

# MONTHLY REVIEW

OF THE

## U. S. BUREAU OF LABOR STATISTICS

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### MAINTENANCE OF EXISTING LABOR STANDARDS.

#### RESOLUTION ADOPTED AT MEETING OF EXECUTIVE COMMITTEE OF THE COMMITTEE ON LABOR.

(As approved by the Advisory Commission and Council of National Defense, Apr. 7, 1917.)

The defense and safety of the Nation must be the first consideration of all patriotic citizens. To avoid confusion and facilitate the preparation for national defense and give a stable basis upon which the representatives of the Government may operate during the war, we recommend:

**FIRST.**—The Council of National Defense should issue a statement to employers and employees in our industrial plants and transportation systems advising that neither employers nor employees shall endeavor to take advantage of the country's necessities to change existing standards. When economic or other emergencies arise requiring changes of standards, the same should be made only after such proposed changes have been investigated and approved by the Council of National Defense.

**SECOND.**—That the Council of National Defense urge upon the legislatures of the States, as well as all administrative agencies charged with the enforcement of labor and health laws, the great duty of rigorously maintaining the existing safeguards as to the health and the welfare of workers, and that no departure from such present standards in State laws or State rulings affecting labor should be taken without a declaration of the Council of National Defense that such a departure is essential for the effective pursuit of the national defense.

**THIRD.**—That the Council of National Defense urge upon the legislatures of the several States that before final adjournment they delegate to the governors of their respective States the power to suspend or modify restrictions contained in their labor laws when such suspension or modification shall be requested by the Council of National Defense, and such suspensions or modifications, when made, shall continue for a specified period and not longer than the duration of the war.

#### AMPLIFICATION OF DECLARATION ADOPTED BY EXECUTIVE COMMITTEE OF THE COMMITTEE ON LABOR, APRIL 16, 1917.

(As approved by the Advisory Commission and Council of National Defense, Apr. 21, 1917.)

There seems to be some misunderstanding of the scope of the statement made by the Council of National Defense when it advised "that neither employers nor employees shall endeavor to take advantage of the country's necessities to change existing standards." In

order that that misunderstanding may be removed the following amplification is made:

There have been established by legislation, by mutual agreement between employers and employees, or by custom certain standards constituting a day's work. These vary from 7 hours per day in some kinds of work to 12 hours per day in continuous-operation plants. The various States and municipalities have established specific standards of safety and sanitation and have provided inspection service to enforce the regulations. They have also established maximum hours of work for women and minimum age limits for children employed in gainful occupations. It is the judgment of the Council of National Defense that the Federal, State, and municipal governments should continue to enforce the standards they have established unless and until the Council of National Defense has determined that some modification or change of these standards is essential to the national safety; that employers and employees in private industries should not attempt to take advantage of the existing abnormal conditions to change the standards which they were unable to change under normal conditions.

The one other standard that the council had in mind was the standard of living. It recognizes that the standard of living is indefinite and difficult to determine, because it is in a measure dependent upon the purchasing power of wages. It believes, however, that no arbitrary change in wages should be sought at this time by either employers or employees through the process of strikes or lockouts without at least giving the established agencies, including those of the several States and of the Government, and of the Mediation Board in the transportation service and the Division of Conciliation of the Department of Labor in the other industries, an opportunity to adjust the difficulties without a stoppage of work occurring. While the Council of National Defense does not mean to intimate that under ordinary circumstances the efficiency of workers is the only element that should be taken into consideration in fixing the hours of labor, safety, sanitation, women's work, and child labor standards, such efficiency is the object that must be attained during the period when the Nation's safety is involved. It may therefore be necessary for the Council as a result of its investigations and experience to suggest modifications and changes in these standards during that time. It is not the purpose of the Council, however, to undertake to determine the wage rate that will be sufficient to maintain the existing standards of living. Such questions as can not be adjusted by private negotiations should be referred to the mediation agencies above referred to or to such other constituted agencies as may exist to the end that such questions may be adjusted in an orderly and equitable manner to avoid the stoppage of industries which are so vital to the interests of the Nation at this critical time.

#### STATEMENT OF THE SECRETARY OF LABOR.

The following excerpt is from a statement made by Secretary of Labor Wilson at a conference held April 23, 1917, in Washington, D. C., between the Secretary of Commerce, Wm. C. Redfield, the Secretary of Labor, W. B. Wilson, and John Williams and Walter Larkin, representing the Amalgamated Association of Iron, Steel, and Tin Plate Workers, James W. Sullivan, representing the Labor Committee of the Advisory Commission of the Council of National Defense, and Grant Hamilton, representing the American Federation of Labor:

**SECRETARY WILSON.** The Council of National Defense takes this position, that the standards that have been established by law, by mutual agreement, or by

custom should not be changed at this time; that where either the employer or the employee has been unable under normal conditions to change the standards to their own liking, they should not take advantage of the present abnormal conditions to establish new standards. Among those standards is the standard of living. The Council of National Defense recognizes the fact that the standard of living is an indefinite standard, difficult to determine, that it is almost entirely dependent upon the rate of wages retaining the same purchasing power. If the wages received will not purchase as much, then the standard of living is lowered. If the wages received will purchase more, then the standard of living is increased. Because of the indefiniteness of the standard of living and the maintaining of it at the same point, the Council recognizes the fact that from time to time disputes will arise as to what is necessary to maintain that standard of living, but it feels that before any stoppage of work takes place in any industry in which the Government is interested for the maintenance of safety that the established agencies of the Government should be given an opportunity to use their good offices to bring about an adjustment of the impending dispute.

Now, there is only one point aside from the wage question in which your organization is especially interested in connection with standards, and that is the question of recognition of the union. That is the one burning question in which, aside from these other questions, you are involved. I do not know the attitude of the other members of the Council on this particular point, but my own attitude is this, that capital has no right to interfere with workingmen organizing labor any more than the workingman has a right to interfere with the capitalists organizing capital. The two are on a parity on that point, and so my feeling is that in the present emergency the employer has no right to interfere with you in your efforts to organize the workers into unions, just as you have no right to interfere with capitalists organizing capital into corporations. If you can get a condition where efforts to organize the workers are not interfered with and where a scale of wages is recognized that maintains the present standard of living, it occurs to me that for the time being no stoppage of work should take place for the purpose of forcing recognition of the union. Of course, that would not interfere with the employers and yourselves entering into any arrangement for recognition that might be mutually agreeable.

## LABOR IN WAR TIME IN GREAT BRITAIN.

## THE QUESTION OF COMPULSION.

In the effort to mobilize its labor forces for war purposes, a primary problem confronting Great Britain was to determine whether compulsion should be attempted and, if so, to what extent. For the purposes of rapid and effective mobilization, the use of some form of compulsion, exercised by a central directing authority, suggested itself as having many advantages. In practice, however, the problem proved more complicated than it might appear on the surface.

To a large extent the success of compulsion depends upon the social conditions and immediate history of a people. If a nation has been schooled to the idea of universal military compulsion, either as a set national policy or as a result of the needs of national defense, and if there exists machinery to deal with the distribution of men, not only for military purposes but also for industrial purposes, then some of the difficulties in the way of compulsory labor mobilization are removed. Thus, it appears that the principal Continental belligerents have, generally speaking, adopted compulsion both for military and for civilian purposes. Even so, the experience of these countries, in so far as information is available, would seem to indicate that civil compulsion is by no means an easy thing to maintain over a long period and is, in any case, a difficult thing to administer. As illustrating the latter point, it may be pointed out that the strain of industrial compulsion is undoubtedly beginning to make itself felt in Germany. While credence need not be given to exaggerated reports of industrial unrest, and while full allowance must be made for the conditions which obtain in that country, it is still apparent that the system of martial law in civil life tends in the long run to exhaust the patience and to militate against the most successful output of a people even though they have been long accustomed to obedience and authority.

As to the difficulty of administration, however well France and Germany may have utilized their resources in man power in the early stages of the war, it seems to be admitted that the mistakes made by both of these countries were considerable. In other words, that desire of placing every man at his right post has by no means been achieved by the Continental powers. Indeed, the difficulties of the effort to do this on a large scale have been shown to be overwhelming by the experience of Germany in its attempt to control labor under the Auxiliary Service Act.

It would appear, therefore, from all available information regarding experience in the present war, that compulsion of labor generally is by no means the complete solution of war-time problems in any country. It may safely be said that the industrial organization is so complex and reacts in so many thousand unexpected ways that

no central organization can be built up in time of stress which would make the best possible use of each individual unit. This is particularly true of a country like Great Britain, where the idea of compulsory service, even for purposes of national defense, was entirely alien. With this in mind, the British Government, confronted by the immediate question, decided at the outbreak of the war that it was only upon a basis of agreement and by volunteering that the labor of the country could be managed.

Subsequent experience has shown clearly that the mobilization of labor combines three distinct problems, which, from the standpoint of the use of compulsion, were of quite different character and complexity. These are:

(1) The allocation of labor between the fighting forces and industry.

(2) The distribution of labor among the various branches of industry with regard to the needs of the fighting force and the needs of the civilian population.

(3) The control of labor, when distributed, in such a way as to obtain from it the maximum output. This is the aspect of the problem which has, in practice, been responsible for the most serious administrative difficulties.

#### 1. Allocation of Labor Between the Army and Industry.

As regards the allocation of labor between the Army and industry, it is common knowledge that the original system of volunteering for the Army did result in a depletion of the ranks of skilled men subsequently required for the manufacture of munitions. But what is not so obvious is that the original system of volunteering for civil work produced somewhat similar results. At the beginning of the war a large proportion of engineering establishments of the country were apparently under the impression that the war would affect them very prejudicially. On the other hand, those establishments which from the outset were engaged on war work obviously were likely to increase largely. As a result many businesses which subsequently became of vital importance were drained, for some time, of the best part of their employees to fill up the works of the direct army contractors.

