3,154	3,333	2,711
Washington C. H., (State-municipal)—						
July, 1917.....	(1)	194	222	117	175	138
Youngstown (State-municipal)—						
July, 1916.....	(1)	1,240	685	1,034	1,183	1,051
July, 1917.....	(1)	2,124	1,197	1,514	2,028	1,852
Zanesville (State-municipal)—						
July, 1917.....	(1)	153	292	91	141	80
Central office (State-municipal)—						
July, 1917.....	(1)	29	1,839	108	29	26
Total:						
July, 1916.....					2 16,145	2 13,223
July, 1917.....					32,866	27,453
Oklahoma—						
Enid (State)—						
July, 1916.....	(1)	289	(1)	(1)	(1)	272
July, 1917.....	146	206	258		236	225
Muskogee (State)—						
July, 1916.....	(1)	263	(1)	(1)	(1)	178
July, 1917.....	298	582	325		318	256
Oklahoma City (State)—						
July, 1916.....	(1)	588	(1)	(1)	(1)	436
July, 1917.....	239	809	688		685	612
Tulsa (State)—						
July, 1916.....	(1)	870	(1)	(1)	(1)	767
July, 1917.....	905	1,917	1,586		1,373	1,227
Total:						
July, 1916.....					(1)	1,653
July, 1917.....					2,612	2,820
Oregon:						
Astoria (Federal)—						
July, 1917.....	16	134	70	(1)	13	11
Portland (Federal)—						
July, 1916.....	1,224	2,589	2 2,512	(1)	2,454	2,309
July, 1917.....	2,218	6,766	2 4,978	(1)	5,041	4,789
Portland (municipal)—						
July, 1916.....	(1)	2,589	266	(1)	(1)	2,401
July, 1917.....	2,757	6,817	83	(1)	(1)	5,484
Total:						
July, 1916.....					4 2,454	4,710
July, 1917.....					4 5,054	10,284

1 Not reported.

2 Fifteen offices not reported.

3 Number applying for work.

4 One office not reported.



OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Contd.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New re- gistra- tions.	Re- newals.		
Pennsylvania:						
Altoona (State)—						
July, 1916.....	(1)	238	47	(1)	37	32
July, 1917.....	24	90	50	53	77	58
Harrisburg (State)—						
July, 1916.....	(1)	465	159	72	191	181
July, 1917.....	493	546	405	115	477	453
Johnstown (State)—						
July, 1916.....	(1)	226	41	15	49	45
July, 1917.....	93	199	108	12	117	98
Philadelphia (Federal)—						
July, 1916.....	86	588	<sup>2</sup> 302	(1)	288	224
July, 1917.....	213	2,062	<sup>2</sup> 1,253	(1)	1,047	933
Philadelphia (State)—						
July, 1916.....	(1)	591	787	199	551	507
July, 1917.....	323	1,099	1,222	359	1,059	956
Pittsburgh (Federal)—						
July, 1916.....	15	196	<sup>2</sup> 505	(1)	273	246
July, 1917.....	54	1,250	<sup>2</sup> 360	(1)	330	205
Pittsburgh (State)—						
July, 1916.....	(1)	2,233	749	168	562	512
July, 1917.....	219	1,008	459	137	501	460
Total:						
July, 1916.....					1,951	1,747
July, 1917.....					3,008	3,163
Rhode Island:						
Providence (Federal)—						
July, 1917.....	39	547	483	(1)	151	108
Providence (State)—						
July, 1916.....	321	311	194	118	(1)	311
July, 1917.....	223	346	281	137	(1)	346
South Carolina:						
Charleston (Federal)—						
July, 1916.....	1	38	<sup>2</sup> 97	(1)	169	169
July, 1917.....						
South Dakota:						
Huron (Federal-State)—						
July, 1916.....	60	3,691	1,270	(1)	1,270	1,270
July, 1917.....			132	(1)	126	126
Tennessee:						
Memphis (Federal)—						
July, 1917.....	1	1,700	<sup>2</sup> 1,284	(1)	1,257	948
Texas:						
Dallas (municipal)—						
July, 1916.....	177	393	46	7	393	393
July, 1917.....	157	301	72	10	350	281
El Paso (Federal)—						
July, 1916.....	(1)	(1)	<sup>2</sup> 1	(1)	(1)	(1)
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Fort Worth (municipal)—						
July, 1916.....	121	373	330	47	315	307
July, 1917.....	112	548	1,311	21	347	342
Galveston (Federal)—						
July, 1916.....	5	6	<sup>2</sup> 34	(1)	11	9
July, 1917.....	3	3	33	(1)	13	11
Houston (Federal)—						
July, 1916.....	(1)	(1)	<sup>2</sup> 9	(1)	(1)	(1)
July, 1917.....	(1)	(1)	(1)	(1)	(1)	(1)
Total:						
July, 1916.....					<sup>3</sup> 719	<sup>3</sup> 709
July, 1917.....					<sup>3</sup> 710	<sup>3</sup> 634

<sup>1</sup> Not reported.<sup>2</sup> Number applying for work.<sup>3</sup> Two offices not reported.

## 154 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Concluded.

## UNITED STATES—Continued.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
Virginia:						
Norfolk (Federal)—						
July, 1916.....	17	182	<sup>1</sup> 114	( <sup>2</sup> )	42	22
July, 1917.....	20	1217	137	( <sup>2</sup> )	85	18
Richmond (municipal)—						
July, 1916.....	288	691	711	( <sup>2</sup> )	795	396
July, 1917.....	324	453	472	( <sup>2</sup> )	554	232
Total:						
July, 1916.....					837	418
July, 1917.....					639	250
Washington:						
Aberdeen (Federal)—						
July, 1916.....	20	92	<sup>1</sup> 226	( <sup>2</sup> )	92	92
July, 1917.....	6	23	<sup>1</sup> 37	( <sup>2</sup> )	23	23
Bellingham (Federal-municipal)—						
July, 1916.....	198	334	<sup>1</sup> 297	( <sup>2</sup> )	289	255
July, 1917.....	174	780	<sup>1</sup> 407	( <sup>2</sup> )	348	328
Everett (Federal)—						
July, 1917.....	( <sup>2</sup> )	( <sup>2</sup> )	60		( <sup>2</sup> )	( <sup>2</sup> )
Everett (municipal)—						
July, 1916.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	438
July, 1917.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	272
Kennewich (Federal)—						
July, 1917.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
North Yakima (Federal)—						
July, 1916.....	538	925	<sup>1</sup> 883	( <sup>2</sup> )	728	696
July, 1917.....	549	1,257	<sup>1</sup> 1,590	( <sup>2</sup> )	1,107	1,034
Seattle (Federal)—						
July, 1916.....	150	829	<sup>1</sup> 1,317	( <sup>2</sup> )	456	416
July, 1917.....	186	1,308	<sup>1</sup> 1,949	( <sup>2</sup> )	791	762
Seattle (municipal)—						
July, 1916.....	3,347	6,471	( <sup>2</sup> )	( <sup>2</sup> )	6,497	6,009
July, 1917.....	4,050	6,819	( <sup>2</sup> )	( <sup>2</sup> )	6,824	6,143
Spokane (Federal)—						
July, 1916.....	74	580	<sup>1</sup> 639	( <sup>2</sup> )	511	511
July, 1917.....	111	654	<sup>1</sup> 743	( <sup>2</sup> )	631	627
Spokane (municipal)—						
July, 1916.....	2,229	4,610	( <sup>2</sup> )	( <sup>2</sup> )	4,075	3,929
July, 1917.....	1,890	2,570	( <sup>2</sup> )	( <sup>2</sup> )	2,524	2,422
Sumner (Federal)—						
July, 1917.....	70	760	<sup>1</sup> 654	( <sup>2</sup> )	654	654
Tacoma (Federal-municipal)—						
July, 1916.....	530	2,529	<sup>1</sup> 1,165	( <sup>2</sup> )	1,085	1,065
July, 1917.....	608	1,840	<sup>1</sup> 1,664	( <sup>2</sup> )	1,860	1,821
Walla Walla (Federal)—						
July, 1916.....	209	390	<sup>1</sup> 490	( <sup>2</sup> )	382	375
July, 1917.....	555	775	<sup>1</sup> 1,040	( <sup>2</sup> )	601	560
Total:						
July, 1916.....					<sup>3</sup> 13,030	<sup>4</sup> 12,721
July, 1917.....					<sup>3</sup> 13,503	<sup>4</sup> 12,825
Wisconsin:						
La Crosse (State-municipal)—						
July, 1916.....	175	293	<sup>1</sup> 262	( <sup>2</sup> )	198	72
July, 1917.....	193	210	255	( <sup>2</sup> )	199	115
Madison (Federal)—						
July, 1917.....	1,392	6,170	<sup>1</sup> 4,774	( <sup>2</sup> )	4,725	4,267
Milwaukee (State-county-municipal)—						
July, 1916.....	1,998	3,775	<sup>1</sup> 2,697	( <sup>2</sup> )	2,627	2,009
July, 1917.....	2,415	5,160	<sup>1</sup> 4,474	( <sup>2</sup> )	4,627	3,354
Oshkosh (State-municipal)—						
July, 1916.....	164	305	<sup>1</sup> 181	( <sup>2</sup> )	152	123
July, 1917.....	60	165	<sup>1</sup> 162	( <sup>2</sup> )	135	103
Superior (State-municipal)—						
July, 1916.....	439	1,331	<sup>1</sup> 907	( <sup>2</sup> )	988	674
July, 1917.....	533	1,644	<sup>1</sup> 1,496	( <sup>2</sup> )	1,626	873
Total:						
July, 1916.....					3,965	2,878
July, 1917.....					11,312	8,712

<sup>1</sup> Number applying for work.<sup>2</sup> Not reported.<sup>3</sup> One office not reported.<sup>4</sup> Three offices not reported.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, JULY, 1916, AND JULY, 1917—Concluded.

## CANADA.

State, city, and kind of office.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to posi- tions.	Posi- tions filled.
			New reg- istra- tions.	Re- newals.		
Quebec:						
Montreal (provincial)—						
July, 1917.....	330	874	1 422	(2)	622	528
Quebec (provincial)—						
July, 1916.....	(2)	214	152	(2)	141	(2)
July, 1917.....	(2)	409	260	(2)	180	(2)
Total:						
July, 1916.....					<sup>2</sup> 141	(2)
July, 1917.....					802	<sup>3</sup> 528

<sup>1</sup> Number applying for work.<sup>2</sup> Not reported.<sup>3</sup> One office not reported.FOURTH ANNUAL MEETING OF AMERICAN ASSOCIATION OF  
PUBLIC EMPLOYMENT OFFICES.

The proceedings of the fourth annual meeting of the American Association of Public Employment Offices, held in Buffalo, July 20 and 21, 1916, have just appeared as Bulletin 220 of the United States Bureau of Labor Statistics. The purpose of this association is to study the administrative details of the employment business, and seek to improve methods and secure uniformity and cooperation among the employment offices of the country.

The association is composed of men actively engaged in managing or administering employment business. Through its efforts systems of records and methods of management have been improved and made more uniform, and in some cases the officers of the association have assisted in drafting public employment office laws.

Two important developments of the fourth annual meeting were (1) the adoption of two resolutions, one placing the association on record in favor of the establishment of a national employment bureau, and the other requesting the United States Commissioner of Labor Statistics to edit and publish as a bulletin the proceedings of the meeting; and (2) the selection of a committee on standardization, with the United States Commissioner of Labor Statistics as chairman, for the purpose of drawing up a system of uniform records and formulating standard definitions of terms and methods of work which can be used in all the offices throughout the country, to the end that there shall be uniformity in the figures and reports from all the States. It is the duty of this committee to select from all the systems and methods now in use the best and most efficient, and its report at the next annual meeting at Milwaukee on September 20 and 21, 1917, will be the most important matter on which the association will have to act.

An address was made by Hon. Royal Meeker, United States Commissioner of Labor Statistics, on "What records should be kept by public employment offices and how they should be used." He emphasized the necessity of keeping such records as, when published, will give the public accurate and complete information as to the work done by the public employment offices throughout the country and the cost of conducting these offices. At present this is difficult, owing to lack of standardization of methods of keeping records. The desirability of uniform definitions, standards, and forms was strongly urged.

The Secretary of Labor, Hon. W. B. Wilson, in an address on a national system of employment offices, discussed the urgent need for public employment offices and showed the advantage which could be secured by a national employment bureau cooperating with State and municipal bureaus, and helping to coordinate the work between the different States and cities of the country.

Other addresses at the conference dwelt upon the importance of business efficiency in public employment offices; the desirability of cooperation among Federal, State, and city employment bureaus; the advantages to be gained by creating a national labor reserve board to organize all the employment offices in the country into one system of labor exchanges and put into effect the remedies that may be found for unemployment; the needs of the women's department of public employment offices and the special problems to be met therein; and the relation between labor organizations and public employment offices and how they may be mutually helpful. Vocational education and its bearing upon employment problems were given consideration in addresses covering such subjects as vocational education and juvenile placement departments, vocational guidance as a public school function, vocational guidance and the juvenile placement work of a public labor exchange, and cooperation between employers and the schools in vocational guidance.

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#### WORK OF FREE LABOR EXCHANGES IN OHIO, 1915-16.

The work of the seven free labor exchanges of Ohio for the year ending June 30, 1916, is recorded in the report No. 27 of the department of statistics and information of the Ohio Industrial Commission, issued at Columbus under date of December 15, 1916. This report states that the fiscal year covered by the data presented has been one of unusual industrial activity, that the number employed by the industries of the State has been increased by many thousands, that wages, particularly for the unskilled and transient workers, have

advanced, and that unemployment, as a serious problem, has been reduced to a minimum.

The daily average number of persons seeking employment through the free labor exchanges during the year ending June 30, 1916, was 1,141, as compared with a daily average of 1,101 for the year ending June 30, 1915. Of the 1,141 applicants, approximately one-third (an average of 363) were new registrations. Employers requested through the free labor exchanges an average of 674 persons per day, as compared with a daily average of 248 applications for help for the year ending June 30, 1915. During the period covered by this report an average of 566 per day were referred to positions and 463 were placed at work, as compared with an average of 240 referred and 203 placed during the fiscal year 1914-15.

The total figures showing the work of the seven offices and the per cent of increase during 1915-1916 as compared with the figures for the preceding year are as follows:

WORK OF THE SEVEN FREE LABOR EXCHANGES IN OHIO FOR THE YEARS ENDING JUNE 30, 1915 AND 1916, SHOWING PER CENT OF INCREASE IN THE LATTER PERIOD.

Item.	Year ending June 30—		Per cent of increase.
	1915	1916	
New registrations.....	93,780	110,749	18.1
Renewals.....	243,068	237,244	<sup>1</sup> 2.4
Total applicants for work.....	336,848	347,993	3.3
Number requested by employers.....	75,840	205,558	171.0
Number referred to positions.....	73,523	171,520	133.3
Number reported placed.....	62,237	141,253	127.0

<sup>1</sup> Decrease.

In this connection attention is directed to the fact that there was a large increase during the year 1915-16 in the number requested by employers, but no corresponding increase in the number of applicants. The 141,253 reported placed is 40.6 per cent of the total number of applicants for work and 68.7 per cent of the number requested by employers, while in the preceding year only 18.6 per cent of the total number of applicants were placed, this number equaling 82.1 per cent of the number requested by employers.

Approximately 74 per cent of the applicants were males and 26 per cent were females, but of those reported placed, 66.2 per cent were males and 33.8 per cent were females. The report notes a slight increase as compared with the preceding year in the per cent of skilled workers and factory employees and a decrease in the per cent of laborers and day workers reported placed in positions. Thus in 1914-15, 15.1 per cent of the males reported placed were skilled workers and factory employees and 73.4 per cent were laborers and day workers, while during the year following the per cents were 16.8 and 69.6, respectively.



Among females the per cent of those placed in general housework decreased from 12.3 in 1914-15 to 7.7 in 1915-16, while the per cent of those placed as factory workers and in sewing trades decreased from 8.8 per cent to 6.4 in the same period. There was a slight increase in the number placed as hotel and restaurant workers and as day workers, including laundresses—from 66.7 to 70.4 per cent.

Beginning in March, 1916, a record of the better grade permanent placements was kept in each office, and during the four months ending June 30, 1916, a total of 681 males were reported as having been placed in positions paying 35 cents or more per hour, \$18 or more per week, or \$75 or more per month; and 175 females were reported as having been placed in positions paying 17½ cents or more per hour, \$9 or more per week, or \$40 or more per month. Of the men the largest number, 284, or 41.7 per cent, were placed in building trades, and of the women, 56, or 32 per cent, were given employment as bookkeepers, stenographers, and office clerks. The salaries of the men so placed ranged up to \$2,400 per year; those of the women up to \$960 per year.

The following summary statement shows for the full year the number and per cent of the total placed in each occupation as taken from the regular daily reports:

Of the 93,537 males placed—

51,385, or 54.9 per cent, were laborers.

12,517, or 13.4 per cent, were day workers (men employed on odd jobs lasting only a few days, a day, or part of a day).

4,280, or 4.6 per cent, were employed in skilled building trades.

2,953, or 3.2 per cent, were farm and dairy hands and gardeners.

2,351, or 2.5 per cent, were employed in skilled metal trades.

Of the 47,716 females placed—

33,607, or 70.4 per cent, were day workers and laundresses.

4,239, or 8.9 per cent, were engaged in hotel and restaurant work.

3,690, or 7.7 per cent, were engaged in general housework.

3,072, or 6.4 per cent, were engaged in factory work, including the sewing trades.

The report notes 38 private employment agencies in operation on June 30, 1916, and states that 20 prosecutions were brought for abuses in connection with employment. Ten of these cases were for operating offices without licenses and the other 10 were for job selling, that is, a practice by which an applicant is required to pay a foreman a fee for employment and in many instances to continue such payments during employment so that the job may be retained and desirable work secured. A report on job selling in industrial establishments in Ohio has been issued by the Industrial Commission (Rept. No. 24) and was reviewed in the MONTHLY REVIEW for October, 1916 (pp. 411-415).

## EMPLOYMENT IN SELECTED INDUSTRIES IN JULY, 1917.

The figures presented have been compiled by the Bureau of Labor Statistics from reports from representative establishments in 13 industries.

A comparison of the figures in the first table below shows that there were increases in the number of employees in 7 and decreases in 6 of the 13 industries in the month of July, 1917, as compared with July, 1916. The iron and steel industry shows an increase of 12 per cent, which was the largest increase, and the silk industry shows the greatest decrease, which was 4.2 per cent. The other industries show changes between these two extremes.

Each industry covered by the inquiry shows a greater amount of money paid to employees in July, 1917, than in July, 1916. Iron and steel leads with an increase of 40.7 per cent, closely followed by automobile manufacturing with an increase of 33.4 per cent.

The following table shows the facts for each industry:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JULY, 1916, AND JULY, 1917.

Industry.	Estab-lish-ments to which in-quiries were sent.	Estab-lish-ments re- port- ing for July, both years.	Period of pay roll.	Number on pay roll in July—		Per cent of in-crease (+) or de-crease (-).	Amount of pay roll in July—		Per cent of in-crease (+) or de-crease (-).
				1916	1917		1916	1917	
Boots and shoes.....	85	70	1 week..	61,539	59,284	- 3.7	797,683	833,025	+ 4.4
Cotton manufacturing....	89	59	....do....	48,521	49,275	+ 1.6	447,502	562,204	+25.6
Cotton finishing.....	19	16	....do....	11,352	11,316	- .3	130,497	154,495	+18.4
Hosiery and underwear...	82	51	....do....	27,872	27,461	- 1.5	255,729	329,929	+29.0
Woolen.....	56	48	....do....	40,162	41,163	+ 2.5	475,132	611,543	+28.7
Silk.....	64	36	2 weeks.	11,813	11,322	- 4.2	227,447	238,201	+ 4.7
Men's ready-made cloth- ing.....	86	39	1 week..	26,141	28,013	+ 7.2	386,732	477,371	+23.4
Iron and steel.....	142	104	½ month.	176,921	198,184	+12.0	5,902,301	8,304,098	+40.7
Car building and repairing	78	22	....do....	22,082	22,057	- .1	877,545	935,514	+ 6.6
Cigar manufacturing.....	104	54	1 week..	16,429	16,962	+ 3.2	171,331	201,422	+17.6
Automobile manufactur- ing.....	67	36	....do....	90,942	92,354	+ 1.6	1,615,257	2,154,737	+33.4
Leather manufacturing...	44	31	....do....	14,799	14,596	- 1.4	198,872	221,671	+11.5
Paper making.....	82	43	....do....	22,135	22,953	+ 3.7	300,491	358,209	+19.2

The number of employees actually working on the last full day of the reported pay-roll period in July, 1917, and July, 1916, was reported by a comparatively small number of establishments and this fact should be borne in mind when studying the next table. Six of the 13 industries reporting show increases, while 7 show decreases. Here iron and steel leads, the increase being 15.1 per cent, while the greatest decrease, 14.9 per cent, is shown by cotton finishing.

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COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON LAST FULL DAY'S OPERATION IN JULY, 1916, AND JULY, 1917.

Industry.	Establishments reporting for July, both years.	Period of pay roll.	Number actually working on last full day of reported pay period in July—		Per cent of increase (+) or decrease (—).
			1916	1917	
Boots and shoes.....	16	1 week...	8,766	7,655	-12.7
Cotton manufacturing.....	35	do.....	26,417	27,681	+ 4.8
Cotton finishing.....	9	do.....	6,136	5,221	-14.9
Hosiery and underwear.....	13	do.....	10,126	10,698	+ 5.6
Woolen.....	34	do.....	30,483	32,354	+ 6.1
Silk.....	19	2 weeks...	6,950	6,571	- 5.5
Men's ready-made clothing.....	5	1 week...	617	601	- 2.6
Iron and steel.....	80	$\frac{1}{2}$ month...	123,656	142,306	+15.1
Car building and repairing.....	20	do.....	16,733	16,759	+ .2
Cigar manufacturing.....	17	1 week...	3,935	3,666	- 6.8
Automobile manufacturing.....	16	do.....	46,141	47,584	+ 3.1
Leather manufacturing.....	13	do.....	8,974	8,410	- 6.3
Paper making.....	11	do.....	7,160	7,127	- .5

In comparing the figures for July, 1917, with those for June, 1917, an increase in the number of employees is shown in 5 and a decrease in 8 of the 13 industries reporting. The decreases here are probably in part due to the July pay-roll period including vacation and stock-taking time. The greatest increase is 3.4 per cent shown by car building and repairing, and the greatest decrease is 5.5 per cent, shown by automobile manufacturing.

An increase in the amount of the pay roll is shown in three of the industries reporting and a decrease is shown in ten of them. Men's ready-made clothing shows the greatest increase, which is 4.8 per cent, and boots and shoes and cotton finishing show a decrease of 7.4 per cent, which is the greatest decline.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JUNE, 1917 AND JULY, 1917.

Industry.	Estab-lishments to which inquiries were sent.	Estab-lishments reporting for June and July.	Period of pay roll.	Number on pay roll in—		Per cent of increase (+) or decrease (—).	Amount of pay roll in—		Per cent of increase (+) or decrease (—).
				June, 1917.	July, 1917.		June, 1917.	July, 1917.	
Boots and shoes.....	85	67	1 week..	58,904	57,193	-2.9	856,472	792,750	- 7.4
Cotton manufacturing.....	89	58	do.....	47,635	47,838	+ .4	545,159	546,279	+ .2
Cotton finishing.....	19	16	do.....	14,211	13,679	-3.7	212,269	196,654	- 7.4
Hosiery and underwear...	82	51	do.....	28,193	27,772	-1.5	314,567	308,496	- 1.9
Woolen.....	56	45	do.....	40,743	40,784	+ .1	601,276	606,396	+ .9
Silk.....	64	37	2 weeks..	13,112	13,092	- .2	304,930	287,423	- 5.7
Men's ready-made clothing.	86	38	1 week..	29,370	28,076	-4.4	457,333	479,305	+ 4.8
Iron and steel.....	142	108	$\frac{1}{2}$ month.	207,133	208,860	+ .8	9,453,681	8,817,749	- 6.7
Car building and repairing...	78	25	do.....	23,703	24,516	+3.4	885,193	825,701	- 6.7
Cigar manufacturing.....	104	61	1 week..	19,852	19,877	+ .1	245,801	242,737	- 1.2
Automobile manufacturing.	67	34	do.....	99,606	93,985	-5.5	2,280,063	2,194,602	- 3.7
Leather manufacturing...	44	30	do.....	14,307	14,139	-1.2	222,228	215,283	- 3.1
Paper making.....	82	43	do.....	23,664	22,953	-3.0	369,436	358,209	- 3.0

Only 54 per cent of the establishments reporting stated the number of employees actually working on the last full day of the pay-roll period which should be considered when studying the table below.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON LAST FULL DAY'S OPERATION IN JUNE, 1917, AND JULY, 1917.

Industry.	Establishments reporting for June and July.	Period of pay roll.	Number actually working on last full day of reported pay period in—		Per cent of increase (+) or decrease (—).
			June, 1917.	July, 1917.	
Boots and shoes.....	24	1 week....	13,278	12,722	— 4.2
Cotton manufacturing.....	41	...do.....	31,598	31,629	+ .1
Cotton finishing.....	11	...do.....	9,340	8,320	—10.9
Hosiery and underwear.....	13	...do.....	10,602	10,528	— .7
Woolen.....	38	...do.....	33,362	33,358	— (1)
Silk.....	22	2 weeks....	9,253	8,692	— 6.1
Men's ready-made clothing.....	8	1 week....	11,390	11,319	— .6
Iron and steel.....	85	$\frac{1}{2}$ month....	147,835	153,617	+ 3.9
Car building and repairing.....	25	...do.....	21,427	21,934	+ 2.4
Cigar manufacturing.....	23	1 week....	5,514	5,499	— .3
Automobile manufacturing.....	18	...do.....	57,355	54,818	— 3.9
Leather manufacturing.....	12	...do.....	8,354	7,960	— 4.7
Paper making.....	11	...do.....	6,856	7,127	+ 4.0

<sup>1</sup> Less than one-tenth of 1 per cent.

#### CHANGES IN WAGE RATES.

Changes in wage rates during the period of June 15 to July 15, 1917, were reported by 54 establishments in 12 of the 13 industries covered. Many of the establishments reporting failed to answer the inquiry as to whether any changes in wage rates had been made during the period. Of the 54 changes indicated, 53 were increases and 1 was a slight decrease.

Out of 108 establishments in the iron and steel industry reporting volume of employment data for the months of June and July, 1917, 21 reported that increases had been made in wages during the period. One establishment reported an increase of 22 per cent to two-thirds of its employees; one reported 20 per cent increase to all employees; four reported 14.6 per cent to about one-third of their employees; four reported 10.9 per cent to 43, 45, 47, and 54 per cent of all employees, respectively; one reported 10 per cent to all employees, while another reported 10 per cent to all tonnage men, which constituted about 40 per cent of the entire force; one reported 9 per cent to all employees; five establishments reported increases ranging between 5 per cent and 7 per cent to various parts of their forces, while one reported 3.7 per cent to all unskilled labor. One establishment reported an increase of 25 cents per turn for the furnace men, mechanics, locomotive crews, and locomotive crane crews, and 15 cents per turn for laborers. One reported an increase of  $2\frac{1}{2}$  cents per hour for all laborers and mechanical department employees.

Four establishments out of a total of 59 reporting in cotton manufacturing show changes in the wage rates. One establishment reported an increase of 10 per cent and one an increase of 5 per cent for all employees; one establishment reported a 10 per cent bonus for full time and one changed a 5 per cent bonus to a regular increase.

Four of the 36 establishments reporting in the automobile industry report changes in the wage rates. Three of the reports were indefinite as to both the per cent of increase and the part of the force affected; one establishment reported a slight decrease in the average hourly wages.

Of the 25 establishments reporting for the car building and repairing industry, 4 show changes in wage rates. One establishment reported an increase of 22.3 per cent for 96 per cent of the force; one reported an increase of 3 cents per hour for about 97 per cent of the force and \$2 per week for 3 per cent; and two reported an increase of  $2\frac{1}{2}$  cents per hour to 60 per cent of the force.

Of the 39 establishments in the men's ready-made clothing industry, 7 show changes in wage rates. Four reported an increase of 10 per cent for 70, 90, 95, and 100 per cent, respectively, of the force; one reported an increase of 10 per cent to a small part of the force; one reported an increase of 10 per cent to time workers and 20 per cent to piece workers, and one reported an increase of 5 per cent but did not state the part of the force affected.

Of the 36 establishments in the silk industry, 4 show changes in the wage rates. One reported an increase of 10 per cent and one 5 per cent for all employees; one reported 10 per cent increase for 40 per cent of the force; and one reported 10 per cent increase for "some departments."

Of the 43 establishments in the paper-making industry, 3 show changes in the wage rates. Two reported an increase of 10 per cent for all employees, while one reported a "bonus" of 25 per cent for the entire force for the period ending July 6.

Of the 51 establishments in the hosiery and underwear industry, but two show changes in the wage rates. One reported 10 per cent increase for all employees, while one reported a bonus ranging from 40 cents to \$1.25 per week for full time.

One establishment in each of four other industries reported a change in the wage rates. One establishment in the boot and shoe industry reported an increase in piece rate for cutting women's shoes, which was said to equal 5 cents per hour; one cigar factory reported an indefinite increase for all employees; one plant in the leather manufacturing industry reported a 5 per cent increase for the entire force; and one woolen mill reported an increase of 5 per cent for all employees.



## EMPLOYMENT IN THE STATE OF NEW YORK IN JULY, 1917.

The bureau of statistics and information of the New York State Department of Labor has issued the following summary of the labor market in that State:

## MANUFACTURING ACTIVITY IN JULY.

[As reported by 1,600 representative firms with over 600,000 employees, or more than one-third of the factory workers in the State, and a weekly pay roll of more than \$9,000,000.]

Manufacturing activity in New York State in July, 1917, was somewhat less pronounced than in June, which in turn showed a slight decline as compared with May. As compared with June, the number of employees decreased one-half of 1 per cent and the total aggregate of wages decreased slightly more. The vacation season, which is utilized for inventory purposes and for making repairs, was chiefly responsible for this decline. Labor disputes likewise played a part. These results are indicated by returns received from a large number of leading factories, including all of the important manufacturing industries and localities in the State and covering the last three years. As compared with June, 6 of the 11 industrial groups reported in July decreases in both number of employees and in amount of wages paid out. In three of the groups there were increases in employees and in wages. A new high record in wages was established for each of these three. July, 1917, was much more active than the corresponding month in either of the three preceding years. The increase in employees as compared with July of last year was 5 per cent and in wages 20 per cent. Corresponding increases over July, two years ago, were 22 and 54 per cent, respectively, and over July, three years ago, 22 and 59 per cent, respectively.

The average per capita earnings of all employees, including both sexes, for one week in July, 1917, were \$16.17, as compared with \$16.20 in the previous month. The corresponding sum for July of last year was \$14.11; for July, two years ago, \$12.66; and for July, three years ago, \$12.54.