#### 2. Distribution of Labor Among Different Branches of Industry.

The above conditions complicated the whole matter of the most efficient distribution of labor among the various branches of industry, and seemed to make it imperative to recruit labor from private to war work, and to keep on war work the labor already engaged upon it. At this stage, in the absence of compulsion, a system of war-munition voluntarism was attempted. It should be noted that this project was definitely instituted as the alternative of some form

of compulsion, and it was plainly indicated that if it broke down compulsion would have to be resorted to. But such a system was extremely difficult, if not impossible, to put into effective operation, because of the original shifting of men. In addition, the private employer often found it difficult to understand why he should expose his business to possible bankruptcy, and it appears that in many cases, and not altogether from unpatriotic motives, he put considerable difficulties in the way of the volunteers.

When contracts began to be spread more widely, and even in the earlier days before they had been widely spread, it became a necessity for all employers on war work to have at their disposal the most skillful staff available. Believing that they would be able to recoup themselves from national funds, they offered wages which tended completely to upset the labor market and which also probably interfered with the efficiency of output by making the men uncertain as to whether they would stay in their existing employment, thereby rendering labor mobile at a time when it was desired that it should be kept stable. The expedients adopted later to check these tendencies are dealt with below.

### 3. Control of Labor so as to Obtain the Maximum Output.

The third problem—that of control—resolves itself into a consideration of how work can be maintained—

- (a) Without cessation.
- (b) Without loss of time or energy.
- (c) With the highest production results.

#### (a) *Maintenance of work without cessation.*

This raises the whole question of industrial warfare. The experience of Great Britain in the early months of the war showed that the patriotic impulse was in itself sufficient to prevent strikes, and that the industrial truce which was arrived at on the outbreak of war was easily maintained for the first few months. This, of course, is not difficult to understand. In the other two aspects of labor control just enumerated, demands are made on individuals for largely increased exertions and on trade-unions to give up cherished rights and privileges. But in order to maintain work without cessation, the workers are only called upon to stay at their work and to forego at the moment the right to enforce demands by methods which would gravely prejudice, and which they could see would gravely prejudice, the nation. In the early stages of the war, therefore, there was an entire absence of any possible necessity for compulsion. Later, however, various causes came into operation which tended somewhat to restore the prewar attitude of the workers toward the subject of strikes. The

factors at work to produce these results are difficult to analyze. They may, however, be grouped as follows:

(1) The gradual awakening of the workmen to the fact that their employer is profiting by the war.

(2) The reaction which follows on long and arduous work.

(3) The necessary demands accordingly made on the individual to continue for long hours without interruption and at a higher tension than any obtaining previously.

(4) The demand that treasured rights and privileges must be surrendered.

(5) The rise in wages.

(6) The habituation of the mind of the workman to the existence of war.

As illustrating these developments it may be pointed out that, at the outbreak of war, threatened labor troubles of a serious character disappeared and profound industrial peace reigned for the first few months. Thereafter, however, it became necessary to make demands on the workmen, and evidence began to accumulate that an unsettled feeling was arising in certain parts of the country. It is a matter of considerable interest that the coming into force of the first Munitions Act<sup>1</sup> was marked by a very serious strike in the South Wales coal fields. This strike was settled by concession, and not by use of the powers of compulsion given by the act. The interest of the strike is that it occurred in war time, just when compulsion was put into force, and that no other of similar magnitude has occurred since that time.

It may be noted as certain that no statute making strikes illegal will entirely prevent strikes. Several have occurred since the passing of the Munitions Act,<sup>2</sup> and what is even more significant is that they occur, if not so frequently, at any rate with a certain persistency, in Germany. It may be, however, that the existence of a power to prevent strikes, coupled with a system of compulsory arbitration, does tend to keep alive the spirit of the industrial truce by constantly bringing to the minds of the workmen the remembrance that the national necessity for constant work has been crystallized in a statute, the breach of which involves a penalty.

(b) *Maintenance of work without loss of time or energy.*

Here again it may be noted that in the early days of the war the patriotic impulse went a long way to securing the maximum time and energy of the worker. But the constant increase in wages, and the fatigue necessarily consequent on long hours, tended to produce a slackening in the work. The question of shop discipline then came

<sup>1</sup> July, 1915.

<sup>2</sup> For text of the Munitions of War Act see Bulletin 221 of the U. S. Bureau of Labor Statistics, p. 125, et seq.

up. The ordinary methods of dealing with lack of discipline were no longer open to the employer. He could not dismiss because of the great labor scarcity and also because dismissals might lead to difficulties with workmen generally which he was not prepared to face under existing conditions. At such a point the demand arises for the State, as a third party, to step in and deal with the matter on a national basis. This means devising some method by which punishments for failure to work can be meted out by some form of tribunal.

This is one side of the maintenance of work at full pressure. There are two other aspects, namely:

(1) The attitude of the employer in maintaining long hours for his own purpose.

(2) The right of the employer to dismiss and of the workmen to leave his employment.

1. *Long hours.*—As to the question of long hours, from the beginning of the war there were statutory powers, so far as women and young persons were concerned, under the Factory Acts, but in the all-absorbing pressure these acts were, with the consent of the administering authority, often ignored. There were never any statutory provisions dealing with the case of adult males. But it was considered necessary by the Government that the question of hours should be dealt with on a compulsory basis. It is not clear whether there was ever statutory sanction for this compulsion, but it seems to have been assumed by Government departments and by employers that such power did exist, and in fact, as time went on, the Government found itself called upon to deal more and more stringently with such questions as Sunday labor and excessive overtime, in order to increase production. From this negative beginning there is apparently emerging an extensive system of welfare and health, which by State direction will demand from the employer a provision of reasonable comfort in working conditions for persons employed.

2. *Right of dismissal and of leaving.*—As regards the right of the employer to dismiss and that of the workman to leave, it early became clear that as long as these rights were completely unfettered there would be, particularly if there were no uniformity in wages, a tendency for labor to shift, and shift even more irregularly than in peace time. Apparently of all the difficulties encountered, none assumed a more acute phase than this. Cases occurred in which men left skilled work to go to unskilled work where wages were higher; where men were drawn from permanent work of national value to temporary work at higher rates; and where men were finally lost to some industries by drifting to temporary employment, at the termination of which they were taken by the Army.

*(c) Maintenance of work with highest production results.*

The third main factor of control is that of maintaining work at the highest possible level of productivity. The history of this matter indicates primarily that the patriotic spirit was not sufficient to compel individuals to surrender rights which had been won by generations of effort. It is a matter of common knowledge that the trade-unions in self-defense had built up a most elaborate classification of work, both in degrees and departments, in order to secure subsistence for their members. Workmen were graded as skilled, semiskilled, and unskilled, and the province of each was most jealously and rigidly secured. Moreover, from the same point of view, a code of restrictions, dealing with the amount of output, the hours of labor, and similar points, had grown up. This code was devised partly in the interests of health and partly upon the principle that the pace of any body of workers should be accommodated to the pace of the average man, and at the same time with a view to confining the amount of output by spreading the work available over the largest possible number of workers.

After some six months of the war it became reasonably evident that these distinctions and restrictions were fundamentally hindering the national output of munitions. In March, 1915, therefore, an attempt was made by agreement to remove all the restrictions. This agreement was arrived at between representatives of the Government and of the unions. It may safely be said that except in so far as it prepared the mind of the worker for later compulsion, the agreement completely failed to achieve its purpose. The main cause of this failure was:

- (1) A feeling on the part of the men that they were being called upon to surrender what they regarded as their heritage
- (2) Without the employers being called upon to make any corresponding sacrifice.

As to the first part of this, it was necessary for the Government to give certain promises to restore earlier conditions after the war. The nature of these promises will be discussed later. It is possible that they need never have been given, or at any rate need not have been given in the form in which they were given if the second cause had been removed from the outset.

There appears to be no doubt that of all the factors that have been contributing to labor difficulties the most formidable has been what is called "Profiteering by contractors." It is probable that if from the outset of the war there had been automatic provision preventing individuals from profiting by the war, labor difficulties, both sentimental and actual, would have been in large part, if not wholly, avoided. It must have followed that if the workman had realized

that the employer had foregone all material advantage, he on his side might be asked to forego certain of his rights. The ultimate limitation of profits<sup>1</sup> and the heavy excess-profits duty, while to a certain extent efficacious, never entirely removed the first and abiding sting of seeing huge profits accumulated. Of all the conclusions that one is entitled to draw, none emerges with greater certainty than this, that compulsion in dealing with private profits from the outset is the fundamental method of grappling with all labor difficulties.

With these general remarks as a basis, a more detailed examination will now be made of the policies adopted by Great Britain and of the machinery set up for putting such policies into effect.

#### VOLUNTARYISM TEMPERED BY COMPULSION IN PRACTICE.

##### (1) Administrative Bodies.

In Great Britain, at the outbreak of the war, there did not exist any single department which was charged with the sole duty of dealing with industrial problems. The Board of Trade was charged with the duty of dealing with unemployment and the distribution of labor, and also with conciliation in labor disputes. The Home Office was responsible for administering the Factory Act. The Local Government Board was responsible for the relief of industrial distress which could not be met by the operations of the Board of Trade. All these departments were, of course, distinct from the contracting departments, with whom rested the decision as to where the contracts should be placed, and whose primary concern in the placing of contracts was to obtain rapidity of delivery.

The system which gradually evolved was one of rule by committees. Attempts were made, notably in the case of the committee on munitions of war, to foregather with various departments with a view to having a single controlling authority. The committee, however, as an expedient of government, has definite limitations. This ultimately produced the result that some central authority for dealing with labor was felt to be required. Accordingly, there was set up the Ministry of Munitions,<sup>2</sup> and this office tended to take upon itself, to a considerable extent, the essential functions of a labor ministry. It must be remembered, however, that while the handling of labor was recognized as an important secondary function of the ministry, its first purpose was to secure munitions. If there had already existed a complete organization for obtaining munitions, it is unlikely that

<sup>1</sup> For provisions of Munitions of War Act limiting profits of controlled establishments, see Bulletin 221 of the U. S. Bureau of Labor Statistics, p. 127. Under the Munitions of War Act (July 2, 1915), controlled establishments must pay a tax of 80 per cent of net profits in excess of average net profits for the two financial years preceding the war. Under the Finance Act, all businesses other than controlled establishments were required to pay for the year ending July 1, 1915, a tax of 50 per cent of excess profits, and during 1916, 60 per cent of excess profits over and above the average of any two of the last three years preceding the war plus £200 [\$973.30].