The *stone, clay, and glass products* group reported in July, 1917, a decrease of nearly 1 per cent in number of employees and more than 6 per cent decrease in wages as compared with June. Lime, cement, and plaster mills were more active. There were seasonal decreases in the brick-tile-pottery and in the glass groups. As compared with July of last year the group as a whole had 22 per cent more employees and paid out 41 per cent more in wages. This increase was due in large part to the fact that one large concern, which was idle in July, 1916, on account of a strike, was operating to capacity in July of this year.

The *metals, machinery and conveyances* group, which has a much larger number of employees and pays out much more in wages than any other group included in these returns, reported in July a decrease of 1 per cent in number of employees and of  $1\frac{1}{2}$  per cent in amount of wages as compared with June. Only 3 of the 11 industries in the group reported increased wage payments. The machinery industry, the weightiest in the group, reported an increase, as did also sheet-metal work and hardware, and cooking, heating, and ventilating apparatus. The most important decrease was in brass, copper, and aluminum manufacture. Labor disputes reduced production in boat and ship building. As compared with July one year ago, the group had 6 per cent more employees and paid out 23 per cent more wages.

The *wood manufactures* group reported in July a negligible decrease as compared with June in employees and in amount of wages. The decrease was mainly in the manufacture of musical instruments. Saw and planing mills were more active. The group had 2 per cent more employees and paid out 16 per cent more wages than in July of last year.

The *furs, leather, and rubber goods* group employed in July 1 per cent fewer workers and paid out 1 per cent less in wages than in June. The manufacture of furs and fur goods reported a seasonal increase. All other industries, except rubber and gutta-percha goods, reported decreases. As compared with July of last year, the group had 3 per cent more employees and paid out 17 per cent more wages.

The *chemicals* group reported in July a negligible increase in employees and 1 per cent more wages were paid out, establishing new high records in both respects. The animal and mineral oil industry and the manufacture of paints, dyes, and colors were more active. As compared with July, 1916, the group had 7 per cent more workers and paid out 25 per cent more wages.

The *paper* industry reported in July a decrease of more than 1 per cent in number of employees, and also in amount of wages, as compared with June. The number of employees was 9 per cent greater, and the amount of wages paid was 21 per cent greater than in July one year ago.

The *printing and paper goods* group reported almost no change in July as compared with June. As compared with July of last year, the group employed 1 per cent fewer workers and paid out 6 per cent more wages.

The *textiles* group reported in July nearly 1 per cent decrease in employees and a negligible increase in wages as compared with June. Cotton goods and miscellaneous textiles each reported gains. Other industries reported losses. The greatest decline, both as compared with last month and with July of last year, was in the manufacture of woolen carpets. As compared with last year, the group had nearly 1 per cent fewer employees, but paid out 15 per cent more wages.

The *clothing, millinery, and laundering* group in July employed  $1\frac{1}{2}$  per cent fewer workers than in June. The decrease in amount of wages paid was negligible. Of the seven industries in the group, two only—women's clothing and laundering-cleaning-dyeing—reported increases. The decreases were seasonal, being most pronounced in men's shirts and furnishings and in women's underwear. As compared with July of last year, the group employed 6 per cent more workers and paid out 20 per cent more in wages.

The *food, liquors, and tobacco* industry in July had 4 per cent more workers and paid out nearly 3 per cent more wages than in June, establishing a new high record in the latter respect. Fruit and vegetable canneries, now in the full swing of the season, reported the largest gain. Miscellaneous groceries reported the next largest gain. Flour and cereals reported the only loss of importance. As compared with July of last year, the group had 5 per cent more employees and paid out 19 per cent more wages.

The *water, light, and power* industry employed in July 4 per cent more employees and paid out 5 per cent more wages than in June, thereby establishing new high records in both respects. As compared with July one year ago, there were 12 per cent more employees and 21 per cent more wages were paid.

#### BUILDING ACTIVITY IN PRINCIPAL CITIES.

[As reported by building departments.]

Slackening in building activity in New York State was pronounced in July, 1917, both as compared with last month and with July of last year. Returns

received from the 10 first and second class cities show that the estimated cost of building operations for which permits were issued in the month of July was 42 per cent less than in June and 85 per cent less than one year ago. Considerable increases over June were reported from Binghamton and Schenectady and slight increases from Buffalo, Rochester, and Syracuse. As compared with July, 1916, Syracuse reported an increase of importance. There were marked decreases in other cities with the exception of Binghamton and Schenectady.

### CONCILIATION WORK OF THE DEPARTMENT OF LABOR, JULY 16 TO AUGUST 15, 1917.

Under the organic act of the department, which gives the Secretary of Labor the authority to mediate in labor disputes through the appointment, in his discretion, of commissioners of conciliation, the Secretary exercised his good offices between July 16 and August 15, 1917, in 73 labor disputes. The companies involved, the number of employees affected, and the results secured, so far as information is available, were as follows:

STATEMENT SHOWING NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, SUBSEQUENT TO JULY 15, 1917.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Controversy between the Water Front Employers' Union of Puget Sound and longshoremen.			Pending.
Strike, Dudlo Manufacturing Co., Fort Wayne, Ind.	160	290	Adjusted.
Strike of molders and other employees, Black & Clausen Paper & Pulp Mill, Hamilton, Ohio.	143	1307	Molders' strike adjusted; machinists' strike unable to adjust.
Strike of employees, Union Electric & Power Co., St. Louis, Mo.	65	75	Adjusted.
Controversy between the Pennsylvania Smelting Co. and its employees, Carnegie, Pa.			Do.
Strike at Lawley Shipyards, Boston, Mass.	350	350	Do.
Strike at the foundry and machine works of J. Thompson & Co., Philadelphia, Pa.			Pending.
Strike of pattern makers, Indianapolis, Ind.			Do.
Threatened strike of machinists, Newport News Shipbuilding Co., Newport News, Va.			Do.
Strike at Sanderson & Porter Mills, Raymond, Wash.			Do.
Threatened strike, ship and lumber yards: Grays Harbor Shipbuilding Co., Aberdeen Shipbuilding Co., Mathews Shipbuilding Co., Aberdeen, Wash.	800		Do.
Olympia Ship Yards Co., Sloan Ship Yards Co., Olympia, Wash.	500		Do.
Strike, National Shipbuilding Co., Orange, Tex.			Adjusted.
Strike of metal polishers, Remington Arms Co., Bridgeport, Conn.	600	12,500	Do.
Strike of packing-house employees, Swift and Armour plants, Denver, Colo.	1,000		Do.
Strike of carmen, Cincinnati, Hamilton & Dayton R. R. Co., Ivorydale, Ohio.			Do.
Strike of leather workers, Wallace Smith Co., Milwaukee, Wis.	100	300	Unable to adjust.
Controversies in California chemical plants affecting production of chemicals used in preservation of California fruit crop.			Adjusted.
Strike of street railway employees, Pittsburg, Kans.	15	500	Do.
Strikes of boiler makers, Williams, Mound & Co. and F. Johnson & Son, Omaha, Nebr.	105		Do.

<sup>1</sup> Number of men affected applies to molders only.

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STATEMENT SHOWING NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, SUBSEQUENT TO JULY 15, 1917—Continued.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Strike of coal miners of the New River district, W. Va. ....	.....	.....	Pending.
Strike at textile mills of C. A. Masland & Sons, Philadelphia, Pa. ....	.....	.....	Do.
Strikes involving the lumber and shingle industry of the Northwest. ....	20,000	.....	Do.
Controversy between Smith, Kline & French Co., wholesale druggists, and their teamsters, Philadelphia, Pa. ....	.....	.....	Adjusted.
Strike of street-car men, Seattle and Tacoma, Wash. ....	4,000	.....	Do.
Strike at Minneapolis Steel & Machinery Co., Minneapolis, Minn. ....	.....	.....	Unable to adjust.
Controversy between Freeport Sulphur Co. and its employees, Freeport, Tex. ....	200	.....	(1)
Controversy between metal trade mechanics and Missouri, Kansas & Texas R. R. Co., Denison, Tex. ....	.....	.....	Adjusted.
Controversy, Long-Hargrove Overall Co., Tyler, Tex. ....	.....	.....	Pending.
Controversies between General Refractories Co., The Harbison-Walker Co., and employees, Olive Hill, Ky. ....	.....	.....	Do.
Controversy between the United States Cartridge Co. and machinists, Lowell, Mass. ....	.....	.....	Adjusted.
Strike of linemen, Berkshire Street Ry. Co., Pittsfield, Mass. ....	21	600	Do.
Strike of tannery men, Morris Packing Co., Westover, Pa. ....	93	.....	(2)
Strike at Slater Cotton Mills, Webster, Conn. ....	.....	.....	Pending.
Sundry strikes in hat factories, Danbury, Conn. ....	.....	.....	Do.
Controversy between Maine Central R. R. Co. and its clerks, Portland, Me. ....	6,000	.....	Adjusted.
Controversy between Barber Steamship Lines and its engineers, New York, N. Y. ....	.....	.....	Do.
Controversies in fruit-packing plants of California. ....	.....	.....	Pending.
Strike at the Mount Vernon-Woodberry Mills, Baltimore, Md. ....	.....	.....	Do.
Controversy between Universal Shipbuilding Co., Midland Bridge Co., Panama Shipbuilding Co. and employees, Houston, Tex. ....	.....	.....	(3)
Strike of miners, Buffalo & Susquehanna Coal Co., Dubois, Pa. ....	.....	.....	Adjusted.
Strike of employees, Shuler & Benninghofen Co., Hamilton, Ohio. ....	300	.....	Pending.
Controversy between Missouri, Kansas & Texas R. R. Co. and its car department employees, Denison, Tex. ....	.....	.....	Adjusted.
Controversy between bricklayers and employers, Petersburg, Roanoke, and Norfolk, Va. ....	50	100	Pending.
Controversy between Reading Iron & Steel Co., and employees, Reading, Pa. ....	3,500	.....	Unable to adjust.
Strike of grain handlers, Philadelphia, Pa.: Furness, Withy Steamship Co. ....	200	3,000	Adjusted.
Philadelphia Ceiling & Stevedoring Co. and stevedores. ....	.....	.....	Pending.
Strike of ship carpenters, Orange, Tex. ....	28	.....	Adjusted.
Controversy between Philadelphia Electric Co. and its employees, Philadelphia, Pa. ....	.....	.....	Pending.
Controversy between Edison Electric Light Co. and its employees, Boston, Mass. ....	.....	.....	Do.
Controversy between American Sheet & Tin Plate Co., Elwood, Ind. ....	.....	.....	(4)
Strike at plant of Louis Walther Co., Philadelphia, Pa. ....	.....	.....	Adjusted.
Strike of terminal clerks, Kanawha & Michigan Railroad, Charleston, W. Va. ....	.....	.....	Do.
Strikes of machinists, Battle Creek, Mich. ....	.....	.....	Pending.
Strike of timber workers, Menominee River Lumber Mills, Marinette, Wis. ....	600	.....	Do.
Strike of trainmen, Pittsburg, Lisbon & Western Railroad, Lisbon, Ohio. ....	.....	.....	Adjusted.
Controversy between the Solid Drawn Forging Co., and employees, Ellwood City, Pa. ....	.....	.....	Pending.
Strike at mills of John and James Dobson, Philadelphia, Pa. ....	.....	.....	Do.
Controversy between Buffalo, Rochester & Pittsburgh R. R. Co. and its maintenance of way employees, Dubois, Pa. ....	.....	.....	Do.
Lockout, Peru Electric Manufacturing Co., Peru, Ind. ....	.....	.....	Do.

<sup>1</sup> Commissioner learned company had not discriminated against men. Mr. Mims, representing company, stated they had no objections to men belonging to labor organizations. Plant had made slight increases in salary. Willing to hire men at any time there was a vacancy.

<sup>2</sup> All men who struck are working at other work. Superintendent claims to have sufficient help to keep up output.

<sup>3</sup> Commissioner reports that no controversy existed.

<sup>4</sup> Commissioner requested to adjust matter of wages, but learned union had not requested advance in wages. Commissioner therefore withdrew from case pending request on their part.

STATEMENT SHOWING NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, SUBSEQUENT TO JULY 15, 1917—Concluded.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Strike at Portage Hosiery Mill, Portage, Wis. ....			Pending.
Controversy between the Woolen and Carpet Yarn Workers' Union and employers, Philadelphia, Pa. ....			Do.
Strike at plant of De Laval Steam Turbine Co., Trenton, N. J. ....	300		Unable to adjust.
Strike in the forge shop of Jennings & Johnston Co., Cleveland, Ohio. ....			Pending.
Strike of street-car men, Kansas City, Mo. ....			Adjusted.
Strike at Niles-Bement Works of Niles-Bement-Pond Co., Philadelphia, Pa. ....			Pending.
Controversy between Alabama coal miners and operators. ....			Do.
Controversies between carpenters and contractors on various Government projects at New York City and vicinity. ....	6,500	48,000	Adjusted.
Controversy between Southeastern railroads (14 in number) and their shopmen. ....	42,000		Do.
Controversy between Chicago & Alton R. R. and its electrical workers, Bloomington, Ill. ....			Pending.
Strike of longshoremen on docks of Mallory & Clyde lines, New York. ....	1,500		Adjusted.
Strikes of surgical knitters, Chesterman & Streeter; Lee-land Surgical Co.; Hastings & McIntosh; James R. Kendrick Co., and Wm. M. Horn, Philadelphia, Pa. ....			Pending.
Controversy between the Great Northern R. R. Co. and its boiler makers, St. Paul, Minn. ....			Do.
Controversy of shipbuilders, Portland, Oreg. ....			Do.
Strike of machinists, Fay & Scott Co., Dexter, Me. ....			Do.

The following cases have been disposed of:

Controversy between International & Great Northern Ry. Co. and shopmen, Houston, Tex. Adjusted.

Controversy between General Electric Co. and electrical workers, Pittsfield, Mass. Adjusted.

Threatened strike of electrical workers, Atlanta, Ga. Adjusted.

Threatened strike, Ostby & Barton, Providence, R. I. Commissioner withdrew from case, as company refused to treat with strikers, but would reemploy such of them as they chose as fast as vacancies occurred.

Strike at jewelry works, Goldsmith, Stern & Co., New York, N. Y. Unable to adjust.

Threatened strike, Charleston Navy Yard, Charleston, S. C. Recommendations filed by commissioner.

Strike of maintenance of way employees, Mississippi River & Bonne Terre R. R. Adjusted.

Strike of miners, Kennecott Copper Co., Kennecott, Alaska. Adjusted.

Threatened strike of carmen, C. I. & L. R. R., Lafayette, Ind. Adjusted.

Strike, Niles Tool Works, Hamilton, Ohio. Four days after case adjusted, men again went out on strike. Commissioner unable to do anything further looking to adjustment.

Strike of miners, Leadville, Colo. Adjusted.

Strike of mine workers, Madeira Hill Coal Mining Co., Houtzdale. Adjusted.

Threatened strike of machinists, Metal Produce Co., Beaver Falls, Pa. Strike averted.

Strike, East Iron & Machine Co., Lima, Ohio. Adjusted.

Controversy between Banning Co. and Longshoremen's union, San Pedro, Cal. Adjusted.

Lockout, National Lead & Steel Package Co., Granite City, Ill. Adjusted.



Strike, at 5 mines, Madeira Hill, Pa. Adjusted.

Controversy between Michigan Central R. R. and machinists, Jackson, Mich. Adjusted.

Strike of molders, Norfolk Navy Yard, Norfolk, Va. Recommendations filed by commissioner.

Threatened strike, drop forge companies, Cleveland, Ohio. All cases adjusted.

Controversy, Alberger Pump & Condenser Co., Newburgh, N. Y. Adjusted.

Strike at Dahlstrom Metallic Door Co., Jamestown, N. Y. Unable to adjust.

Controversy, Wagner Electric Co., St. Louis, Mo. Complaint no longer pertinent, in that construction work was completed.

Bakers' strike, Denver, Colo. Unable to adjust.

LIST OF OFFICIALS OF BUREAUS OF LABOR, EMPLOYMENT  
OFFICES, INDUSTRIAL COMMISSIONS, COMPENSATION COM-  
MISSIONS, WAGE BOARDS, FACTORY INSPECTION BUREAUS,  
AND ARBITRATION AND CONCILIATION BOARDS IN THE  
UNITED STATES AND CANADA.

UNITED STATES.

DEPARTMENT OF LABOR:

Hon. William B. Wilson, Secretary.

Address: Washington, D. C.

BUREAU OF LABOR STATISTICS:

Dr. Royal Meeker, commissioner.

Address: Washington, D. C.

BUREAU OF IMMIGRATION:

Anthony Caminetti, commissioner.

BUREAU OF NATURALIZATION:

Richard K. Campbell, commissioner.

CHILDREN'S BUREAU:

Julia A. Lathrop, chief.

UNITED STATES EMPLOYEES' COMPENSATION COMMISSION:

R. M. Little, chairman.

Mrs. Frances C. Axtell, vice chairman.

John J. Keegan.

Charles H. Verrill, statistician.

Arthur H. Deibert, secretary.

Address of commission: Union Trust Building, Washington, D. C.

UNITED STATES BOARD OF MEDIATION AND CONCILIATION:

Martin A. Knapp, chairman.

William L. Chambers.

G. W. W. Hanger.

William H. Smith, secretary.

Address of board: 920-927 Southern Building, Washington, D. C.

ALABAMA.

INSPECTOR OF JAILS, ALMSHOUSES, COTTON MILLS, AND FACTORIES:

William M. Dinsmore, M. D., chief. Box 282, Montgomery.

ALASKA.

(No special labor officials except mine inspector.)

ARKANSAS.

BUREAU OF LABOR AND STATISTICS:

B. D. Brickhouse, commissioner, Markham & Ridgeway, Little Rock.

Free employment bureau:

W. G. Sprague, manager, 522 Pine Street, Pulaski Heights, Little Rock.

## 170 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

### MINIMUM WAGE COMMISSION:

Miss Lula Scruggs, 202 West Ninth Street, Argenta.  
Miss Nora McCabe, 2115 Arch Street, Little Rock.

### CALIFORNIA.

#### BUREAU OF LABOR STATISTICS:

John P. McLaughlin, commissioner, 948 Market Street, San Francisco.

##### Public employment offices:

C. B. Sexton, superintendent of bureaus, 525 Market Street, San Francisco.

(Bureaus located at Los Angeles, Oakland, Sacramento, and San Francisco.)

#### INDUSTRIAL ACCIDENT COMMISSION:

A. J. Pillsbury, chairman, Piedmont, Cal.

Will J. French, San Francisco.

Meyer Lissner, Los Angeles.

H. L. White, secretary, San Anselmo.

John R. Brownell, superintendent of safety.

Dr. M. R. Gibbons, medical director, San Francisco.

Address of commission: Underwood Building, 525 Market Street, San Francisco.

#### INDUSTRIAL WELFARE COMMISSION:

Hon. Frank J. Murasky, judge of superior court, chairman.

Mrs. Katherine Philips Edson, executive officer.

A. B. C. Dohrmann.

A. Goldstein.

Walter G. Mathewson.

Address of commission: 525 Market Street, San Francisco.

#### COMMISSION OF IMMIGRATION AND HOUSING:

Simon J. Lubin, president.

Most Rev. E. J. Hanna, D. D., vice president.

Mrs. Frank A. Gibson.

J. H. McBride, M. D.

Paul Scharrenberger, secretary.

George L. Bell, attorney and executive officer.

Address of Commission: Underwood Building, San Francisco.

### COLORADO.

#### BUREAU OF LABOR STATISTICS:

W. L. Morrissey, deputy commissioner of labor and chief factory inspector, Denver.

##### Public employment offices:

W. L. Morrissey, deputy commissioner of labor, etc., Denver.

(Bureaus located at Colorado Springs, Denver, and Pueblo.)

#### INDUSTRIAL COMMISSION:

Hiram E. Hilts, chairman.

George W. Densmore.

A. N. Parrish.

W. E. Schwed, secretary.

Address of commission: State capitol, Denver.

#### MINIMUM WAGE COMMISSION:

(According to an act passed by the 1917 legislature and effective July 20, 1917, the State Industrial Commission is also made a minimum wage commission.)

**CONNECTICUT.**

**DEPARTMENT OF LABOR AND FACTORY INSPECTION:**

William S. Hyde, commissioner, Hartford.

**Public employment offices:**

William S. Hyde, commissioner, Hartford.

(Bureaus located at Bridgeport, Hartford, New Haven, Norwich, and Waterbury.)

**WORKMEN'S COMPENSATION COMMISSION:**

Frederick M. Williams, chairman, Lilly Building, Waterbury.

George E. Beers, 42 Church St., New Haven.

Edward T. Buckingham, 1024 Main Street, Bridgeport.

George B. Chandler, Pearl Street, Hartford.

Dr. James J. Donohue, Norwich.

**STATE BOARD OF MEDIATION AND ARBITRATION:**

Lucius E. Whiton, New London.

Hugh C. Shalvoy, Danbury.

Edward W. Broder, Hartford.

**DELAWARE.**

**LABOR COMMISSION:**

Charles Warner, chairman, I. O. O. F. Building, Wilmington.

John H. Hickey, 1225 West Fourth Street, Wilmington.

Thomas C. Frame, Dover.

George A. Hill, Bridgeville.

Miss Helen S. Garrett, secretary, 1505 Broome Street, Wilmington.

Address of commission: Wilmington.

**Child-labor division:**

Charles H. Grantland, chief, 491 Du Pont Building, Wilmington.

**Women's-labor division:**

Idabelle Stevenson, assistant, 491 Du Pont Building, Wilmington.

**INSPECTOR OF CANNERIES:**

Dr. William R. Messick, Lewes.

**INDUSTRIAL ACCIDENT BOARD:**

(Compensation act creating industrial accident board passed by the 1917 legislature, but no appointments have yet been made.)

**FLORIDA.**

**OFFICE OF STATE LABOR INSPECTOR:**

J. C. Privett, State labor inspector, Room 6, Baldwin Building, Jacksonville.

**GEORGIA.**

**DEPARTMENT OF COMMERCE AND LABOR:**

H. M. Stanley, commissioner, Atlanta.

**HAWAII.**

**DEPARTMENT OF IMMIGRATION, LABOR, AND STATISTICS:**

Ralph Kearns, commissioner, Honolulu.

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## 172 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

### INDUSTRIAL ACCIDENT BOARDS:

County of Hawaii:

H. B. Elliot, chairman, Hilo.

County of Maui:

William A. McKay, chairman, Wailuku, Maui.

County of Oahu:

A. J. Campbell, chairman, Oahu.

County of Kauai:

J. M. Lydgate, chairman, Kauai.

### IDAHO.

### BUREAU OF IMMIGRATION, LABOR, AND STATISTICS:

(No appropriation for past five years; matters in its jurisdiction handled by farm-markets department, the address of which is Boise.)

### LABOR COMMISSION (for the adjustment of labor disputes):

W. J. A. McVety, Boise.

A. W. Laird, Potlatch.

### INDUSTRIAL ACCIDENT COMMISSION.

(Created by act of 1917. Three commissioners, to take office Jan. 1, 1918, not yet appointed.)

### MINIMUM WAGE COMMISSION:

Harry W. Fulton, chairman, Boise.

Mrs. Theresa Graham, Coeur d'Alene.

George E. Hill, Rigby.

### ILLINOIS.

### DEPARTMENT OF LABOR:

Barney Cohen, director.

Address of department: Springfield.

### Free employment offices:

W. G. Lewman, superintendent, Danville.

(Bureaus located at Chicago, East St. Louis, Peoria, Rock Island, Moline, Rockford, and Springfield.)

### Industrial board:

Charles S. Andrus, chairman.

Peter J. Angsten, } representing the employer.

O. N. Custer, }

Robert Eadie, } representing the employee.

J. A. Culp, }

Address of board: City Hall Square Building, Chicago.

(Formerly an independent commission of three members; increased to five members.)

### Division of factory inspection:

Robert S. Jones, chief, Chicago.

(Department of labor created by consolidation bill of Gov. Lowden, effective July 1, 1917, which consolidates the bureau of labor statistics, the free employment offices, supervision of private employment agencies, department of factory inspection, the industrial board, and the board of arbitration.



# INDIANA.

## BUREAU OF STATISTICS:

Henry A. Roberts, chief, Indianapolis.

## Public employment bureaus:

Henry A. Roberts, chief, bureau of statistics, Indianapolis.

(Bureaus located at Evansville, Fort Wayne, Indianapolis, South Bend, and Terre Haute.)

## INDUSTRIAL BOARD:

Samuel R. Artman, chairman.

Edgar Perkins, member.

Charles R. Hughes, member.

Howe S. Landers, secretary.

Address of board: Rooms 31-34, State capitol, Indianapolis.

## Factory-inspection department:

John J. Walsh, chief factory inspector, Indianapolis.

# IOWA.

## BUREAU OF LABOR STATISTICS:

A. L. Urick, commissioner, Des Moines.

## Public employment bureau:

John C. Nietzel, chief clerk, Des Moines.

## WORKMEN'S COMPENSATION SERVICE:

A. B. Funk, industrial commissioner.

Chesla C. Sherlock, secretary.

Dr. Oliver J. Fay, medical advisor, Equitable Building, Des Moines.

Address: Statehouse, Des Moines.

# KANSAS.

## DEPARTMENT OF LABOR AND INDUSTRY:

P. J. McBride, commissioner, statehouse, Topeka.

## Free employment office:

P. J. McBride, director, statehouse, Topeka.

## INDUSTRIAL WELFARE COMMISSION:

P. J. McBride, chairman.

Mrs. A. C. Mitchell, 821 Mississippi Street, Lawrence.

John Craddock, Weir.

Miss Linna E. Bresette, Topeka.

Address of commission: State capitol, Topeka.

# KENTUCKY.

## DEPARTMENT OF AGRICULTURE, LABOR, AND STATISTICS:

Mat S. Cohen, commissioner of agriculture and labor, Frankfort.

Jack Nelson, State labor inspector, Paducah.

## WORKMEN'S COMPENSATION BOARD:

R. T. Caldwell, chairman, Gaylord Building, Ashland.

S. W. Hager, U. S. Trust Building, Louisville.

R. C. P. Thomas, Neale Building, Bowling Green.

Alexander Gilmour, secretary, Frankfort.

Dr. Milton Board, medical director, 54 U. S. Trust Building, Louisville.

Address of board: Frankfort.

LOUISIANA.

BUREAU OF LABOR INDUSTRIAL STATISTICS:

Frank E. Wood, commissioner, suite 626 Audubon Building, New Orleans.

Mrs. Martha D. Gould, factory inspector of Orleans Parish, room 11, City Hall, New Orleans.

MAINE.

DEPARTMENT OF LABOR AND INDUSTRY:

Roscoe A. Eddy, commissioner of labor and industry and State factory inspector, Augusta.

INDUSTRIAL ACCIDENT COMMISSION:

Eben F. Littlefield, chairman.

E. J. Carter (ex officio insurance commissioner).

R. G. Eddy (ex officio).

H. H. Thurlough, secretary.

Address of commission: Augusta.

STATE BOARD OF CONCILIATION AND ARBITRATION:

Maj. Frederick Bogue, chairman, East Machias.

Reginald Ingalls, Bar Harbor.

Alden M. Flagg, secretary, Auburn.

Address of board: Auburn.

MARYLAND.

STATE BOARD OF LABOR AND STATISTICS:

Charles J. Fox, chairman, Orangeville, Baltimore County.

Dr. Samuel A. Keene, advisory member, 914 North Fulton Avenue, Baltimore.

Harry C. Willis, advisory member, Worton.

Address of commission: 300 Equitable Building, Baltimore.

(State board of labor and statistics created by legislature of 1916.

Took over powers and duties of bureau of statistics and information, women's ten-hour bureau, and arbitration of disputes.)

STATE INDUSTRIAL ACCIDENT COMMISSION:

John Milton Reifsnider, chairman.

Charles D. Wagaman.

James Higgins.

Howard C. Hill, secretary.

Dr. Robert P. Bay, chief medical examiner, The Walbert, Baltimore.

Address of commission: Equitable Building, Baltimore.

MASSACHUSETTS.

BUREAU OF STATISTICS:

Charles F. Gettemy, director, Boston.

Free employment offices:

Charles F. Gettemy, director, Boston.

(Bureaus located at Boston, Worcester, and Springfield.)

STATE BOARD OF LABOR AND INDUSTRIES:

Alfred W. Donovan, chairman.

John F. Tobin.

Mrs. Davis R. Dewey.

Samuel Ross.

Alfred H. Quessy, M. D.

Edwin Mulready, commissioner of labor and executive officer of board.

Address of board: New Albion Building, 1 Beacon Street, Boston.

INDUSTRIAL ACCIDENT BOARD:

William W. Kennard, chairman.

Frank J. Donahue.

David T. Dickinson.

Joseph A. Parks.

Thomas F. Boyle.

Chester E. Gleason.

John H. Cogswell.

Robert E. Grandfield, secretary.

Francis D. Donoghue, M. D., medical advisor.

Address of board: New Albion Building, 1 Beacon Street, Boston.

STATE BOARD OF CONCILIATION AND ARBITRATION:

Willard Howland, chairman, Chelsea.

Charles G. Wood, Concord. (Term expired in June; successor not yet appointed.)

Frank M. Bump, Raynham.

Bernard F. Supple, secretary, Boston.

Address of board: Room 126, Statehouse, Boston.

MINIMUM WAGE COMMISSION:

Edwin N. Bartlett, chairman.

Mabel Gillespie.

Arthur N. Holcombe.

Ellen Nathalie Matthews, secretary.

Address of commission: Room 911, New Albion Building, 1 Beacon Street, Boston.

MICHIGAN.

DEPARTMENT OF LABOR:

R. H. Fletcher, commissioner, Lansing.

Public employment bureaus:

R. H. Fletcher, commissioner, Lansing.

(Bureaus located at Battle Creek, Bay City, Detroit, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Muskegon, and Saginaw.)

INDUSTRIAL ACCIDENT BOARD:

William M. Smith, chairman, St. Johns.

Thomas B. Gloster, member, Detroit.

James A. Kennedy, member, Lansing.

Gilbert W. Dickson, secretary, Detroit.

Address of board: Lansing.

COMMISSIONER OF MEDIATION AND CONCILIATION:

Herbert E. Powell, Ionia.

MINNESOTA.

DEPARTMENT OF LABOR AND INDUSTRIES:

W. F. Houk, commissioner, St. Paul.

Public employment bureaus:

Don D. Lescossier, director of employment.

(Employment bureaus located at Duluth, Minneapolis, and St. Paul.)

Bureau of women and children:

Agnes L. Peterson, superintendent, St. Paul.

STATE BOARD OF ARBITRATION:

Robert F. Pack, 15 Fifth Street south, Minneapolis.

Raymond F. Schroeder, 47 Courthouse, St. Paul.

(One vacancy.)

MINIMUM WAGE COMMISSION:

(Minimum wage act held unconstitutional by district court Nov. 23, 1913, and the commission was restrained from performing any official act. Terms of original members expired Jan. 1, 1915, and no new appointments have been made.)

MISSOURI.