<sup>2</sup> June 9, 1915.

a labor organization would have been attached to it. It was felt, however, that some central authority must exist, and an obvious place was found in the new and vigorous organization. Originally the ministry undertook on behalf of both itself and the Admiralty the management and distribution of labor, enlisting for this purpose the resources of the Board of Trade, and also undertaking the administration of the new compulsory powers which have been referred to earlier.

Late in the war a Ministry of Labor was set up.<sup>1</sup> This ministry, however, did not absorb the great labor department which had been set up by the Ministry of Munitions, and it remained distinct from the subsequently created labor department of the Admiralty and also from the later organized system of national service.

(2) Regulation of Wages.

The history of the gradual control of wages went through four main stages. These may be very briefly sketched. The first stage lasted till the passing of the first Munitions of War Act (July 2, 1915). During this period wages were left to the ordinary play of competition and industrial arrangement. It was open to any employer, if he saw fit, to increase wages or to alter their basis with the view of attracting additional labor or of encouraging the labor already at work. At this stage, when the Government contracts were being pressed with the utmost power of the Government to expedite output, little consideration was given to uniformity of wages. All sorts of wage anomalies began to appear. Big contractors in one district, in order to attract labor from other sources, paid rates out of all proportion to what had previously been paid, not only to skilled but also to unskilled men.

The second stage arose when the Government assumed power by the Munitions Act, so far as controlled establishments were concerned, to veto any variation in wages both upward and downward. At the same time, by the institution of compulsory arbitration, an effort was made to modify the irregularities which had already occurred by attempting to devise uniform advances throughout the whole country. The central arbitrating committee on production found itself faced with an extremely heavy task if its aim was to provide a reasonable basis of remuneration. In practice it seems to have limited itself largely to the attempt, first, to level down some of the more obvious anomalies, and, later, when these had to a certain extent been removed, to assure future advances being on a uniform basis.

The adoption of the Munitions Act, however, added certain complications to the wages situation. In the first place a pledge was

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<sup>1</sup> December, 1916.

given that no piece rates should be cut. This had an unexpected result. Piece rates had been hurriedly fixed throughout the country in the belief that a large number of processes were skilled. The introduction of automatic machines and the general speeding up of manufacture showed that a large number of processes hitherto regarded as skilled were either semiskilled or unskilled. In view of the pledge given, however, it became essential to keep the existing piece rates. The result was that semiskilled and unskilled men introduced onto machine processes often obtained earnings far in excess of those earned by skilled men working at time rates in the same shop.

An additional complication was introduced by the war munitions volunteer scheme. This scheme was designed to attract workmen from parts of the country where they were not particularly needed to other parts where they were urgently required. It provided that the men transferred should earn either the rate of the job to which they were transferred or their old rate if that were higher. As a result of certain interpretations of this provision cases began to appear of men on identical work and working side by side receiving considerably different wages.

The third stage started with the Munitions of War (Amendment) Act, 1916.<sup>1</sup> This act for the first time gave the Government power to take the initiative with regard to wages. It provided that the Government might make orders regulating wages as regards women—to whom the provisions as to restriction on leaving employment applied—and certain classes of unskilled men replacing skilled men. So far as women's wages were concerned, the Government had the advantage of starting with what was virtually a clean sheet. There were practically no such things as district rates for women, or where they existed they were so low that in war conditions it was quite reasonable to advance them. Orders were made as regards women doing women's work and women replacing men.<sup>2</sup> The point of fundamental interest about the first of these two classes, and to a less extent about the second, was that the actual rates were fixed in the orders, and the decision left for the arbitrators was not as to whether the rates themselves were sufficient but was merely to determine such questions as to whether in a given case a particular piece of work was men's work or women's work. This assisted very considerably the general regulation of wage matters so far as women were concerned.

The fourth stage was arrived at early in 1917 when an attempt was made to secure through the central arbitrating body a ruling that advances should be national instead of by district.

<sup>1</sup> January 27, 1916. See Bulletin 221 of the U. S. Bureau of Labor Statistics, pp. 133-140.

<sup>2</sup> See Bulletin 223 of the U. S. Bureau of Labor Statistics, p. 71 et seq.

It is a controverted question whether the Government at the start should have adopted the same method of control over all wages as it ultimately adopted in the case of women's wages. In any case it is to be remembered that there was a very essential difference between men's and women's wages, namely, that while, as stated above, women's wages were entirely fluid, men's wages had been sharply crystallized and differently so from one district to another. It would, therefore, have been a matter of very serious difficulty for the Government to establish for men as it has for women any uniform rates to prevail throughout the country. A possible course would have been to settle definitely the district rate in each district, and thereafter, having regard to the alteration of food prices, to make readjustments as occasion required. Such an undertaking, however, would have required immense effort and very protracted negotiations. It would have been necessary to deal, at least so far as munitions work was concerned, with the whole country, trade by trade.

(3) Control and Discipline, Including Consideration of Hours of Labor and Welfare.

At the beginning of the war there was no machinery in existence for dealing with discipline in the workshop beyond what obtained in peace time, viz, the right to dismiss for offenses and the cumbrous and unusual resort to the Employers and Workmen's Act. It became apparent after the first few months of the war that the existing remedies were inoperative. At a time of acute labor shortage it was not possible to dismiss for offenses, and the remedy in the act referred to above was in any case of little value. The need for some remedy was increased by the operation of two causes:

(a) The increase in wages which rendered the workman less anxious to work full time.

(b) The fatigue which was beginning to overtake men who had been working at a stretch for some months without resting.

Accordingly when the first Munitions Act was passed in 1915, it was provided that in the case of controlled establishments factory rules might be framed to govern the discipline of the factory, and a breach of these rules would be punishable before a special domestic court which was set up under the act. The class of cases that the court was designed to cover were minor disciplinary offenses, such as bad time keeping (i. e., absences and broken time), refusal to obey orders, and, generally, failure to observe the necessary factory rules.

It was found almost immediately, however, that the powers thus conferred did not reach the heart of the trouble. It became essential to go deeper and attack the ultimate source, which in many cases was the existence of long hours and unremitting and arduous labor. The work accomplished in this direction is of the utmost importance.

It is probable that in so far as an improvement in discipline has been effected, this improvement was at least as much effected by the reduction of working hours as by punitive legislation.

It does not appear that the time keeping has at any time been ideal. Nor does it appear that a vast improvement has been effected by the methods adopted under the Munitions Act and as a result of welfare measures. It is possible, however, that the troubles might never have arisen if from the outset wages had been adequately controlled and the health of the worker had been properly protected.

There is perhaps no sovereign remedy for the maintenance of discipline in workshops, but experience has shown plainly that it is desirable to realize that inordinately long hours are bound in the long run to lead to diminution of output, and that for one reason or another special war conditions may require special forms of legislation. It was not forgotten that a considerable element in discipline is the creation of a proper spirit between employers and employed, and this spirit was cultivated in some cases by the creation of shop committees. It has been argued that the danger of such committees is that they tend to assume the functions of management or, failing success in this direction, tend to become practically useless through inactivity. On the whole, however, experience seems to show that if arrangements are effected by which the men can see that a proper shop committee exercises a certain control over the foremen, a good deal of workshop difficulty can be avoided. Clearly it is not enough to control wages, to look after health, and to have legislation giving disciplinary powers to the State, unless the good will of the workmen is fully enlisted, and this was attempted through the cooperation of the unions. After the passage of the Munitions Act there were created local advisory boards under the general direction of the national advisory committee. It was hoped that these might in part help to smooth the way. They do not seem to have accomplished much, and the lesson seems to be that effective intervention must be in the immediate shop and is but little helped by the establishment of an outside committee.

#### (4) Prevention of Strikes and Lockouts.

It has been pointed out in an earlier part of this article that, at the outset of the war, compulsion to avoid strikes seems to have been the least necessary form of compulsion. It was stated further, however, that when once workmen became alive to a number of considerations their patriotic impulse to remain at work suffered a severe check. The history of the strikes since the Munitions Act points to the conclusion that compulsion alone, without the help of public feeling, can never banish strikes completely.

The existing compulsory powers to deal with strikes are twofold. There is first the Munitions Act, which makes strikes and lockouts

illegal and makes compulsory arbitration essential. There is in the second place the Defense of the Realm Regulations which make incitement to strike, or rather an attempt to interfere with the output of munitions of war, a serious misdemeanor, punishable with very heavy penalties.

So far as the first of these powers is concerned, it would appear that the existence of the powers has in a large number of cases prevented minor strikes from occurring. It is, of course, a truism to say that without the patriotic feeling of the workmen the act would have had no effect, but it is obvious that the act was possible only because it did represent something of the feelings of the people. Apparently the Munitions Act was passed because the country was ready for the Munitions Act, and was prepared to accept the principles which it laid down. At the same time it has been found increasingly that as an instrument of punishment for strikes the Munitions Act is not very effective. Where large numbers of men are involved, it is necessary to choose a few, since to prosecute thousands would be impracticable. Such action is bound to evoke accusations of victimization. Moreover, the penalty, while severe, is not of a character to be very effective.

When really serious industrial trouble has arisen, it has been considered necessary to call in the special powers given by the Defense of the Realm Regulations. It is not clear, however, that the form in which the Defense of the Realm Regulations are drawn meets the issue in the most satisfactory manner. It is necessary in every case to establish evidence against the inciter, and the persons concerned are not likely to furnish the necessary evidence if they can avoid it.

The powers of the Defense of the Realm Regulations have been used only once in a case of a big strike, though the possibility of using those powers has several times apparently been threatened. It is a matter of much interest that following the action in the case referred to there was complete industrial peace for a period of almost a year in an area previously extremely troubled.