BUREAU OF LABOR STATISTICS:

William H. Lewis, commissioner.

Address of bureau: Jefferson City.

Free employment department:

William H. Lewis, commissioner.

(Conducts free employment bureaus in St. Louis, Kansas City, and St. Joseph.)

DEPARTMENT OF FACTORY INSPECTION:

A. Sidney Johnston, chief inspector, Boatmen's Bank Building, St. Louis.

STATE BOARD OF MEDIATION AND CONCILIATION:

(Provided for by law, but no board appointed and no appropriation.)

MONTANA.

DEPARTMENT OF LABOR AND INDUSTRY:

W. J. Swindlehurst, commissioner, Helena.

INDUSTRIAL ACCIDENT BOARD:

A. E. Spriggs, chairman.

Rufus G. Poland (ex officio), State auditor.

W. J. Swindlehurst (ex officio).

G. G. Watt, secretary.

Address of board: Helena.

NEBRASKA.

DEPARTMENT OF LABOR:

George E. Norman, deputy commissioner of labor and deputy compensation commissioner.

Address of department: Lincoln.

Free employment bureau:

George E. Norman, deputy commissioner of labor.

BOARD OF MEDIATION AND INVESTIGATION:

Robert Cowell, Omaha.

T. P. Reynolds, Omaha.

A. J. Sawyer, Lincoln.

MINIMUM WAGE COMMISSION:

George E. Norman, Lincoln.

Anna L. Hawes, Lincoln.

NEVADA.

LABOR COMMISSIONER'S OFFICE:

William E. Wallace, labor commissioner, Carson City.

INDUSTRIAL COMMISSION:

George D. Smith, chairman, Carson City.

H. A. Lemmon, commissioner, Reno.

William E. Wallace, commissioner, Carson City.

Dr. Donald McLean, chief medical adviser, Carson City.

Address of commission: Carson City.

NEW HAMPSHIRE.

BUREAU OF LABOR:

John S. B. Davie, labor commissioner, Concord.

STATE BOARD OF CONCILIATION AND ARBITRATION:

John H. Neal, chairman, Portsmouth.

George A. Tenney (employers' representative), Claremont.

Michael F. Connelly (representative of labor), 97 Bridge Street, Manchester.

NEW JERSEY.

DEPARTMENT OF LABOR:

Lewis T. Bryant, commissioner, Trenton.

Employment bureau:

Joseph Spitz, director, Trenton.

(Bureaus established at Newark, Jersey City, and East Orange.)

Bureau of industrial statistics:

James T. Morgan, chief, Trenton.

Bureau of electrical equipment:

Rowland H. Leveridge, chief.

Bureau of hygiene and sanitation:

John Roach, chief.

Inspection bureau:

John I. Holt, assistant commissioner, Trenton.

Bureau of structural inspection:

Charles H. Weeks, chief, Trenton.

Workmen's compensation bureau:

William E. Stubbs, secretary.

Address of bureau: Statehouse, Trenton.



NEW YORK.

INDUSTRIAL COMMISSION:

John Mitchell, chairman, Mount Vernon.

Louis Wiard, Batavia.

Henry D. Sayer, Richmond Hill.

Edward P. Lyon, Brooklyn.

James M. Lynch, Syracuse.

William S. Coffey, secretary.

Address of commission: General offices, State capitol, Albany;  
executive offices, 230 Fifth Avenue, New York.

Industrial council:

Henry D. Sayer, chairman.

Edward J. Barcalo, Buffalo.

Carleton A. Chase, Syracuse.

Richard H. Curran, Rochester.

G. E. Emmons, Schenectady.

James P. Holland, New York City.

Richard C. Stofer, Norwich.

Thomas M. Gafney, Syracuse.

Melinda Scott, New York City.

M. H. Christopherson, Yonkers.

William S. Coffey, secretary.

Bureau of employment:

Charles B. Barnes, director, 230 Fifth Avenue, New York.

(Employment bureaus established at Albany, Brooklyn, Buffalo,  
Rochester, and Syracuse.)

Bureau of statistics and information:

Leonard W. Hatch, chief statistician, State capitol, Albany.

Bureau of industries and immigration:

Marian K. Clark, chief investigator, 230 Fifth Avenue, New York.

Bureau of inspection:

James L. Gernon, first deputy commissioner, State capitol, Albany;  
230 Fifth Avenue, New York.

Bureau of workmen's compensation:

William C. Archer, second deputy commissioner.

Dr. Raphael Lewy, chief medical examiner, 230 Fifth Avenue, New York.

Bureau of mediation and arbitration:

Frank B. Thorn, third deputy commissioner, State capitol, Albany.

Bureau of industrial code:

Richard J. Cullen and T. C. Eipper, deputy commissioners.

NORTH CAROLINA.

DEPARTMENT OF LABOR AND PRINTING:

M. L. Shipman, commissioner, Raleigh.

NORTH DAKOTA.

DEPARTMENT OF AGRICULTURE AND LABOR:

J. N. Hagan, commissioner, Bismarck.

# OHIO.

## INDUSTRIAL COMMISSION:

(Vacancy.)

Herbert L. Eliot.

T. J. Duffy.

Robert S. Hayes, secretary.

Address of commission: Columbus.

## Division of workshops and factories:

Thomas P. Kearns, chief deputy.

Victor T. Noonan, director of safety.

## Division of statistics and mediation:

George F. Miles, chief.

## Public employment offices:

C. H. Mayhugh, director.

(Offices in Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown. In addition to the State branch of the National Council of Defense maintains employment offices in Athens, Canton, Chillicothe, Hamilton, Lima, Mansfield, Marietta, Marion, Portsmouth, Springfield, Steubenville, Tiffin, Washington Court-house, and Zanesville.)

## Workmen's compensation:

H. H. Hamm, director of claims.

E. E. Watson, chief actuary.

W. H. White, M. D., chief medical examiner.

# OKLAHOMA.

## DEPARTMENT OF LABOR:

W. G. Ashton, commissioner, Oklahoma City.

## Employment bureaus:

W. O. Hudson, statistician.

(Bureaus at Enid, Muskogee, Oklahoma City, and Tulsa.)

## INDUSTRIAL COMMISSION:

A. A. McDonald, chairman.

W. C. Jackson.

M. J. Williams.

W. P. Miller, secretary.

Dr. LeRoy Long, medical advisor, 608 Colcord Building, Oklahoma City.

Address of commission: Oklahoma City.

## STATE BOARD OF ARBITRATION:

(No appointments made.)

# OREGON.

## BUREAU OF LABOR:

O. P. Hoff, commissioner and factory inspector, Salem.

## BOARD OF INSPECTORS OF CHILD LABOR:

Stephen G. Smith, chairman, 65-67 Broadway, Portland.

Mrs. Millie R. Trumbull, secretary, courthouse, Portland.

Mrs. Sarah A. Evans, Portland.

Mrs. Turner Oliver, La Grande.

Miss Pauline Kline, Corvallis.

Address of board: Courthouse, Portland.

STATE INDUSTRIAL ACCIDENT COMMISSION:

Harvey Beckwith, chairman.

William A. Marshall.

Wilford Allen.

Address of commission: Salem.

INDUSTRIAL WELFARE COMMISSION:

E. B. MacNaughton, chairman.

Miss Margaret E. Howatson.

Amedee M. Smith.

O. P. Hoff (ex officio), secretary.

Address of commission: 646-648 Courthouse, Portland.

PENNSYLVANIA.

DEPARTMENT OF LABOR AND INDUSTRY:

John Price Jackson, commissioner, Harrisburg.

Bureau of employment:

Jacob Lightner, director.

(Employment bureaus at Altoona, Harrisburg, Johnstown, Philadelphia, and Pittsburgh.)

Address of bureau: 143 North Fourth Street, Harrisburg.

Industrial board:

John Price Jackson, chairman.

Otto T. Mallery, Philadelphia.

Mrs. Samuel Semple, Titusville.

William Young, Philadelphia.

A. L. Garver, M. D., Roaring Springs.

William Lauder, secretary, Riddlesburg.

Address of board: Masonic Temple, Harrisburg.

Bureau of statistics and information:

(Vacancy), chief.

Wilson I. Fleming, assistant chief.

Address of bureau: State capitol, Harrisburg.

Division of hygiene and engineering:

F. D. Patterson, M. D., chief.

Bureau of inspection:

Lew R. Palmer, chief, State capitol, Harrisburg.

Bureau of workmen's compensation:

Harry A. Mackey, chairman, Philadelphia.

James W. Leech, Ebensburg.

John A. Scott, Indiana.

John Price Jackson, commissioner, Harrisburg.

Lee Soloman, secretary, Philadelphia.

Address of bureau: Masonic Temple, Harrisburg.

Bureau of mediation and arbitration:

Patrick Gilday, chief, State capitol, Harrisburg.

PHILIPPINE ISLANDS.

BUREAU OF LABOR:

Bernardino G. Monreal, director.

Faustino Aguilar, assistant director.

Address of bureau: Manila.

**PORTO RICO.**

**BUREAU OF LABOR:**

Carmelo Honoré, acting chief, San Juan.

**WORKMAN'S RELIEF COMMISSION:**

Chas. F. Hill, chairman.

Manuel Camuñas, chairman pro tempore.

W. F. Lippitt, member.

Dr. A. Martinez Alvarez, secretary.

Address of commission: San Juan.

**RHODE ISLAND.**

**BUREAU OF INDUSTRIAL STATISTICS:**

G. H. Webb, commissioner, Providence.

**OFFICE OF FACTORY INSPECTORS:**

J. Ellery Hudson, chief inspector.

Address: Statehouse, Providence.

**SOUTH CAROLINA.**

**DEPARTMENT OF AGRICULTURE, COMMERCE, AND INDUSTRIES:**

E. J. Watson, commissioner.

Address of department: Columbia.

**BOARD OF CONCILIATION AND ARBITRATION:**

John A. Law, chairman, Spartanburg.

John L. Davis, secretary, Columbia.

I. H. Hunt, Newberry.

**SOUTH DAKOTA.**

**COMMISSIONER OF IMMIGRATION AND STATE INDUSTRIAL COMMISSIONER:**

Charles McCaffree, Pierre.

**TENNESSEE.**

**DEPARTMENT OF WORKSHOP AND FACTORY INSPECTION:**

W. L. Mitchell, chief inspector, Nashville.

**TEXAS.**

**BUREAU OF LABOR STATISTICS:**

C. W. Woodman, commissioner, Austin.

**INDUSTRIAL ACCIDENT BOARD:**

T. H. McGregor, chairman.

J. H. Fowler.

J. H. Fricke.

Charles E. McMordie, secretary.

Address of board: Austin.

**UTAH.**

**INDUSTRIAL COMMISSION:**

P. A. Thatcher, chairman.

Harrison E. Jenkins, commissioner.

W. M. Knerr, commissioner.

F. D. Brown, secretary.

Address of commission: Capitol Building, Salt Lake City.

(Established by an act passed March 8, 1917. Takes over duties of the Bureau of Immigration, Labor, and Statistics and of the Board of Labor, Conciliation, and Arbitration.)

VERMONT.

COMMISSIONER OF INDUSTRIES:

Robert W. Simonds, Montpelier.

(Created in lieu of industrial accident board and factory inspection office by legislature of 1917.)

STATE BOARD OF CONCILIATION AND ARBITRATION:

Henry C. Brislin, Rutland.

George O. Gridley, Windsor.

VIRGINIA.

BUREAU OF LABOR AND INDUSTRIAL STATISTICS:

J. B. Doherty, commissioner, Richmond.

WASHINGTON.

BUREAU OF LABOR:

C. H. Younger, commissioner, Olympia.

INDUSTRIAL INSURANCE DEPARTMENT:

John M. Wilson, chairman.

J. W. Brislawn.

H. L. Hughes.

P. Gilbert, secretary.

Dr. J. W. Mowell, chief medical advisor, Olympia.

Address of department: Olympia.

INDUSTRIAL WELFARE COMMISSION:

Mrs. Jackson Silbaugh, chairman, 1313 Sunset Ave., Seattle.

M. H. Marvin, 908 South Fifth Street, Tacoma.

Mrs. W. H. Udall, 817 South L Street, Tacoma.

C. H. Younger, commissioner of labor and ex-officio member of the commission, Olympia.

(One vacancy existing.)

Mrs. Frances K. Headlee, secretary.

Address of commission: Olympia.

WEST VIRGINIA.

BUREAU OF LABOR:

Samuel B. Montgomery, commissioner, Charleston.

STATE COMPENSATION COMMISSIONER:

Lee Ott, commissioner.

C. L. Topping, secretary.

M. V. Godby, chief medical examiner, Charleston.

WISCONSIN.

INDUSTRIAL COMMISSION:

George P. Hambrecht, chairman.

Thomas F. Konop.

Fred M. Wilcox.

E. E. Witte, secretary.

Address of commission: Madison.

(Public employment offices are maintained in Milwaukee, La Crosse, Oshkosh, and Superior.)



WYOMING.

COMMISSIONER OF LABOR AND STATISTICS:

Ed. P. Taylor, commissioner, Cheyenne.

COMPENSATION COMMISSIONER:

State treasurer, Herman B. Gates, Cheyenne.

Miss Eunice Andersen, secretary, Box 617, Cheyenne.

THE DOMINION OF CANADA.

DEPARTMENT OF LABOR:

Hon. T. W. Crothers, K. C., M. P., minister.

F. A. Acland, deputy minister, editor of Labor Gazette.

Bryce M. Stewart, chief of statistics and associate editor of Labor Gazette.

Address: Ottawa.

(Administers the conciliation and labor act, the industrial disputes investigation act, 1907, the combines investigation act; fixes fair wage schedules to be inserted in Government contracts; collects and classifies statistical and other information relating to conditions of labor, and publishes monthly The Labour Gazette and periodically special bulletins on trade and labor conditions, prices, labor legislation, etc.)

THE PROVINCES.

ALBERTA.

BUREAU OF LABOR:

(Under the auspices of the department of agriculture, Edmonton.)

BRITISH COLUMBIA.

DEPARTMENT OF LABOR:

Hon. J. W. de B. Farris, minister, Victoria.

(Department is now in the process of organization.)

FACTORY INSPECTOR:

C. R. Gordon, chief inspector, courthouse, Vancouver.

WORKMEN'S COMPENSATION BOARD:

E. S. H. Winn, chairman, Victoria.

Parker Williams, Victoria.

Hugh B. Gilmour, Victoria.

MANITOBA.

BUREAU OF LABOR:

E. McGrath, secretary, Winnipeg.

Factory inspectors:

John Carroll.

Ida H. Bauslaugh.

FAIR WAGE BOARD:

S. G. Oxtou, chairman, deputy minister of public works, Winnipeg.

W. J. Davidson, Winnipeg.

George Armstrong, Winnipeg.

WORKMEN'S COMPENSATION BOARD:

H. G. Wilson, commissioner, Winnipeg.

William Neill, secretary, Winnipeg.

NEW BRUNSWICK.

FACTORY COMMISSION:

Kilgour Shives, Campbellton.

Emma S. Fiske, St. John.

Michael Kelly, St. John.

Charles McDonald, St. John.

INSPECTION OF FACTORIES AND HOTELS:

James Kenny, St. John.

NOVA SCOTIA.

FACTORY AND MINES INSPECTION (under department of public works):

H. Donkin, C. E., deputy minister, Halifax.

Phillip Ring, factory inspector, department of public works, Halifax.

WORKMEN'S COMPENSATION BOARD:

V. J. Paton, K. C., chairman, Halifax.

Fred W. Armstrong, Halifax.

John T. Joy, Halifax.

ONTARIO.

TRADES AND LABOR BRANCH (department of public works):

Walter A. Riddell, M. A., Ph. D., superintendent, Toronto.

FACTORY AND ACCIDENT INSPECTION:

Factory, shop, and office inspection branch:

James T. Burke, chief inspector, Toronto.

WORKMEN'S COMPENSATION BOARD:

Samuel Price, chairman, Toronto.

A. W. Wright, vice chairman, Toronto.

George A. Kingston, commissioner.

J. M. McCutcheon, secretary, Toronto.

QUEBEC.

INSPECTION OF INDUSTRIAL ESTABLISHMENTS AND PUBLIC BUILDINGS (under department of public works, Hon. L. A. Taschereau, minister):

Louis Guyon, chief inspector, 9 St. John Street, Montreal.

REGISTRAR OF BOARDS OF CONCILIATION AND ARBITRATION:

Felix Marois, department of public works, Quebec.

SASKATCHEWAN.

BUREAU OF LABOR (under department of agriculture):

Thomas Molloy, secretary, Regina.

# BUREAUS OF LABOR IN FOREIGN COUNTRIES.

Country.	Name of bureau.	Chief official.	Location of bureau.	Title of publication.	Frequency of issue.
Argentina....	Departamento Nacional del Trabajo.	Presidente..	Buenos Aires.	Boletín del Departamento Nacional del Trabajo.	Monthly.
Australia....	Labor and Industrial Branch (Bureau of Census and Statistics, Department of Home Affairs).	Commonwealth Statistician.	Melbourne..	Labour Bulletin...	Quarterly.
New South Wales.	Department of Labor and Industry.	Minister of Labor and Industry.	Sydney....	New South Wales Industrial Gazette.	Monthly.
Queensland	Department of Labor....	Director....	Brisbane....	.....	Do.
Austria.....	K. K. Arbeitsstatistisches Amt im Handelsministerium.	Vorstand....	Vienna.....	Soziale Rundschau	Do.
Belgium.....	Office du Travail (Ministère de l'Industrie et du Travail).	Directeur Général.	Brussels....	Revue du Travail.	Do.
Brazil.....	Ministerio da Agricultura, Industria e Commercio.	Ministro....	Rio de Janeiro.	.....	Do.
Canada.....	Department of Labor....	Minister of Labor.	Ottawa....	Labour Gazette...	Do.
Ontario.....	Bureau of Labor (Department of Public Works).	Secretary....	Toronto....	.....	Do.
Chile.....	Oficina de Estadística del Trabajo.	Jefe.....	Santiago....	Boletín de la Oficina del Trabajo.	Do.
Denmark....	Direktoratet for arbejds, og fabriktilsynet.	Direktor....	Copenhagen.	.....	Do.
Ecuador.....	Departamento de Obras Públicas.	Director general.	.....	.....	Do.
Finland.....	Industriстыrelsen (Kejsersliga Senaten).	Direktor....	Helsingfors..	Arbetsstatistisk Tidskrift.	Bimonthly.
France.....	Office du Travail (Ministère du Travail et de la Prévoyance Sociale).	Directeur...	Paris.....	Bulletin du Ministère du Travail et de la Prévoyance Sociale.	Monthly.
Germany.....	Abteilung für Arbeiterstatistik, Kaiserliches Statistisches Amt (Ministerium des Innern).	Präsident...	Berlin.....	Reichsarbeitsblatt.	Do.
Great Britain	Department of Labor Statistics (Board of Trade).	Director....	London....	Board of Trade Labour Gazette.	Do.
Greece.....	Division of Labor and Social Welfare (Department of Industry) (Tmema Ergasias Kai Koinonikes Pronoias—Upourgeo tes Ethnikes Oikonomias).	.....	Athens....	.....	Do.
Italy.....	Ufficio del Lavoro (Ministero per l'Industria, il Commercio e il Lavoro).	Direttore Generale.	Rome.....	Bollettino dell'Ufficio del Lavoro.	Monthly, semi-monthly.
	Ufficio Provinciale del Lavoro.	Deputato Provinciale.	Milan.....	.....	
Mexico.....	Departamento del Trabajo	.....	Mexico City.	Boletín del Departamento del Trabajo.	Monthly.
Netherlands..	Directie van den Arbeid (Department van Landbouw, Nijverheid en Handel).	Directeur Generaal.	The Hague..	.....	Do.
New Zealand.	Department of Labour....	Minister of Labour.	Wellington..	Journal of the Department of Labour.	Monthly.
Norway.....	Socialavdelingen (Departementet for Sociale Saker, Handel, Industri og fiskeri).	Direktor....	Christiania..	Sociale Meddelelser	Bimonthly
Peru.....	Dirección de Obras Públicas, Ministerio de Fomento.	Director....	Lima.....	.....	Do.
Porto Rico...	Negociado del Trabajo....	Jefe.....	San Juan....	Boletín.....	Irregular.
Portugal.....	República do Trabalho Industrial (Direcção geral do Comercio e industria), Ministerio do Fomento.	.....	Lisbon....	Boletim do Trabalho Industrial.	Do.
Roumania....	(1).....	.....	.....	.....	.....

<sup>1</sup> A general ministry of commerce and industry.

## BUREAUS OF LABOR IN FOREIGN COUNTRIES—Concluded.

Country.	Name of bureau.	Chief official.	Location of bureau.	Title of publication.	Frequency of issue.
Serbia.....	Section for Industry, Trade, and Social Legislation (Ministry of Political Economy) (Ministar Narodne Privrede).	.....	Belgrade.....	.....	.....
South Africa... Spain.....	<sup>(1)</sup> ..... Instituto de Reformas Sociales.	Secretario General.	Madrid.....	Boletín del Instituto de Reformas Sociales.	Monthly.
Do.....	Dirección General de Comercio, Industria y Trabajo.	Director.....	do.....	Boletín Oficial de Comercio, Industria y Trabajo.	Do.
Sweden.....	K. K. Socialstyrelsen.....	Direktor....	Stockholm..	Sociala Meddelanden.	Do.
Switzerland...	Secrétariat Ouvrier Suisse (semioficial).	Secrétaire...	Zurich.....	.....	.....
Uruguay.....	Oficina del Trabajo (Ministero de Industrias, Trabajo e Instrucción Publica).	.....	Montevideo.	Boletín de la Oficina del Trabajo.	Quarterly.
International..	International Labor Office.	Director....	Basel, Switzerland.	Bulletin.....	Irregular.

<sup>1</sup> Only a public employment office (labor department) in the ministry of mines and industry.

# VOCATIONAL EDUCATION AND EMPLOYMENT OF THE HANDICAPPED, WITH SPECIAL REFERENCE TO CRIPPLED SOLDIERS.

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Recalled to Life, no. 1, June, 1917. p. 130-186.  
Report by the Intelligence Department of the Local Government Board.
- Workshop for the crippled.  
Journal of the American Medical Association, May 26, 1917. v. 68: 1568.  
Brief account of the Union of the Foreign Colonies of France and the institution for crippled soldiers at Grand Palais.



Würtz, Hans. Die Erwerbschule.

Monatsblätter für invaliden und krüppelhilfe, 1915. hft. 1, p. 6-10.

— Krüppeltum und Lebensfreude.

Zeitschrift für Krüppelfürsorge, Hamburg, 1913, v. 6: 83-93.

A pedagogic treatise showing the necessity of instilling the cripple above all with love for life and work in order to make him a useful member of society.

— Das Künstlerische Moment im Unterricht und in der Ausbildung der Krüppel.

Zeitschrift für Krüppelfürsorge, Hamburg, 1912. v. 5: 167-174.

— Die Selbsttätigkeit als Prinzip in der Krüppelerziehung.

Zeitschrift für Krüppelfürsorge, Hamburg, 1913. v. 6: 182-199.

— Die Schulabteilung der Berlin-Brandenburgischen Krüppel-Heil und Erziehungs-Anstalt.

Zeitschrift für Krüppelfürsorge, Hamburg, 1913. v. 6: 139, 146.

— Der Wille siegt. Ein pädagogisch-kultureller Beitrag zur Kriegskrüppelfürsorge. Berlin, 1915.

Zichy, Geza Graf. Das Buch des Einarmigen. Ratschläge zur Aneignung der Fähigkeit, mit einer Hand selbständig zu werden. 3. Aufl. Stuttgart, 1915.

Zehrfeld. Wohlfahrtseinrichtungen; soziale und wirtschaftliche Fragen der Kriegsbeschädigtenfürsorge.

Soziale Kultur, August-September, 1915. v. 35: 488-491.

#### GENERAL REFERENCES.

Charities and Commons, Feb. 3, 1906.

Devoted principally to problems of employment of the adult blind.

The American Journal of Care for Cripples.

"The literature on the subject is scanty and scattered and much of it available only in foreign languages. This Journal aims to make available significant and authoritative literature dealing with provision for war cripples. The foreign material will appear in English translation."— (Statement by the editor, D. C. McMurtrie, in the June, 1917, issue.)

The most pertinent articles, v. 1, June, 1917, are included in this bibliography.

Recalled to Life. No. 1, June, 1917, to date. London, Bale.

A journal devoted to the care, reeducation, and return to civil life of disabled sailors and soldiers, edited by Lord Charnwood.

Current numbers of the following periodicals contain much pertinent material:

Lancet. 1917. See index. Almost every number contains paragraph or more on progress of movement.

Journal of American Medical Association.

Association Nationale des Mutilés de la Guerre. Bulletin. Paris.

Der Blindenfreund. Issues since the war have been devoted almost exclusively to the subject.

Outlook for the Blind.

The Beacon.

The Survey.

Volta Review.

American Annals of the Deaf.

Zeitschrift für Krüppelfürsorge.

## INDUSTRIAL NOTES.

**MORE WOMEN THAN MEN AT WORK IN GERMANY.**—A special census the first of March showed that in classified industries in Germany the number of men at work was 3,962,625 and the number of women at work was 3,973,457, as compared to an overplus of men in January of 10,050.

—*United States Commercial Attaché at Copenhagen, June 23, 1917.*

**INTERNATIONAL MOLDERS' UNION.**—In the quarterly report contained in the official journal of this organization for June, 1917, it is stated that from the first of the year to the end of June 5,077 members were initiated and 4,158 were reinstated. The death rate among members is said to be unusually high, and on the subject of sickness the report is as follows:

Trade conditions were never better and wages were never so high as during the months of April, May, and June, 1917, yet, notwithstanding these facts, we have paid to our members during the past three months the very large sum of \$50,657.80. This is the largest amount which has ever been paid in the same months of the year, with the exception of April, May, and June, 1904, in which quarter we paid out \$52,448, or \$1,790.20 more than in the quarter just past. For the first six months of this year the total sick benefits paid to our members is \$101,989.60, which makes the grand total paid since January 1, 1896, \$2,927,793.65.

—*International Molders' Journal, August, 1917.*

**INTERNATIONAL TYPOGRAPHICAL UNION.**—The following statistics are taken from the annual reports of the officers of the International Typographical Union for the year ending May 31, 1917:

Gross earnings of members, 12 months-----	\$66,652,431.00
Increase over preceding year-----	3,940,626.00
Average earnings per member, 12 months-----	1,086.43
Increase over preceding year-----	45.25
Old-age pensions paid, 12 months-----	351,505.00
Mortuary benefits paid, 12 months-----	298,476.88
Mortuary benefits paid beneficiaries of 42 members killed in the war-----	12,225.00
Cost of maintenance of Union Printers' Home, 12 months-----	123,146.76
New buildings, repairs, and improvements-----	32,239.61
Expenditures for strikes and lockouts during the year-----	4,684.50

—*Bulletin, International Typographical Union, August, 1917.*

**INCREASED EARNINGS IN THE PRINTING TRADE.**—Based on the old-age pension and mortuary assessments of the union, which are paid at the rate of a certain per cent on the earnings of the members, the average annual earnings per member of the International Typographical Union for the years 1909 to 1917 are computed to be as follows: 1909, \$897; 1910, \$953; 1911, \$974; 1912, \$992; 1913, \$1,023; 1914, \$1,042; 1915, \$1,026.51; 1916, \$1,041.18; 1917, \$1,086.43.

—*Supplement to Typographical Journal, August, 1917.*

**EIGHT-HOUR DAY FOR ALASKA.**—The Territory of Alaska has gone beyond any other State or Territory of the Union in the limitation of the hours of labor, an act of May 5, 1917, providing that "a period of employment for all wage earners and salary earners in the Territory of Alaska shall not exceed eight hours within any one calendar day, except in cases when life or property is in imminent danger."

**DISPUTES INVESTIGATION FOR HELENA, MONT.**—An agreement has been signed by the Employers' Association and the unions composing the Helena Trades and Labor Assembly and the Building Trades Council which provides that all grievances and disputes between employers and employed thereunder shall be referred to a committee of 12 men, representing equally the two sides, before any strike, boycott, secondary boycott, or similar action shall be taken or declared by either side and before any person or place shall be bannered or picketed. The parties affected shall enter into agreements governing working conditions and wage scales, ratified by the unions and the branch of the Employers' Association under which they come, and when so ratified the agreements shall be binding on all the members of the unions and the association affected.

—*American Federationist, July, 1917.*

**LABOR WAR PROBLEMS—BRITISH METHODS.**—The addresses delivered by Mr. James H. Thomas and Mr. C. W. Bowerman, prominent members of the British Commission to the United States, before the Committee on Labor of the Council of National Defense, are printed in full in the *American Federationist* (Washington, D. C.) for June. They describe the mobilization of labor for war service, labor conferences with the Government, the safeguarding of trade-union standards, and other phases of the cooperation which exists. Following the addresses the members of the committee were given the opportunity to ask questions, and Mr. Thomas, spokesman for the delegation, answered them at length. A verbatim report of this business of the meeting is appearing in subsequent issues of the magazine.

**STATE CONTROL OF COAL TRANSPORT IN GREAT BRITAIN.**—On the 8th of September there goes into effect in Great Britain a system of transporting coal by public railway for inland consumption, under

the direction of the controller of coal mines, which, it is estimated, will effect a saving in railway transport of not less than 700,000,000 ton-miles annually. As an organization designed to relieve transport, the scheme is based on the issues (1) that the consumption of coal should take place as near as possible to the producing point; (2) that the movement of traffic should follow the main trunk lines wherever possible and be in well-defined directions; (3) that an area producing less coal than suffices for its own needs should not send any to other areas; and (4) that one producing more than it requires should distribute it to adjacent or convenient areas.

—*Economist (London)*, July 14, 1917.

**MERCHANT SHIPBUILDING IN AUSTRALIA.**—It is probable that Australia will build its own merchant ships. The prime minister and the minister for the navy have had a conference with representatives of the industrial organizations interested in shipbuilding, and proposals made by the Government have been submitted to the labor unions. The most important questions to be decided have to do with piecework and the dilution of labor, that is, the employment of unskilled labor where necessary on account of shortage.

There is now on hand in Australia about 140,000,000 bushels of wheat, and the amount for the next three or four years in excess of Australia's requirements will fluctuate between 120,000,000 and 240,000,000 bushels.

—*Christian Science Monitor*, August 9, 1917.

**INCREASED SALARIES FOR GOVERNMENT EMPLOYEES IN FRANCE.**—A general demand for an augmentation of salary or an allowance to meet the increased cost of living during the war was made recently by the employees in the Government offices of France. The commission charged with the matter has drawn up a schedule based on the following scale: 1. Employees receiving less than 3,600 francs (\$694.80) per annum shall receive a daily allowance of 1.50 francs (\$0.29) a day for a period of one year; 2. Employees receiving between 3,600 and 5,000 francs (\$694.80 and \$965) shall receive an annual increase of 360 francs (\$69.48). The first of these increases will affect 354,000 employees and the second 16,000.

—*Annalist (New York)*, August 13, 1917.