#### (5) Freedom of Workmen to Move.

As was noted above, the demand for labor by employers and the desire of workmen to do what they believed to be their duty and also to secure certain employment during a time when there was some doubt as to whether full employment would be available, created a considerable shifting of labor, detrimental to the greatest immediate output. At the outset it was complained that a good deal of labor was moved in order to meet the urgent immediate necessities of the mobilization of the dockyards and the army. In so far as this shifting was carried on through the labor exchanges, there was apparently no particularly bad effect. An attempt was

made by those institutions to distribute the men so as to impede as little as possible the future of industry in the areas affected. But the labor exchanges handled only a part of this work. Employers were not satisfied to rely solely on the exchanges. Workmen, on the other hand, were not prepared to wait to be singled out, and left in large numbers for well-known armament and dockyard centers.

It was not until a comparatively late date that the preventing of labor shifting by checking unequal raises in wages was even considered. The problem, indeed, was approached from an entirely different point of view, the first effort to prevent labor shifting being to make it an offense for an employer to entice labor. Because of the difficulty in proving enticement, this effort seems to have been a failure, and was suspended by the system of leaving certificates, provided for by the Munitions of War (Amendment) Act. While all the provisions of the act have been subjected to hostile criticism, this provision is one feature of the act which employers are prepared to praise, and by subsequent amendments and modifications it has become less oppressive to the workmen.

It would seem that this type of restrictive measure tends to be unpopular because it definitely limits industrial freedom and goes extremely near to industrial compulsion direct. It has been suggested by some that the one remedy which would make any such provision unnecessary would be a system of labor or employment exchanges, so constituted as to be the only source through which men could be recruited. But it is clearly very difficult to set up such an organization in war time because it involves the most careful organization.

#### (6) Removal of Restrictive Practices and Customs.

The outbreak of the war found the British engineering industries, and in fact most other manufacturing industries, carried on under a complicated system of trade-union customs and regulations. These customs and regulations had been built up during several generations by the efforts of the trade-unions and had come to be more or less explicitly recognized by the employers. They were sometimes embodied in written codes or agreements, drawn up and signed by trade-unions and by employers' associations or particular employers, and sometimes they were contained in trade-union printed rules, to which employers were not parties but which they for the most part, either voluntarily or of necessity, had come to recognize and accept.

These rules and conditions naturally had been made in the interests of the workpeople, to provide—

- (a) Against unemployment.
- (b) Against reduction of wages or the standard of living.
- (c) For protection against capricious or tyrannical employers.

(d) For the opportunity of securing progressive improvements in wages and general conditions of work and living.

The customs referred to embraced not only the standard rates of wages, but the length of the normal working-day, including arrangements for overtime, nightwork, Sunday work, mealtimes and holidays; also the exact class of employees (apprentices, or skilled, semiskilled, or unskilled laborers, or women) to be employed or not to be employed on particular processes or on different types of machines; whether any should be employed at all; whether one operative should complete an entire job or tend only one machine, or form part of a team of specialists, each doing a different process; whether boys, apprentices, or women should be employed on certain processes, or on certain machines, or at all, or in what proportion to the adult workmen; whether pay should be by time or by piece, or by some other system of payment by results; and, perhaps the most difficult of all to localize and combat, what amount of output by different employees should be considered a fair day's work, not to be considerably exceeded.

In the first few months of the war it became clear that, owing to the enormous supply of munitions required and the number of skilled workmen who had gone into the army, it would be impossible to cope adequately with the demands made on the munitions factories unless all trade-union rules and practices tending to restrict employment or production should be set aside. The most important change that was required was to obtain complete freedom for each employer to dilute labor by setting one or two skilled mechanics to help and direct a number of less skilled workers; to break up jobs so as to bring them within the capacity of semiskilled workers; to introduce automatic machinery; to employ nonunionists and unapprenticed men, laborers, and women. Another change which was declared by the war cabinet as of paramount importance, particularly in the shipbuilding industry, was the substitution of payment by results in place of payment by time.

Negotiations with the trade-unions concerned resulted in the Treasury Agreement of March, 1915.<sup>1</sup> One clause in this agreement was to the effect that the trade-unions were of the opinion that during the war period the relaxation of the present trade practices was imperative, and that each union should be recommended to take into favorable consideration such changes in working conditions or trade customs as might be necessary, with the view of increasing the output of munitions or of war equipment. These recommendations were made conditional on the Government requiring all contractors and subcontractors engaged on munitions and war equipment to give

<sup>1</sup> For text of this agreement see Bulletin 221 of the U. S. Bureau of Labor Statistics, p. 118 et seq.

certain pledges. These pledges in effect amounted to an agreement that any departure during the war from the prewar practices should be only for the period of the war, and that all workmen who had joined the colors or who were at that date in the firm's employment should have priority of employment after the war; that the rates paid to the substituted labor should be the same rates as would normally be paid the workmen engaged upon the same work; that a record should be kept of the changes made from the prewar conditions, and that before any change was introduced notice to the workmen concerned, and an opportunity of local consultation with the men or their representatives, should be given.

As already stated, the terms of this agreement were three months later incorporated in the Munitions of War Act of 1915,<sup>1</sup> and controlled establishments were expressly given the right to regard all restrictive rules or customs as in suspense on condition that they on their part observed the terms of the agreement set out above. It will be observed that the Government made itself responsible for a distinct pledge, which has several times been repeated by responsible ministers of the Government, that the changes introduced from the normal prewar trade practices should be for the period of the war only. It is clear, however, that to a very considerable extent conditions have changed physically, as well as industrially, in such a way that an absolute restoration of prewar customs is practically impossible.

The introduction of improved machinery and appliances has in itself changed conditions in a way which was not foreseen when the pledge was given, and, though the Government is under an obligation to restore to the trade-unions the most analogous practices, where the operation or process is a new one introduced since the war began, it is obvious that the ultimate industrial situation after the war must be very different from what it was before the war. Some trade-unionists certainly will not oppose this state of affairs. They assume that economy of labor must make for national prosperity and the nation's prosperity will be to the benefit of the workingman. In addition to this, they believe that when employers and employed come to settle industrial conditions after the war, the unions will be possessed of a powerful lever in the shape of the Government's restoration pledge, by means of which they may be able to exact much improved conditions, especially in the matter of hours per day. For this reason there are those who consider that the pledge as to restoration was a mistake, but, on the other hand, there is little doubt that without the agreement of the labor leaders of the country it would have been impossible, at least in 1915, for the Government to have started with any hope of success on any scheme for breaking down,

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<sup>1</sup> See Bulletin 221 of the U. S. Bureau of Labor Statistics, pp. 125-132.

even for a temporary period, the established trade-union customs and practices. Compulsion in regard to this matter, without the previous agreement of labor, must have given rise to months of industrial strife, perhaps with doubtful results in the direction desired. As it was, the suspension of trade-union rules was made a matter of law, but it was only so made after agreement with the unions.

To take two important instances, namely, dilution of labor and the introduction of piecework, the maintenance of rules preventing the operation of these systems was clearly suspended in controlled establishments by the Munitions of War Act. In practice it was found, however, that it was necessary to proceed in the case of each district, or in the case of particular establishments, as if the suspension were entirely voluntary and not a matter of law. Special agreements on both subjects were made in many districts, and these documents, though they do perhaps modify the law in some minor details, are in fact little more than the repetition of the law on the subject, put in the form of an agreement. Where opposition to the introduction of a change has been maintained the case has been decided by compulsory arbitration. In some cases where an award has been made against the unions concerned, the men still have refused to obey. This is a clear violation of the Munitions Act, but in practice it has been found necessary, almost without exception, to proceed by way of negotiation.

It seems to follow, therefore, that in Great Britain, where union practices have secured a firm hold, it is impossible to set these practices aside except on the basis of their voluntary suspension, first by the representatives of all labor and then by the actual workers themselves.

The principles on which it is agreed that an employer shall proceed in making a change have been mentioned above, namely, he shall give notice and an opportunity of consultation to the workmen concerned, or their representatives, and he shall make a record of the change when it has been made, as evidence, for the purposes of restoration after the war. The principle of notice and consultation has been found one upon which the trade-unions have set the greatest possible store, and this may be taken as the most essential condition upon which the suspension of rules has been allowed. The wording of the act in this respect, which was taken from the Treasury Agreement of March, 1915, is not very definite. With the aim of remedying this difficulty, certain recommendations were issued by the Ministry of Munitions in the fall of 1915, setting out in greater detail the procedure which should be followed in giving the required notice and consultation. It was suggested that the workmen in the shop in which a change was to be made should be requested by the employer to

appoint a committee from their number, together with a local trade-union representative if they desired, to whom particulars of the proposed change would be explained. The employer should then, after explaining the changes proposed and giving the date when it was to go into effect, give the committee full opportunity of raising any point it desired in connection therewith, so that, if possible, the introduction might be made with the consent of all parties. Should the committee then be unable to agree upon the change, opportunity should be given for further local consultation, that representatives of the trade-unions concerned might be present. It was not intended that the introduction of the change should be delayed until the concurrence of the workpeople was obtained, but that the change should be introduced after a reasonable time, and if the workpeople or their representatives desired to bring forward any question which could not be mutually settled, they should report it for compulsory arbitration. These recommendations, though they have been generally adopted by the employers, have no legal sanction in so far as they extend beyond the terms of the Munitions Act.

The terms of the act in regard to the making of records have been criticized. At present they are limited to changes made after an establishment has become controlled and they merely state that a record of the nature of the change shall be kept. In securing the introduction of changes it has been found that one of the chief difficulties to be encountered is a suspicion on the part of the workpeople that the employer on his part is not carrying out the conditions attaching thereto as laid down by the act. The most important point, as already stated, is the question of notice and consultation.

Another question has been that of recording the change made. It became obvious that workpeople were not prepared to give up rights and privileges which they have won after years of hard warfare without some record of the fact that they should not be prejudiced thereby. Employers, owing to the urgency of the immediate work before them, were found to ignore the condition of recording changes made. The Ministry of Munitions therefore undertook the collection and registering of all such records, and part of the system followed is to show a copy, at the earliest possible moment, to the unions concerned, in order that they may know that the record has been made. It has been suggested that a more convenient and probably better plan would have been for the making of the record to be part of the preliminary procedure of notice and consultation; that is to say, that the record should be drawn up and agreed to and a copy given to the men concerned, or their union, at the time when the change is explained to them.