## OFFICIAL PUBLICATIONS RELATING TO LABOR.

### UNITED STATES.

CONNECTICUT (HARTFORD).—*Juvenile Commission. Eighth annual report to the mayor and court of common council of the city of Hartford, Conn., for the year ending April 30, 1917. Hartford, 1917, 48 pp.*

Suggests very briefly the work being done by the commission in the interests of the children of Hartford. An appendix contains three addresses delivered at the annual conference relating to vocational education, held in Hartford on January 2, 1917, the subjects being, "Providing democratic opportunities in the high school," "Continuation classes in the Hartford public high school," and "Work among children in Hartford."

MAINE.—*Department of Labor and Industries. Excerpt from the third biennial report, 1915-16. Waterville, 1917. 83 pp.*

This report covers the work of the department from July 1, 1914, to July 1, 1916. It states that 10,923 industrial accidents were reported to the industrial accident commission since January 1, 1916, a special report of which will be published later; that the Maine "peonage" law should be repealed since "under its provisions hundreds of men have been convicted and forced to serve a sentence in jail for no offense other than being in debt;" that complaints have been received of employment agencies collecting fees in excess of those authorized by law for procuring employment; that progress since 1914 in improving factory conditions as respects danger of loss of life in case of fire or other disaster has been "very unsatisfactory;" that there have been only a few strikes of organized labor, and that the "wage earners of Maine have been employed more continuously at remunerative wages during the last two years than ever before."

A summary of six manufacturing industries shows a total of 73,368 males and 26,297 females employed in 1916, with a pay roll amounting to \$23,502,254.55. During the two-year period ending July 1, 1916, 2,057 industrial accidents (35 fatal), in which the disability exceeded six days, were reported by a large number of employers. More than half of the accidents as reported occurred in the paper and pulp industry, the number being 1,052 (51.1 per cent), while 12.6 per cent occurred in foundries, iron, steel, and metal products, 12 per cent in textile industries, and 11.7 per cent in the lumber industry. Fractures, bruises, crushings, lacerations, sprains, dislocations, burns, and scalds were responsible for about 72 per cent of all accidents reported. About 59 per cent of those injured were in the 21 to 40 age group.

The report contains a directory of trades-unions and similar organizations, the results of a study of employment of women in Maine stores, and a statement of child-labor conditions in the State (both of these latter being noted more fully on pages 117 to 119 of this issue of the MONTHLY REVIEW), and a report of the State board of arbitration and conciliation, which presents a brief history of certain industrial disputes but gives no summary of its activities.



MARYLAND.—*Industrial Accident Commission. Second annual report for the year November 1, 1915, to October 31, 1916. Baltimore [1917]. 62 pp.*

This report is noted on pages 110 to 113 of this issue of the MONTHLY REVIEW.  
—*State Board of Labor and Statistics. Industrial directory, 1917. Baltimore, [1917]. 133 pp.*

A list of the manufactories of the State by counties and Baltimore City, giving the names, street location, or post-office address of those engaged in the various manufacturing industries. The list includes 4,797 establishments in Baltimore employing an average of 111,585 wage earners and 2,295 establishments in the counties employing an average of 37,816 wage earners. The total value of the products of these factories is given as \$540,326,000.

MASSACHUSETTS.—*Bureau of Statistics. 16th Annual Report of Director of Labor Organizations in Massachusetts, 1917. Labor Bulletin No. 119 (being part 1 of the Annual Report of the Statistics of Labor for 1917). Boston, March 1st, 1917. 62 pp.*

This edition consists of four divisions: (1) National and international organizations, having one or more affiliated local unions in the United States; (2) State, district, and trade councils, consisting of organizations composed of delegates from local organizations within a particular trade or group of trades, or within a definite district comprising more than a single city or town; (3) central labor unions and local councils, composed of delegates from local unions in the same locality; (4) local trade-unions, composed of wage earners in a single locality directly associated in what may be called the "unit body" of organization.

NEVADA.—*The Labor Laws, compiled by the labor commissioner. Carson City, 1917. 52 pp.*

Contains all labor laws enacted up to March 27, 1917, with citations, and is issued in the belief that "this publication will give all interested in the work of this department an opportunity to acquaint themselves with the statutory provisions affecting the relation of employer and employee." There is an index.

NEW JERSEY.—*Thirteenth annual report of the board of tenement house supervision of New Jersey for the year 1916. Trenton, 1917. 45 pp. Illustrated.*

This report covers the year ending October 31, 1916. The report notes an increased willingness on the part of owners to comply with the tenement-house law, as shown by the fact that in 1915 service of final orders to secure compliance with the law was required in 65 per cent of the cases, while in 1916 such service was required in only 47 per cent of the cases, although the number of original notices was 46 per cent greater than in the preceding year. A statement of the outstanding activities of the board during the year includes the following:

Approved 556 plans for the construction or conversion of tenement houses and 230 plans for alterations.

Supervised the construction of 698 tenement houses constructed in accordance with the provisions of the tenement-house law. These buildings were erected at a cost of \$9,852,000, and furnish living accommodations for 6,240 families, or approximately 31,200 persons.

Made 19,462 inspections and reinspections of new-law tenement houses in process of construction.

Served 1,440 notices and 930 orders directing the removal of violations found in the construction of new-law tenements.

Made 56,772 inspections in the removal of old-building violations.

Served 17,477 notices and 9,008 orders for the removal of violations found to exist in old tenement houses.



Secured the removal of 62,717 violations charged against existing tenement houses.

Caused the complete removal of 87 back-yard privy vaults and the installation of 859 sanitary water closets.

Installed sash windows, measuring 3 by 5 feet, in the cross partitions of 3,811 interior rooms, so that dark rooms might borrow some degree of light and air from the adjoining rooms.

Caused lights to be kept burning in the halls of 320 tenement houses.

Caused the placing of sinks and running water in 491 tenement houses, the sink in each case being placed directly within the apartment.

Forced the cleaning of 1,670 back yards and the removal of rubbish therefrom; the cleaning of 68 stables and 10 chicken houses.

Brought about the cleaning and painting or whitewashing of the walls and ceilings of halls and stairs of 7,952 tenement houses, and the cleaning of the woodwork of the halls and stairs of 6,030 houses.

Caused the erection of fire escapes on 72 old tenement houses and 227 new tenement houses, a total of 299 tenement houses equipped with fire escapes during the year.

Investigated 1,666 complaints in all parts of the State.

Referred to the attorney general for prosecution 16 cases in which the owners of tenement houses had neglected or refused to comply with the law; in 8 of the cases judgment was secured.

Collected and turned over to the State treasurer \$200 in fines and \$41.87 in costs, a total of \$241.87.

The board recommends the enactment of legislation to strengthen the tenement-house law by providing, among other things, that the minimum floor area permitted in the living room of a new tenement house shall be 90 square feet; that sinks with running water shall be required within each apartment; that the minimum penalty prescribed for violations of the act shall be \$50; that, with certain exceptions, fire escapes shall be required on all tenement houses three stories or more in height. It is also proposed to extend the provisions of the act respecting the removal of privy vaults, school sinks, etc., to houses occupied by two families, and to make the terms of the act applicable to all buildings occupied or intended to be occupied by three or more families.

NEW YORK.—*Department of Labor. Industrial Commission. Hoods for removing dust, fumes, and gases. Special bulletin No. 82. May, 1917, prepared by the division of industrial hygiene. Albany, 1917. 23 pp. Illustrated.*

This bulletin is noted on pages 105 to 109 of this issue of the MONTHLY REVIEW.

OHIO.—*Industrial Commission. Department of investigation and statistics. Report No. 27. Work of the free labor exchanges of Ohio for the year ending June 30, 1916. Columbus, December 15, 1916. 60 pp.*

This report is noted on pages 156 to 158 of this issue of the MONTHLY REVIEW.

— *Industrial Commission. Department of investigation and statistics. Report No. 29. Infections following industrial accidents in Ohio. Columbus, March 1, 1917. 12 pp.*

This report is noted on pages 109 and 110 of this issue of the MONTHLY REVIEW.

#### FOREIGN COUNTRIES.

AUSTRALIA (NEW SOUTH WALES).—*Department of Mines. Annual report for the year 1916.*

According to this report the total aggregate value of the metals and minerals produced in 1916 was £10,975,742 (\$53,413,448.44), which is an increase of 9.1 per cent over the preceding year. The largest single mineral produced was coal, being 8,127,161 tons, valued at £3,336,419 (\$16,236,683). It is estimated that 31,304 persons found employment in and about the mines in 1916; of this number 16,892, or 54 per cent, were employed in connection with coal mines. Thirty-four fatal accidents are recorded—three less than in 1915. Of this

number 13 occurred at coal and shale mines and 14 at silver, lead, and zinc mines. Eighty-six persons were seriously injured (55 at coal mines). The number killed per 1,000 persons employed was 0.77 in coal mines and 1.46 in other mines, the fatality rate for all mines being 1.09. The accident rate for all mines was 3.83.

A report of the miners' accident relief fund shows 22,497 contributors during the year. The income amounted to £56,965 12s. 6d. (\$277,223.21), of which 38.5 per cent was received from employees, 19.8 per cent from owners, 19.8 per cent from the Government, and 21.8 per cent from other sources. The accidents reported to the fund during 1916 were 44 fatal and 3,939 nonfatal. This is 10 more fatal accidents than is reported as having occurred in mines during the year, the explanation probably being that these 10 actually occurred in the preceding year. The expenditures for the year included funeral allowances, £516 (\$2,511.11), relief paid to relatives of deceased persons, £18,726 (\$91,130.08), and relief paid to persons disabled, £32,239 (\$156,891.09). The allowances payable on December 31, 1916, in respect of fatal accidents and cases of permanent disablement were at the rate of £33,995 (\$165,436.67) per annum.

CANADA (ALBERTA).—*Department of Public Works. Annual report, 1916. Edmonton, 1917. 455 pp. Illustrated.*

One report included in this volume is that of the chief inspector of mines made under date of February 15, 1917. It is stated that the quantity of coal produced in 1916 by 279 mines exceeded the output in 1915 by 1,213,713 short tons, or an increase of 3.5 per cent. There were 7,570 employees in 1916, making a total of 614 tons mined per capita, which is an increase of 15.4 per cent over 1915. The report notes 20 fatal, 51 serious, and 34 slight accidents during 1916, a total of 105, or an increase of 25 per cent over the preceding year. For each fatal accident recorded 232,430 tons of coal were mined. These figures indicate an accident frequency rate of 13.87 and a fatality rate of 2.64 per 1,000 men employed. Seven of the fatal accidents are ascribable to haulage, while 20 of the nonfatal were due to haulage and 31 were due to falls of rock and coal. Sixty per cent of all accidents were due to these two causes. There were 38 prosecutions under the mines act and 36 convictions were secured, the penalties amounting to \$460.

GREAT BRITAIN.—*Board of Trade. Output of coal in the United Kingdom. London, 1917. 4 pp. Price 1d.*

This leaflet shows the estimated quantities of coal raised in the United Kingdom in each quarter of 1916 as compared with particulars for the corresponding periods of 1915 and 1914, the amount of time lost at coal mines through general holidays in 1914, 1915, and 1916, and the output, exports, and consumption of coal during 1913, 1914, 1915, and 1916. The total number of tons raised in 1916 was 255,846,000 as compared with 253,179,000 in 1915 and 265,643,000 in 1914. In 1916, 42,013,000 tons were exported.

— *Home Department. Summer time committee. Report of the committee appointed by the Secretary of State for the Home Department to inquire into the social and economic results of the summer time act, 1916, and to consider (i) whether it is advisable that summer time should be reintroduced in 1917 and in subsequent years, and if so (ii) whether any modifications in the arrangements are required, and (iii) between what dates summer time should be made operative. London, February 22, 1917. 23 pp. Price 3d.*

This report relates to the experience in Great Britain of the daylight-saving plan in operation in 1916 and concludes, from the evidence received from employers and from work people, that such plan is desirable, is beneficial to busi-

ness and to the home life from the standpoint of health and economy, and should be continued. Among the farmers only was there conflict of opinion as to the value of the daylight saving scheme, but in spite of the difficulties recorded, it appears that a very large majority of them favored the act. In fact, the committee sums up the evidence submitted to it by stating that the "vast preponderance of opinion throughout Great Britain is enthusiastically in favor of summer time and of its renewal—not only as a war measure, but as a permanent institution," and suggests that the period of operation should be from the second Sunday in April to the third Sunday in September of each year.

GREAT BRITAIN.—*Reports of the chief registrar of friendly societies for the year ending 31st December, 1915. Part B: Industrial and Provident Societies. London, 1917. x, 120 pp. Price 5s.*

—*Reports of the Chief Registrar of Friendly Societies for the year ending 31st December, 1916. Part A: General report. London, 1917. vii, 138 pp. Price 1s. 3d., net.*

NETHERLANDS.—*Department van Landbouw, Nijverheid en Handel. Overzicht van der Verslagen der Kamers van Arbeid over 1916. The Hague, 1917. LXIV, 5, 59 pp.*

Annual report issued by the Dutch Department of Agriculture, Commerce and Industry, relative to the number of and membership in workmen's and employers' associations in Netherlands for the year 1915.

#### UNOFFICIAL PUBLICATIONS RELATING TO LABOR.

ASSOCIATION OF CHAMBERS OF COMMERCE OF THE UNITED KINGDOM. *Monthly proceedings. Report of meeting of executive council, February 7, 1917. Parliament Mansions, Victoria St., London, SW., February, 1917. pp. 359 to 388.*

—*Report of proceedings and resolutions adopted at the 57th annual meeting, March 20 and 21, 1917. Parliament Mansions, Victoria St., London, SW., 1917. 136 pp.*

The first contains the letter and resolutions on imperial preference, submitted to the prime minister by the committee on commercial and industrial policy, Lord Balfour, of Burleigh, chairman.

The second is the report of the annual meeting of the association, representing more than 100 chambers of commerce, and constitutes a consideration of present and after-the-war problems from the employer's standpoint. Among the subjects dealt with are the following: Cooperation between capital and labor, excess profits duty, taxation after the war, Government contracts and wage increases, preservation of trade secrets, and the national service act, the last of which is intended to provide labor for depleted industries. The report includes addresses by the minister of labor, the president of the board of trade, and the administrator of the national service act.

BROCK, FRITZ HANSON. *Kampen mot arbetslösheten (In Statsvetenskaplig tidskrift för politik, statistik, ekonomi. Lund, Vol. 20, June, 1917. pp. 145-163.)*

A discussion of "the fight against unemployment," appearing in the Swedish Economic Journal, of June, 1917. The author states that there has been a tardy recognition of the problems of unemployment and consequently of measures to combat its evils, and that an intelligent understanding of the fluctuations of the labor market is required. He also advocates the establishment of labor exchanges, the administration of which is highly important, as "unemployment is the most difficult problem in administrative technique and of social politics;" unemployment insurance; well-regulated relief works and the pur-

chase of public supplies at times of ordinary depression; greater application of industrial education in the direction of less specialization. The ideas of Kropotkin (Fields, factories, and workshops, 1913) for alternating work in the petty workshop and in the fields are quite suggestive in this connection.

BUTLER, C. V. *Domestic service. An inquiry by the Women's Industrial Council.* London, G. Bell & Sons, Ltd. 1916. 148 pp. Price 1s. 3d. net.

A report compiled from 708 schedules received from employers, 566 schedules received from domestic servants, and some hundreds of letters in an attempt to weigh impartially the "frequently conflicting accounts and opinions" of this vexed question from both the personal and the industrial aspect. Under the first head the personal drawbacks most often urged against service, both by employers and servants and their relatives, appear to be lack of liberty, of companionship, and of outside interests, together with the loss of caste which it is said to involve. "Among the mistresses and maids who wrote to the Women's Industrial Council there was a general feeling that lack of companionship, or lack of congenial companionship, was one of the great drawbacks of service as compared with other occupations, especially among the very young and the middle-aged workers. To a certain extent this was felt to be inevitable. To a much larger extent it was thought to be remediable."

The "social stigma" is in theory an entirely unnecessary stumblingblock to service. It can not, however, be moved by loftily ignoring it, for "working girls" choose their occupation in life at the age at which girls of any class in life are apt to care most about what "people," namely, their own equals, think. The remedy lies partly in fostering public opinion. \* \* \* But the status of the servant will be raised much more effectively by improvement from within, by better methods of training, by establishing a standard of efficiency for the servant in the middle-class house; still more by recognizing the servants' right to a definite time to themselves.

Under industrial aspects of domestic service are considered its organization, standards of efficiency, and wage-earning power, together with its prospects. Lady Willoughby de Broke contributes a chapter from the standpoint of the somewhat liberal employer.

CHAMBER OF COMMERCE OF THE UNITED STATES. *Report of committee on war pay rolls.* Washington, D. C. May 31, 1917. 8 pp.

The report of an investigation, made at the request of the Council of National Defense, as to the best means of dealing with the problem of the maintenance of soldiers' and sailors' families. Appended are the schedules of separation allowances in Great Britain and Canada.

COMMONWEALTH CLUB OF CALIFORNIA. *The health insurance amendment. Transactions, vol. XII, No. 4.* San Francisco, 1917. pp. 147-202.

At the request of the State Commission on Social Insurance, the Commonwealth Club of California assisted in the investigation of the subject of health insurance which resulted in the constitutional amendment that is to be passed upon at the general election in November, 1918. The arguments for and against, from the standpoint of employer, of employee, and of taxpayer, presented to the club in May of the present year, have been published as the pamphlet of 56 pages, here noted.

FISHER, IRVING. *The ratio chart for plotting statistics.* Reprinted from *Quarterly Publications of American Statistical Association*, June, 1917. pp. 577 to 601.

The ordinary chart is adapted to *difference* comparisons rather than to *ratio* comparisons, whereas the statistician is usually concerned with the latter far more than with the former. The object of this article is to make clear the construction and to point out in some detail the various uses and advantages of the

ratio chart, whose "extreme simplicity," the author believes, is not yet realized. The pamphlet contains 18 illustrations and a bibliography.

GRAY, HERBERT B., AND TURNER, SAMUEL. *Eclipse or empire? London, Nisbet & Co. (Ltd.), 1916. 316 pp.*

An appeal to the British man in the street to make his country once again "the workshop of the world" by the study and application of science, by technical education, by increased individual effort. In a glossary of 178 pages are given brief histories of various articles of manufacture, showing how the value and utility of ideas and inventions have been more quickly "appreciated, appropriated, and applied" in other lands than Great Britain. The authors urge above everything else a new system of education, on which "vested interests, tradition, and prejudice have for many generations laid heavy and paralyzing hands."

HAHN, JULIUS. *Handbuch der Krankenversicherung nach der Reichsversicherungsordnung, den Nebengesetzen und den Ausführungsvorschriften. Vol. 1, Berlin, 1915. XXXVI, 881 pp.*

A detailed commentary on those parts of the German Workmen's Insurance Code which relate to sickness insurance. The present volume of this work comments on the provisions of books 1 and 2 of the Insurance Code dealing with general insurance provisions and sickness insurance respectively. A second volume, which will cover the remaining parts of the code dealing with sickness insurance, is still in preparation.

HEWES, AMY, AND WALTER, HENRIETTE R. *Women as munition makers: a study of conditions in Bridgeport, Conn. Munition workers in England and France; a summary of reports issued by the British Ministry of Munitions. New York, Russell Sage Foundation, 1917. 158 pp. 75 cents net.*

A brief investigation conducted during the summer of 1916 among the women employed in the largest munitions plant in Bridgeport, Conn., for the purpose of discovering the effect upon them of the changed conditions of living and working. The questions covered working conditions, hours, wages, and home conditions. One hundred and eighteen girls and women were interviewed and certain information was obtained for 47 others.

Evidence shows that the working conditions of the women interviewed in Bridgeport during the summer of 1916 were similar in many respects to those under which English women worked for the first year or more of the war with such bad effects upon themselves and upon efficiency of production. \* \* \* It is in the hope that this country may avoid a breakdown in the health of its women workers and a sacrifice of hard-gained labor laws to protect them, as well as the results to health and morals of congested living, that this study is offered.

The second half of this volume is devoted to a summary of the British reports on munition workers in England and France.

HOFFMAN, FREDERICK L. *A plea and a plan for the eradication of malaria throughout the Western Hemisphere. Newark, N. J., Prudential Press, 1917. 65 pp. Diagrams.*

Address to the National Committee (of the United States) on Malaria Eradication, of which the author is a member, organized in accordance with the request of the Second Pan American Scientific Congress, held in 1916, that "the American Republics inaugurate a well-considered plan of malaria eradication based upon the recognition of the principle that the disease is preventable to a much larger degree than has thus far been achieved."

JOURNAL DES ÉCONOMISTES. *Revue Mensuelle de la Science Economique et de la Statistique. Yves-Guyot, Editor in chief. 76 Année. June 15, 1917. 321-480 pp.*

This issue contains discussions on the following subjects: Control of manufactures for war, economic aspects of "dumping," the British Trade Corpora-



tion, German estimate of German public wealth, an inventory of the resources of British colonies, French-Italian economic cooperation, increase in railroad freight rates, financial and economic situation in Uruguay; and under the title "Review of the Academy of Moral and Political Science" the following subjects are reviewed: The European war and the economic relations of Switzerland with its neighbors, economic life in Russia, war statistics, etc.

KNOFF, S. ADOLPHUS. *Maternity insurance as a means to lessen the disease and death rate of mothers and children.* Reprinted from the *Medical Record*, May 26, 1917. New York, William and Wood Co. 1917. 18 pp.

— *Preventive medicine and birth control.* Reprint from the *Medical Times*, 81 Fulton Street, New York, April, 1917. 15 pp.

A brief for birth control presented to the Society of Medical Jurisprudence, New York. Dr. Knopf is a professor in the New York Postgraduate Medical School and Hospital, and is visiting physician to the Riverside Hospital-Sanatorium for the Consumptive Poor of the Health Department of New York City.

NATIONAL AMALGAMATED UNION OF LABOR (UNITED KINGDOM). *Report and balance sheet for quarter ending March 31, 1917.* Newcastle-on-Tyne, Richard Mayne, 1917. 78 pp.

The general secretary's report discusses briefly the organization of women, and voices the objections of unskilled labor to the "trade-card" scheme of exemption from military service of skilled labor needed in industry.

— *Twenty-seventh annual report and financial statement for the year ending December 31, 1916.* Newcastle-on-Tyne, Cooperative Printing Society, 1917. 106 pp.

Illustrative of the fact that measures adopted since the outbreak of war for the settlement of industrial disputes have very largely reduced their number and, consequently, the amount expended in union benefits, is the statement that in 1916 this union spent less than £173 (\$841.90) on lockout benefits, in contrast to amounts close upon £10,000 (\$48,665) expended in certain earlier years.

NATIONAL FIRE PROTECTION ASSOCIATION. *Proceedings of 21st annual meeting,* Washington, D. C., May 8 to 10, 1917. Executive office, Boston, 87 Milk St., 1917. 428 pp.

Includes among others timely articles on ammunition manufacture, as follows: Processes and hazards of artillery and small-arms ammunition manufacture, by W. D. Milne, Inspector Underwriters' Bureau of New England; State regulation of ammunition storage and manufacture, by Francis D. Patterson, chief division of industrial hygiene and engineering, Department of Labor and Industry, Pennsylvania; and Transportation of explosives, by B. W. Dunn, chief inspector, Bureau of Explosives, New York.

NATIONAL UNION OF WOMEN WORKERS. *Handbook and report of the National Council and Union of Women Workers of Great Britain and Ireland.* London, Parliament Mansions, Victoria Street SW., 1916-17. 191 pp. Price, 1s. net.

Largely taken up with lists of committee members and subscribers, constitutions, and standing orders, but containing much interesting material on the work done by the various committees of this organization of women.

OHIO STATE UNIVERSITY. COLLEGE OF ENGINEERING. *Congress of human engineering. Proceedings.* Ohio State University Bulletin, Vol. XXI, No. 12. January, 1917. 160 pp.

The addresses delivered at a three days' conference in October, 1916, called by the College of Engineering of the Ohio State University "to bring together some of the noted men of the country who have made a study of the human factor in industry in contradistinction to the material side." The speakers included employers, labor leaders, teachers, and social workers.



RUBINOW, I. M. *Medical benefits under workmen's compensation. In Journal of Political Economy (University of Chicago Press), June (pp. 580-620) and July (pp. 704-741), 1917.*

A compensation law may best be judged by the degree in which it accomplishes its purpose to compensate the injured workman or his dependents. In the belief that the time has come for a comparison of the "essential, organic provisions" of the acts in force in the various States, since "their effects upon the economic status of the working class are beginning to be felt," the present careful study of their provisions for medical benefit has been made. Though the movement for accident compensation started in this country only after some 20 years of European experience was available, the legislation enacted is "of such bewildering variety that hope for uniformity seems farther removed now than it was seven years ago." That some progress has been made is evident from the fact that 8 of the 37 acts in force at the close of 1916 granted medical aid without any time limit and without any money limit.

SETON-WATSON, R. W., AND OTHERS. *The war and democracy. London, Macmillan, 1916. 390 pp. Maps and bibliographies. Price, 2s. net.*

Instructive essays on the causes and possible results of the war, first published in 1914, by R. W. Seton-Watson, author of various books on the races of Europe; J. Dover Wilson, late lecturer in the University of Helsingfors, Finland; Alfred E. Zimmern, late fellow and tutor of New College, Oxford; and Arthur Greenwood, lecturer in economics at the University of Leeds. Devoted largely to international politics, but contains a chapter of about 50 pages by Mr. Greenwood on the social and economic aspects of the struggle, in which are described the large measures of control by which the British Government averted a commercial deadlock and adapted the country to a condition of war.

In a month Britain came nearer than ever before to being a cooperative commonwealth. It has been realized that industry and commerce are not primarily intended as a field for exploitation and profit, but are essential national services in as true a sense as the army and navy. The complexity of the modern economic world and the large individual gains which have been made in it have obscured the fact that the economic structure exists to serve the needs of the community. It was recognized by the Government, at any rate to some extent, that the success of our armies in the field would be nullified if, in the economic sphere, the production of commodities and services were seriously diminished and if their interchange were hampered in a large degree. People have felt that the spinner, the miner, the weaver, the machinist are all by following their occupations performing a valuable service to the community. How far this attitude of mind will persist after the war, when normal conditions in industry and commerce gradually return, remains to be seen.

TILLYARD, FRANK AND HAMNETT, F. H. *Legal hints for social workers. 4th edition. London, National Union of Women Workers, Parliament Mansions, Westminster, 1916. 64 pp. Price, 6d.*

A revision by F. H. Hamnett, member of Poor Man's Lawyer, Toynbee Hall, London, of an earlier work by Frank Tillyard, lecturer on industrial law at the University of Birmingham. The pamphlet gives information as to where legal advice and assistance for the poor may be obtained, the courts in which the poor may secure legal remedies, and methods of friendly intervention, compromise and arbitration. It contains a brief summary of the main provisions of the law on matters of most practical interest to social workers.

TRUMBULL, FRANK. *Americanizing industrial workers vitally important task of to-day. Reprint from Manufacturers Record, April 5, 1917. 3pp.*

An appeal for a wiser, a safer, and a more humane method of meeting the problem of the alien, by the chairman of the immigration committee of the Chamber of Commerce of the United States.

WILLOUGHBY, WILLIAM F. AND OTHERS. *The system of financial administration of Great Britain. Published for the Institute for Government Research. New York and London, Appleton, 1917. 362 pp.*

This is the first volume in the series of "Studies in administration" contemplated by the Institute for Government Research. It comprises the exhaustive report of a study of the British system of financial administration made under the auspices of the Rockefeller Foundation by a commission composed as follows: William F. Willoughby, professor of jurisprudence and politics, Princeton University; Westel W. Willoughby, professor of political science, Johns Hopkins University; and Samuel McCune Lindsay, professor of social legislation, Columbia University.

## SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS.

*[The publication of the Annual and Special Reports and of the bimonthly Bulletin has been discontinued, and since July, 1912, a Bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These Bulletins are numbered consecutively in each series and also carry a consecutive whole number, beginning with No. 101. A list of the series, together with the individual Bulletins falling under each, is given below. A list of the Reports and Bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application.]*

### Wholesale Prices.

- No. 1. Wholesale prices, 1890 to 1912. (Bul. 114.)
- No. 2. Wholesale prices, 1890 to 1913. (Bul. 149.)
- No. 3. Index numbers of wholesale prices in the United States and foreign countries. (Bul. 173.)
- No. 4. Wholesale prices, 1890 to 1914. (Bul. 181.)
- No. 5. Wholesale prices, 1890 to 1915. (Bul. 200.)
- No. 6. Wholesale prices, 1890 to 1916. (Bul. 226.) [In press.]

### Retail Prices and Cost of Living.

- No. 1. Retail prices, 1890 to 1911: Part I. (Bul. 105: Part I.)  
Retail prices, 1890 to 1911: Part II—General tables. (Bul. 105: Part II.)
- No. 2. Retail prices, 1890 to June, 1912: Part I. (Bul. 106: Part I.)  
Retail prices, 1890 to June, 1912: Part II—General tables. (Bul. 106: Part II.)
- No. 3. Retail prices, 1890 to August, 1912. (Bul. 108.)
- No. 4. Retail prices, 1890 to October, 1912. (Bul. 110.)
- No. 5. Retail prices, 1890 to December, 1912. (Bul. 113.)
- No. 6. Retail prices, 1890 to February, 1913. (Bul. 115.)
- No. 7. Sugar prices, from refiner to consumer. (Bul. 121.)
- No. 8. Retail prices, 1890 to April, 1913. (Bul. 125.)
- No. 9. Wheat and flour prices, from farmer to consumer. (Bul. 130.)
- No. 10. Retail prices, 1890 to June, 1913. (Bul. 132.)
- No. 11. Retail prices, 1890 to August, 1913. (Bul. 136.)
- No. 12. Retail prices, 1890 to October, 1913. (Bul. 138.)
- No. 13. Retail prices, 1890 to December, 1913. (Bul. 140.)
- No. 14. Retail prices, 1907 to December, 1914. (Bul. 156.)
- No. 15. Butter prices, from producer to consumer. (Bul. 164.)
- No. 16. Retail prices, 1907 to June, 1915. (Bul. 184.)
- No. 17. Retail prices, 1907 to December, 1915. (Bul. 197.)
- No. 18. Retail prices, 1907 to December, 1916. (Bul. 228.) [In press.]

### Wages and Hours of Labor.

- No. 1. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912. (Bul. 128.)
- No. 2. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912. (Bul. 129.)
- No. 3. Union scale of wages and hours of labor, 1907 to 1912. (Bul. 131.)
- No. 4. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912. (Bul. 134.)
- No. 5. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912. (Bul. 135.)
- No. 6. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912. (Bul. 137.)
- No. 7. Union scale of wages and hours of labor, May 15, 1913. (Bul. 143.)
- No. 8. Wages and regularity of employment in the dress and waist industry of New York City. (Bul. 146.)
- No. 9. Wages and regularity of employment in the cloak, suit, and skirt industry. (Bul. 147.)
- No. 10. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913. (Bul. 150.)
- No. 11. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912. (Bul. 151.)