Under normal conditions the requirement that substituted labor shall receive the same rate of wages for a job as would be paid to the

worker normally employed upon it is regarded by the trade-unions as very important. The objects of the unions in insisting upon this condition were to secure—

(a) That the employers should not make a profit from dilution of labor.

(b) That the skilled workman should not be undercut on a skilled job by less skilled workers.

It has been suggested that the unions, with the experience that they have now, would not wish again to insist upon this condition under similar circumstances. In the introduction of less skilled workers under the supervision of the skilled, there soon appeared the anomaly of the substituted man's working on piecework at rates previously demanded by the skilled man and making higher wages than the skilled man on the same job ever earned, and higher wages than the skilled man, as supervisor, even now earned, owing to the practical necessity of paying the supervisor on a time rate. To meet this anomaly many experiments have been made in the direction of payment on the fellowship or gang system, whereby the supervisor, as well as the operatives themselves, receives a proportion of the piecework balance earned by any section of workers. This, however, does not seem to be practicable in all cases, and to a large extent the fact still remains that there are numbers of highly skilled mechanics who are engaged on the higher class of work but who can not be paid by the piece, and are accordingly in receipt of considerably lower wages than their less skilled fellows in the same establishment.

## LABOR CONDITIONS IN CANADA AS AFFECTED BY THE WAR.

STATEMENT FURNISHED BY MR. F. A. ACLAND, DEPUTY MINISTER OF LABOR OF CANADA, UNDER DATE OF APRIL 18.

A general review of the situation in Canada since the outbreak of the war in August, 1914, seems to justify the conclusion that if no drastic action for regulating or controlling industry, safeguarding of standards, etc., has been taken by the Government, it has been because there has not been any obvious or apparent reason for doing so. Industrial unrest, as evidenced by strikes and lockouts, has been at the minimum in Canada during the past three or four years. For instance, our strikes and lockouts in Canada during 1916 numbered 75 (double the number of the preceding year), while those in Australia, according to a recent return from the Commonwealth statistician numbered about 330 for 1916, and the total for the three years 1914, 1915, and 1916 was about 850. The population of Australia is about 5,000,000, that of the Dominion about 8,000,000. The MONTHLY REVIEW of the United States Bureau of Labor Statistics, for April, 1917, gives 3,323 as the number of strikes and lockouts for the United States during 1916. The population of the United States is about twelve times that of Canada, but there are greatly more than twelve times as many strikes. One must not, of course, accept statistics blindly or draw conclusions hastily, but these figures seem to corroborate the statement that labor difficulties here have been at the minimum. As to the causes, it is more difficult to say. There is (1) the Industrial Disputes Investigation Act and its direct influence in the settlement of certain disputes and its indirect or passive influence in other cases; (2) the department is constantly in touch with industrial disputes and does a very large amount, relatively speaking, of conciliation work, preventing numerous disputes from developing into strikes or lockouts; (3) there is no doubt a disposition on the part of the majority of employers and workmen to recognize the wholly abnormal times through which we are passing and the desirability of all parties doing their best to avoid serious troubles; instances to the contrary can be cited, but the absence of serious disputes is not wholly the result of accident.

As to the safeguarding of standards, there has been no formal agreement or compact between employers at large and workmen, through unions or otherwise. Labor is organized in Canada in a greatly smaller measure than in Great Britain, where such standards had probably reached their maximum of effectiveness and in considerably smaller measure than in the United States. The total trade-union membership in Canada at the end of 1916 was approximately 160,000, the larger part of it belonging to unions in affiliation with the American Federation of Labor. Five-sixths of the Can-

adian membership is, I would add, found in international organizations, the headquarters of which are in the United States. The greatest industrial activity has prevailed in connection with munitions industries, using the term in its broadest sense and including not only shell-making establishments, etc., but also numerous lines of work connected with the furnishing of soldiers and armies. The department hears only too quickly of grievances in connection with any contract over which the Government has any degree of control. A good many grievances have been reported and there have been numerous investigations and adjustments, strikes seldom resulting. The manufacture of munitions in the more limited sense, shell making, etc., has been in the hands of what is called the Imperial Board of Munitions, which conducts its business under the direct authority of the Imperial Government, Mr. J. W. Flavelle, a prominent Toronto gentleman, being chairman. The contracts are distributed by the board, and the board accounts to the Imperial Government. There is, of course, necessary cooperation on the part of the Dominion Government. None of the firms engaged on munition contracts of any sort whatsoever are in any sense controlled establishments.

Disputes are reported sometimes to the Imperial Board, sometimes elsewhere, but eventually come to this department, and we do our best with them, through our traveling inspectors or otherwise. Word reaches us of a good deal of friction, but the record shows how seldom it has developed into strikes. The Imperial Board and the department of labor are in touch in these matters. Wages in munitions work are probably somewhat ahead of those in other lines, but the work is scattered well over the country and one must avoid a sweeping statement. Wages in most lines of industry have been increased very considerably, sometimes commensurately with the increasing cost of living, and sometimes not commensurately; there is, of course, much difficulty in determining the precise bearing of the one movement on the other.

The conditions differ in industries less vitally affected by war work, such as railways, mining, etc. Railway workers in the more important lines have been working as usual under agreement and there has been no special departure of any kind. In metal mining there has been considerable unrest, but little cessation of labor. In coal mining there has been, particularly in western Canada, much unrest and there have been strikes, though as a rule they have been short-lived. I would add on this last point that, whereas the group of coal mines in eastern British Columbia and southern Alberta, coming collectively under the control of operators belonging to the Western Coal Operators' Association, had not for 10 years been able to renew without a strike the working agreement which comes to an end biennially on the 31st of March, yet when their agreement ended on March 31, 1915, a working agreement was achieved without

a strike. The agreement came up for renewal on March 31 last, two or three weeks ago. There was a little striking, but operations generally continued and there was every expectation of an agreement being pulled through. Our officers have been there for a month lending a hand. To-day word reaches us that some of the miners have gone out. The men are members of the United Mine Workers of America and the leaders of that organization were among those who recently at Washington promised to do their best to have strikes averted. Their promises had specific reference of course to the war situation in the United States, but they would, I think, regard it as equally binding here, and our impression is that the international officers are using their influence for peace; under such circumstances a strike should not last long.

The attitude of the labor leaders in Canada is believed to have been substantially in line with that of workmen generally, disposed to safeguard so far as possible, by agreement or otherwise, the wage rates and other conditions obtained before the war, but more inclined, having regard to conditions at large, to ask and make concessions.

You inquire as to the extent to which it has been necessary to resort to the labor of women. We have no figures on this point. There has been a good deal of change in the character of women's labor, but it is difficult to say to what extent additional women have undertaken work, though the number is considerable. Domestic servants are scarcer than ever, but there is no lack of female labor for clerical purposes. In some Ontario cities, particularly Toronto, women have gone somewhat extensively into munitions work and have done very well at it. In the west there is of course a shortage of women. One must be careful not to compare the situation with that of England. In the older country there were approximately 2,000,000 more females than males at about the beginning of the war. In Canada the situation was reversed. Our census of 1911 shows a male surplus of 432,000, and the surplus would have been very largely of the younger adults; during the two or three years following, immigration was very active and the numerical male surplus at the beginning of the war is believed to have been not less than 600,000. While more may yet be done in the way of utilizing the labor of women, there is not in Canada the large reserve of female labor that existed in Great Britain. The matter has been one of interest, but has not so far been the occasion of friction.

There is a growing danger of labor shortage for agricultural operations and many plans are being formulated to meet the danger. The provincial governments are taking steps from different points of view. Last year the soldiers training for overseas were given leave at some points to assist in gathering the harvest.

No word has reached us as to special hazards from industrial poisoning or industrial accidents due to the speeding up of industry.

It happens, however, that during the last three or four years our provinces have been specially active in the enactment of laws of a somewhat drastic nature relating to workmen's compensation, etc. This has not been specially due to war speeding, but may at the same time have some bearing thereon.

No special grievances resulting from long hours or Sunday work have been reported. These conditions would be more likely to exist in connection with munitions industries than elsewhere, and grievances arising would not be differentiated from other grievances as above mentioned. There has been nothing in the nature of a scientific inquiry into the results of industrial poisoning, fatigue and maximum hours, etc. Many influences have combined to prevent a wide increase of the number of working hours in a day and to require special rates for overtime; we hear only of isolated grievances, and these receive due attention.

Information collected by the department of labor in connection with the report issued annually on labor organization in Canada shows that the organized labor forces of the Dominion have partially recovered from the heavy losses in membership which were recorded in the years 1914 and 1915. The increase for 1916 was 17,064, the total membership recorded at the end of the year 1916 being 160,407.

It was also reported to the department that from the outbreak of the war to the end of the year 1916, 21,599 trade-unionists in Canada had enlisted for overseas service and 593 reservists rejoined the colors, making a total of 22,192 recruits furnished by units of organized labor.

As to food products, the attached order in council, which is administered under the minister of labor, controls. Some inquiries are being made as to stocks and prices and much information as to this point has been collected. It is thought to have tended to prevent hoarding in cold storage and other establishments. So far there have been no prosecutions. The increase in prices has been less than in any other country save the United States, and perhaps Australasia. There has been no price regulation save, I think, in the case of print paper. Changes in the situation on this point may of course occur any day. For instance, this morning's newspapers announce the removal by the Government of duties on wheat and flour, which may have an important bearing on the price of these articles in Canada.

ORDER OF NOVEMBER 10, 1916, RESPECTING HIGH COST OF LIVING, AS AMENDED BY ORDER OF NOVEMBER 29, 1916.

His excellency the administrator in council with a view to prevent the undue enhancement of the cost of living, is pleased, under the power in that behalf conferred by section 6 of the War Measures Act, 1914, or otherwise vested in the governor general in council, to make the following regulations respecting the price, sale, control, storage

transport, etc., of the necessaries of life and the same are hereby made and enacted accordingly:

1. For the purposes of these regulations the expression—

“Council” means the governing body of a municipality.

“Necessary of life” means a staple and ordinary article of food (whether fresh, preserved, canned, or otherwise treated), clothing and fuel, including the products, materials and ingredients from or of which any thereof are in whole or in part manufactured, composed, derived or made.

“Municipality” means any county, district, township, parish, city, town, village, or other area within a Province which is governed municipally by a council or similar body.

“Person” includes natural persons and bodies corporate.

2. (1) No person shall conspire, combine, agree, or arrange with any other person—

(a) To limit the facilities for transporting, producing, manufacturing, supplying storing or dealing in any necessary of life, or—

(b) To restrain or injure trade or commerce in relation to any necessary of life; or

(c) To prevent, limit, or lessen the manufacture or production of any necessary of life, or to enhance the price thereof; or

(d) To prevent or lessen competition in the production, manufacture, purchase, barter, sale, transportation, insurance, or supply of any necessary of life.

(2) Nothing in this section shall be construed to apply to combinations of workmen or employees for their own reasonable protection as such workmen or employees.

(3) Section 498 of the Criminal Code shall, as respects necessaries of life only, until the repeal of this section of these regulations, be deemed to have been repealed.

3. (1) No person shall accumulate or shall withhold from sale any necessary of life beyond an amount thereof reasonably required for the use or consumption of his household or for the ordinary purposes of his business;

(2) Every person who shall at any time hold any necessary of life beyond an amount thereof reasonably required as aforesaid, and every person who shall hold for the purpose of sale, whether as manufacturer, wholesaler, jobber, retailer, or otherwise, any stock in trade of any necessary of life, shall offer for sale the said excess amount, or the said stock in trade, as the case may be, at prices not higher than are reasonable and just.

*Provided, however,* That this section shall not apply or extend to any accumulating or withholding by any farmer, gardener, or other person, of the products of any farm, garden, or other land cultivated by him; nor shall any manufacturer, wholesaler, or jobber, because of anything herein contained, be under obligation to sell to other than such classes of persons as are accustomed to purchase from manufacturers, wholesalers, or jobbers, respectively, nor shall any person be under obligation to sell otherwise than in accordance with the ordinary course of business.

4. The minister of labor may, by notice in writing under his hand or that of his deputy, require any person who operates, controls, or manages any cold-storage plant, packing house, cannery, factory, mine, warehouse, or other premises in which or in any part of which any necessary of life is prepared, manufactured, produced, or held by such person for himself or for another, or who in any manner deals in any necessary of life, to make and render unto such minister, within a time set in such notice, and such person shall make and render unto such minister precisely as required by him, a written return under oath or affirmation showing in detail—

(a) The species and amount of any necessary of life held by such person at any indicated time or times, including any time preceding the making of these regulations, where and for whom said necessary is held, and if held for another, upon what terms held;

(b) The time when any or all of such necessary of life was prepared, manufactured, produced, acquired, or taken into possession;

(c) The cost of such necessary of life, including all charges and expenses of an overhead or other nature, affecting such cost;

(d) The price at which such necessary of life, if already sold, has been sold, or, if unsold, is held for sale;

(e) Such other information concerning any necessary of life as the minister may require, including a full disclosure of all existing contracts or agreements which such person, or his principal or agent, may have at any time entered into, with any other person, touching or concerning the sale or resale prices of any necessary of life, or the period of time during which any necessary of life should be held, as bailee or otherwise, before sale or resale, or limiting the quantity of any necessary of life which should be sold to any one buyer or combination of buyers or within any limited district.

5. Whenever the council of any municipality shall declare by way of resolution that in its opinion excessive prices are being demanded within the limits of such municipality for any necessary of life, such council may, by notice in writing under the hand of its clerk or other authorized officer, require any person dealing within the municipality in such necessary of life, and locally situate therein, to make and render unto such council within a time set in such notice, and such person shall make and render unto such council, precisely as required by it, a written return under oath or affirmation, showing in detail—

(a) The amount of such necessary of life held by such person for sale or disposition within such municipality at any indicated time or times including any time preceding the making of these regulations;

(b) The time when any or all of such necessary of life was acquired, produced, or brought within or into such municipality;

(c) The cost of such necessary of life, including all charges of an overhead or other nature affecting such cost;

(d) The price at which such necessary of life is held for sale or at which any sales of part of the same or of a similar necessary of life have been made by such person within such municipality at any indicated time or times, including any time preceding the making of these regulations.

If, after the receipt of any such return, such council shall consider that any circumstances justify reference of the return and a statement of the conditions to the minister of labor for further investigation at his hands, or if no return, or what the council shall consider an untrue or misleading return, is made, such council may, by way of resolution in writing expressing the facts and the council's conclusion therefrom, report to such minister.

6. (1) If, after the receipt by the minister of labor of any return made to him or to any municipality in purported compliance with these regulations, such minister shall consider that any circumstances so justify, or if, after a return under these regulations has been required; none is made or none is made within the time set in the notice requiring such return or within such further time as the minister of labor may upon special application to him allow, the said minister shall have power to investigate the business and to examine the premises, books, papers, and records of the person making or failing to make such return, as the case may be and for those purposes such minister may appoint an examiner or examiners and may authorize in writing any examiner so appointed to enter and examine the premises, books, records, and papers of such person and to take evidence under oath or affirmation of any person who such examiner may believe has knowledge relating to such matters as ought to have been included within a proper return according to circumstances.

(2) Every person who is in possession or control of any such premises, books, records, or papers shall give and afford to such examiner admission and access thereto whenever and as often as demanded.

(3) No person shall in any manner impede or prevent or attempt to impede or prevent any such investigation or examination.

(4) Every person in any manner required by such examiner to give evidence under oath or affirmation touching or concerning the matters committed to such examiner for investigation shall attend before said examiner and give evidence whenever so required.

7. Whenever, in the opinion of the minister of labor, after an investigation and examination held in pursuance of the powers conferred by these regulations, an offense against any of these regulations is disclosed, said minister shall remit to the attorney general of any Province within which such offense shall have been committed for such action as such attorney general may be pleased to institute because of the conditions appearing, certified copies of (a) any return or returns and resolutions of any municipality which may have been made, rendered, or passed pursuant to these regulations and are in the possession of the minister and relevant to such offense and of (b) the evidence taken on any such investigation or examination and the report of the examiner.

8. (1) No prosecution for a contravention or nonobservance of any provision of these regulations shall be commenced without the written leave of the attorney general for the Province in which the offense is alleged to have been committed, expressing whether such prosecution shall be by way of indictment or under Part XV of the Criminal Code.

(2) Such prosecution shall be commenced only in the county or municipality in which some or all of the necessary of life with respect to which the alleged offense was committed were situated at the time of the commission of the offense or in the county in which the person charged resides or carries on business.

9. (1) Any person who contravenes or fails to observe any of the provisions of these regulations shall be guilty of an indictable offense and liable upon indictment or upon summary conviction under Part XV of the Criminal Code to a penalty not exceeding \$5,000 or to imprisonment for any term not exceeding two years, or to both fine and imprisonment, as specified; and any director or officer of any company or corporation who assents to or acquiesces in the contravention or nonobservance by such company or corporation of any of the provisions of these regulations shall be guilty personally and cumulatively with his company or corporation and with his codirectors or associate officers.

(2) For the purposes of the trial of any indictment for any offense against these regulations, section 581 of the Criminal Code, authorizing speedy trials without juries, shall apply.

RODOLPHE BOUDREAU,  
*Clerk of the Privy Council.*

RESTRICTED EMPLOYMENTS IN SPECIFIED OCCUPATIONS IN GREAT BRITAIN.<sup>1</sup>

In Great Britain large numbers of comparatively unskilled but vigorous men are employed on work of national importance, and they can not be withdrawn without endangering the output of munitions and other essentials unless a sufficient number of men who are doing work of less importance in other trades will come forward as national service volunteers to take their places. The army requires the men who are fit for military service, but the only way to obtain them is to induce other men, who are not fit, either on account of age or physical disability, for serving in the army, to do the work of the men withdrawn. In addition to the men required in order to release men for the army, others are wanted to reinforce the present staffs at certain very important works.

Accordingly the director-general of national service has taken steps to obtain a pool of male labor, which can be utilized for these two purposes. As it is of great importance that this labor should not be absorbed in the wrong way, two lists of trades have been prepared. The first, which appears as a schedule to the restricted occupations order, enumerates certain industries and occupations into which additional male labor of 18 to 61 years is not to be allowed to go except with the permission of the Department of National Service, or unless the men have enrolled as national service volunteers. The other list, called trades and occupations of primary importance, shows, on the other hand, where the new labor can be best used in the national interest. There are, of course, many other trades of national importance, but having regard to the nature of the output of such trades and the requirements of the war services, they are not so urgently in need of substitutes as those named in the list. Further, in many trades the only men of military age and fitness now remaining are so highly skilled as to be quite irreplaceable by substitutes from other trades.

The restricted occupations order provides as follows:

1. After the date of this order, the occupier of a factory, workshop, or other premises shall not, except as herein provided, take or transfer into employment in any industry or occupation mentioned in the schedule to this order, whether to fill a vacancy or otherwise, any man who has attained the age of 18 and has not attained the age of 61, whether the man has previously been so employed or not;

Provided that nothing in this order shall prevent—

(a) The occupier of any factory, workshop or premises from taking or transferring men into his employment with the consent of the director-general of national service given on the ground that the employment is expedient for the purpose of executing a Government contract, or on the ground that the work on which the men are to be employed is of national importance, but subject in all cases to any conditions which

<sup>1</sup> From The Board of Trade Labor Gazette, March, 1917, p. 91; and The Board of Trade Journal Mar. 8, 1917, pp. 666 and 669.

the director-general may impose; or (b) an employer from taking back into his employment any man who has joined His Majesty's naval or military forces, on his retirement from those forces under proper authority, if the man is taken back in accordance with an undertaking given by the employer before the man joined.

2. The occupier of any factory, workshop, or premises used in connection with or for the purpose of any industry or occupation mentioned in the schedule to this order, shall give work which is directly or indirectly required for the purpose of any Government contract priority over any other work in that industry or occupation.

3. The occupier of any factory, workshop, or premises used in connection with or for the purpose of any industry or occupation mentioned in the schedule to this order shall comply with any directions given by the director-general of national service for the purpose of giving full effect to any provision of this order or for the purpose of obtaining, and verifying, any information he may require as to the nature and amount of work done in the factory, workshop, or premises.

4. Any authority or directions which may be given for the purposes of this order by the director-general of national service may be given on his behalf by a national service commissioner.

5. For the purposes of this order, every officer and servant of the occupier of a factory, workshop, or premises, and, where the occupier is a company, every director of the company, shall be under the same obligations under this order as the occupier.

6. Any failure to obey any regulation or restriction contained in this order is an offense against the Defense of the Realm Regulations.

The trades and occupations in the two lists referred to are as follows:

#### RESTRICTED OCCUPATIONS.

##### *I. Metals, machines, implements, and conveyances.*

Carriage building for private purposes (exclusive of repairs).

Enameled iron advertisement manufacture.

Furnishing ironmongery, including bedsteads and parts thereof, manufacture of.

Gas and electric light fittings, manufacture of.

Metal articles for garden use (other than garden tools necessary for food production), manufacture of.

Safes and steel office furniture, manufacture of.

Sheet-metal domestic utensils, manufacture of.

Sheet-metal japanning, lacquering, and decorating.

Steam or hot-water heating apparatus for domestic or horticultural use, manufacture of.

Machinery for trades scheduled in this list, manufacture of.

##### *II. Woodworking.*

French polishing.

Furniture and cabinetmaking and upholstery.

Garden seats, summer houses, and horticultural buildings, manufacture and erection of.

Picture and show-card frames, manufacture of.

Show cases, manufacture of.

Shop fronts and fittings, manufacture and erection of.

Venetian blinds, manufacture of.

Wood carving.

Wood molding, manufacture of.

##### *III.—Stone and slate.*

Enameled slate manufacture.

Stone, marble, granite, and slate quarrying.

Stone, marble, granite, and slate cutting and polishing.

*IV.—Pottery, bricks, and glass.*

Bottles for beer, wine, spirits, and aerated waters, manufacture of.  
 Bricks (other than fire bricks) and tiles, manufacture of.  
 Glass beveling, embossing, and silvering.  
 Glass staining and stained-glass fitting.  
 China and earthen ware, manufacture of.  
 Table and decorative glass, manufacture of.

*V.—House building and repairing.*

Building (including horticultural houses).  
 House painting and decorating.

*VI.—Paper, printing, etc.*

Bookbinding.  
 Letterpress and lithographic printing.  
 Paper making.  
 Wall paper, manufacture of.

*VII.—Textile and allied trades.*

Carpets, floor rugs, furniture hangings, and upholstery materials, manufacture of.  
 Linoleum, oilcloth, and table baize, manufacture of.

*VIII.—Clothing, etc.*

Dress, mantle, and blouse making (bespoke).  
 Furs, preparing and making up.  
 Millinery.  
 Patent-leather and fancy boot, shoe, and slipper making.  
 Tailoring (bespoke).  
 Umbrellas and parasols, and parts thereof, manufacture of.

*IX.—Food, drink, tobacco.*

Aerated waters, manufacture of.  
 Beer, wines, and spirits, bottling of.  
 Brewing and malting.  
 Biscuits, baking of.  
 Cakes and confectionery, baking of.  
 Sugar and chocolate confectionery, manufacture of.  
 Cigars, manufacture of.

*X.—Miscellaneous manufactures.*

Brushes, manufacture of.  
 Church-organ building.  
 Clock making.  
 Electroplating.  
 Fancy leather articles, manufacture of.  
 Games and sports, apparatus manufacture.  
 Goldsmiths' and silversmiths' wares and jewelry, manufacture of.  
 Musical instruments, making of.  
 Photographic apparatus and materials, manufacture of.  
 Sporting guns and ammunition therefor, manufacture of.  
 Trunk and portmanteau making.

*XI.—Commercial occupations.*

All foregoing trades: Distribution and sale of products of.

Other trades:

Advertising agents.

Commercial travelers and canvassers, commission agents, hawkers, and peddlers.

Shop assistants.

Clerks, except those with technical knowledge of a high order, or acting in a managerial or administrative capacity.

*XII.—Miscellaneous occupations.*

Flowers and ornamental shrubs and plants, production and sale of.

Domestic servants, indoor, including waiters and servants in clubs, hotels, lodging houses, restaurants, and cafés.

Domestic servants, outdoor.

Employees at theaters, music halls, cinemas, and other places of amusement.

**TRADES AND OCCUPATIONS OF PRIMARY IMPORTANCE.***I.—Mining and quarrying.*

Coal mining.

Patent fuel works.

Oil shale mining, including shale oil works.

Iron mining and quarrying.

Copper mining.

Tin and wolfram mining.

Lead mining.

Fire clay and silica stone mining and quarrying.

Ganister mining and quarrying.

Limestone quarries (mainly supplying iron, steel, or chemical works).

*II.—Metals, machines, implements, and conveyances.*

Metal manufacture:

All classes of workers engaged in the manufacture of the following metals or their constituent parts from the treatment of the ore to the production of the metal in standard forms, such as ingot, billet, bloom, bar, rod, sheet, or section—Aluminum, copper, iron, steel, lead, nickel, tin (smelting only), spelter, zinc, and other metals (e. g., tungsten, vanadium, wolfram) needed for war purposes, and their alloys (e. g., brass, phosphor bronze).

Tube and tube fittings, manufacture of, for use in trades scheduled on this list.

Shipbuilding and engineering, including repairing:

Ship and barge building.

Marine engineering.

Boiler making.

Railway locomotive construction.

Railway carriage and wagon building.

Traction engines, manufacture of.

Internal combustion engines, manufacture of.

Motor wagon making and repairing.

Agricultural implements and machinery, manufacture and repair of.

Electrical engineering.

Mining plant and machinery, manufacture and repair of.

Iron foundries and steel smelting works and rolling mills.

Other engineering works engaged in repairing machinery or plant for use in industry.

Aircraft, including engines, manufacture and repair of.

Shell forging.

Miscellaneous metal trades:

Anchor making.

Chain making—

Block chains.

Other chains ( $\frac{7}{16}$ -inch diameter and over).

Scythe, sickle, reaping hook, hay knife, and agricultural machine knife manufacture.

Heavy edge tool, pick, spade, shovel, and hoe manufacture.

Dairy appliance manufacture.

Electrical accumulator manufacture and repairing.

Hosiery machine needle manufacture.

Scientific instrument making.

Springs, volute and spiral, steel wire over 10 British wire gauge, manufacture of.

Slag wool making.

Blacksmiths and farriers, including blacksmiths' strikers.

Wheelwrights.

Wire drawing, steel and copper.

Wire rope manufacture.

### *III.—Woodworking.*

Felling, hauling, sawing, and creosoting of timber.

Saw sharpening and setting.

Wood wool, manufacture of.

### *IV.—Pottery and glass trades.*

Chemical ware (stoneware and fire clay) manufacture.

Furnace fire brick (including ganister and silica brick) manufacture.

Optical and chemical glass manufacture.

Optical lens and prism making.

Other glass manufacture (except table and decorative ware and bottles for beer, wine, spirits, and aerated waters).

### *V.—Building and works of construction.*

Building trade, Government work or licensed work for war purposes.

### *VI.—Textile and allied trades.*

Woolen and worsted manufacture and finishing.

Hosiery manufacture and finishing.

Rope and binder twine, manufacture of.

Silk shalloon and noils, manufacture of.

Transmission belting, manufacture of.

### *VII.—Chemical, oil, etc., trades.*

Coal-tar products, manufacture of.

Dyestuffs, manufacture of.

Explosives and propellants, manufacture of.

Other chemical products, manufacture of.

Lubricating oils and other lubricants, manufacture of.

Oil-seed crushing.

Soap and candles, manufacture of.

Fertilizers, manufacture of.

*VIII.—Leather trades.*

Hide and skin markets and fat and bone factories.  
 Fellmongery.  
 Tanning and currying of heavy leather.  
 Leather transmission belting manufacture.

*IX.—Transport trades.*

Dock and wharf labor.  
 Bargemen, lightermen, on rivers and canals.  
 Mercantile marine.  
 Railway service.  
 Coal trade (wholesale and retail distribution).  
 Carters, lorrymen, and draymen engaged in carrying heavy goods.

*X.—Agriculture.*

All occupations on farms and in market gardens.

*XI.—Food trades.*

Flour, oatmeal, and rice milling.  
 Machine creameries and condensed milk and milk powder factories.  
 Margarine manufacture.  
 Edible oils and fats, preparation of.  
 Sugar refineries working under Government.  
 Bacon curing.  
 Cold stores.

*XII.—Miscellaneous manufactures.*

Coke, manufacture of.  
 Rubber trades.  
 Waterproofing of fabrics for war purposes and of paper.

*XIII.—Public utility services.*

Police.  
 Fire brigades.  
 Salvage corps.  
 Electrical generating stations.  
 Tramways, omnibuses, and char-à-bancs in connection with munition works.  
 Gas works.  
 Waterworks.  
 Asylums and hospitals.  
 Grave digging.

*XIV.—Unspecified munition trades.*

Munition trades not mentioned above.

With reference to the restricted occupations order which was made by the Minister of Munitions at the instance of the director-general of national service on 28th February (see above), it is notified that arrangements have been made between the director general of national service and the minister of labor whereby the managers of employment exchanges are empowered to give consent, on behalf of the director-general, to the engagement of labor in the restricted occupations in case in which:

(a) An employer requires a specified number of men for work of national importance in respect of which he can produce a priority certificate;

(b) An employer requires a man who had been offered to him through an employment exchange prior to 2d March;

(c) An employer requires a man who has applied to an employment exchange for work and has failed to obtain employment for a continuous period of six working-days; the period of employment in each case not to exceed one month or such further period as may be authorized by the director general.

The director general has also decided that the restrictions in the order shall not be enforced in respect of any sailor or soldier who has been discharged from the naval or military services of the Crown in consequence of disablement or ill health.

The above arrangements are of a preliminary nature and will be modified or extended from time to time as may be found necessary.

In its April, 1917, number the Labor Gazette announces <sup>1</sup> that—

The war cabinet have approved a new scheme submitted by the director general of national service, after consultation with his labor advisory committee, for supplementing his general appeal for national service volunteers.

The special object of the new scheme is to obtain from the less essential industries a sufficient number of suitable substitutes to take the places of men who must be released for military purposes from the more essential industries. Committees of employers and employed in the various trades affected are being formed for the purpose of arranging what men shall be released from their respective trades in order to provide the necessary numbers of suitable men, and to arrange for their transfer to the places in which they are required through the substitution officers of the National Service Department. Arrangements have been made to insure that these officers will be kept closely in touch with all the other departments concerned with substitution.

The main feature of the scheme is that it places upon those concerned in the trade itself the responsibility of finding the men required with the least possible injury to the trade or hardship to the man.

The men to be transferred will not be required to enroll as national service volunteers. They will be invited to fill specific vacancies in work of national importance, but they will receive the same subsistence allowances and other benefits as are given, in similar circumstances, to national service volunteers.

As a result of the recent inquiry conducted by members of the war cabinet, it has been settled that new arrangements for the enrollment and allocation of national service volunteers are to come into operation at the end of this month. Under the present arrangement, volunteers are enrolled by the national service department and allocated to their work by the employment exchanges department of the Ministry of Labor, and as it has been found that this division of authority and machinery is not conducive to efficiency, it has been decided, with the assent and approval of the two ministries, that on and after the 1st May, 1917, the allocation as well as the enrollment of national service volunteers will rest with the national service department, who will, wherever possible, provide suitable men to fill any vacancies, in work of national importance, which can not be filled by discharged soldiers or from other sources of labor registered at the employment exchanges.

#### OUTPUT IN RELATION TO HOURS OF LABOR.

When the demand for the greatest possible output is urgent, as at the present time, many employers are quick to assume that an extension of the usual hours of work will give a proportionate increase in product. That such a result oftentimes does not follow has been the experience of many employers. In fact, there are numerous well-known instances where the shortening of hours has

<sup>1</sup> British Board of Trade Labor Gazette, April, 1917, p. 125.

brought about a marked increase in production.<sup>1</sup> Two recent instances are especially worthy of attention at this time, when complaint is made of a shortage of labor and when it is of special importance that the greatest output should be secured, not for a day or a week, but for an extended period of time, perhaps several years. These two instances are those of a shoe manufacturer employing over 4,000 men in seven factories and of a tool manufacturer employing about 500 men. The results of the experiment of the shoe manufacturer are shown in a letter reproduced below from an article by John A. Fitch in *The Survey*, for May 12, 1917.

During the first week of December, 1916, our company voluntarily reduced the hours of labor in its entire system of factories from 55 hours per week to 52 hours per week.

This change was put in effect at a time when the conditions in our factories were such as to furnish excellent data as to the result of such a reduction in hours on the production of a large number of employees.

In the period before the change was made—

1. We had built up production to what was regarded as approximately maximum, each plant having reached a production in excess of any previous period.

2. Each plant was laid out with the maximum number of machines in the space available.

3. There was an employee on practically every machine in the system.

4. Over 95 per cent of the productive pay roll was on standardized piecework.

5. All of the plants were running smoothly under a routing system in which delays due to lack of material were practically zero.

6. No new factories were in process of organization.

7. No material changes were being made in the character of the product.

8. No new machinery or processes tending to increase per capita output materially were being installed; what few changes were being made would tend to increase slightly the productive difficulty of the product.

9. Standard production load was such that "going out early" was almost unknown; here and there a few special departments were working overtime occasionally.

Our system of factories may be divided into two general classes:

1. Supply factories where material is cut or prepared and fed to the shoe factories.

2. Seven shoe factories where the product is assembled.

As the seven shoe factories are operated under a standard system, the conditions are comparable with those of sister ships in the Navy. Production is routed into and through these factories in what we call "sheets," each sheet constituting a half-day's and 11 sheets a week's production. When the hours of labor were decreased in December, 1916, it was decided to make no reduction in the standard sheet or half-day quota. The plan was to determine after trial what reduction, if any, would prove necessary as a result of the shorter hours.

We have operated under the reduced hours for four months. It has been found unnecessary to reduce standard production; actual production has not decreased. The following table shows the changes made in standard production since the first week in December.

<sup>1</sup> See MONTHLY REVIEW for December, 1916, p. 119.

Date.	Factory symbol.	Production changed—		Reason.
		From—	To—	
March, 1917.....	MC.....	212	200	To offset increase in a difficult portion of production.
April, 1917.....	MC.....	200	212	Former production resumed.
March, 1917.....	ME.....	288	275	To facilitate improvement of product.
Do.....	ML.....	250	262	Factory gaining in actual production.
February, 1917.....	MD.....	288	275	To offset an increase in more difficult part of product.
December, 1916.....	MN.....	238	250	Increased production.
	MP.....	175	175	No change.
	MT.....	108	108	Do.

Under the production system in use any department falling behind standard production to such an extent as to be one-half day behind schedule would automatically cause what is called a "dropping of sheets" and a reduction in the standard production for the particular factory involved. This event has not occurred; in fact, the writer, who has been in general charge of the production system in this company for over 10 years, believes that at no period in its history have we had so little trouble with the production system as during the winter of 1916 and 1917; this, too, in spite of the fact that we have had more difficulties arising from outside our plants than heretofore, namely:

1. Shortage of material.
2. Railroad traffic disturbances, resulting in unexpected delays in materials.

Our organization would regard the above data as ample to justify the general conclusion that we have lost no production as a result of shortening hours. To reduce it to an absolute certainty, however, we have taken from our actual records data for the two months preceding and the months following the reduction in hours, namely:

1. Actual number of employees on the pay rolls.
2. Actual production shipped.
3. Comparison in the unit representing the productivity per employee per working-day.

These figures cover the combined production of the seven shoe factories (sister assembling plants) and result as follows:

Period.	Total number of employees.	Productive unit per employee per day based on pairs shipped.
October and November, 1916 (working 55 hours).....	3,986	8.91
December, 1916, and January, 1917 (working 52 hours).....	4,105	9.00
February and March, 1917 (working 52 hours).....	4,170	9.02

(a) Number of employees includes both productive and nonproductive; nonproductive pay roll, however, is carefully standardized and changes in it during this period were infinitesimal.

(b) Of productive pay rolls 95 per cent plus is piecework.

(c) Employees classified by sex: Male, 60 per cent; female, 40 per cent (based on previous estimates, but percentages fluctuate only slightly).

(d) During the winter months there were several bad epidemics of colds and grippe, tending to increase production losses from absence.

(e) A shortage of available labor made employment conditions difficult.

The writer is firmly convinced from this and other similar experiments that long working hours are not only an economic loss to the community as a whole, but that there is ample evidence to indicate that even inside factory walls there is no net profit in running on a schedule much over eight and one-half hours per day. There are so many complex factors entering into the production of the individual employee and

particularly into the production of employee groups that the old theory of proportional production per hour is absolutely untenable.

Our experience has been that overtime work is decidedly undesirable as a method of increasing production. Our policy is to discourage it in all departments. Toward this end we have made it a rule for several years to pay 50 per cent extra for all piece-work done during overtime hours. We permit overtime work ordinarily only under the following conditions:

1. To quickly offset breaks in continuous production.
2. Where only a small number of employees are affected.
3. For short periods.

To sum up, our whole experience tends to justify the shorter-hour movement. We are absolutely convinced that it is right for the community as a whole, because we feel sure it would increase the net productivity of society. We believe it is right for the individual factory unit because we have come to realize that even in an individual plant the real problem is to get the maximum amount of work done by a given thousand people, not in a day, in a week, or in a year, but in a lifetime.

The experience of a tool manufacturer, making high-grade tools, in reducing labor turnover, eliminating lost time, and, with a reduction of hours of about 9 per cent, securing an increase in production of 10 per cent, has been told by John M. Williams, secretary of Fayette R. Plumb (Inc.), of Philadelphia, in an address entitled "An Actual Account of What We Have Done to Reduce our Labor Turnover," delivered before the Philadelphia Association for the Discussion of Employment Problems, March 5, 1917. Before presenting the results of the experience of this company, it is necessary to say, in order to afford opportunity for properly judging the results, that the firm is over 60 years old and has been engaged from the beginning in making high-grade tools. A cost system had been installed in the factory at great expense and was regarded as most efficient in securing results. It is stated that such changes as were brought about were not due in any degree to the fact that the employees were low grade or underpaid. The results secured are stated in the words of the secretary of the firm:

*First.—A bonus system.*

The employment department found that one of the greatest evils from which we suffered was continued lateness, continued absence, and workmen quitting at the drop of the hat.

To discourage these practices, and reward good workmen, they proposed and we adopted a bonus system as follows:

(a) A workman receives an additional 5 per cent of his weekly pay, providing he turns in a perfect weekly time card as to attendance. Excused only if sent home by foreman, or loses time due to injury incurred at factory.

(b) Receives another 5 per cent for maintaining the standard of a good workman.

It is assumed that all employees have maintained this standard, unless they are reported to the contrary by their foreman or the superintendents.

This is deducted in extreme cases only.

(c) While workman is credited with the bonus from the day he starts, he must work three months before he obtains it. If he quits or is discharged before this time he receives no bonus.

(d) The bonus is paid by check and a workman may leave his bonus on deposit with the firm and receive six per cent annually payable semiannually.

We now have about 41 bonus books on deposit. We have greatly improved the conditions, and feel that it has been a wise expenditure, but experience has proved that it needed stiffening and we have added a ruling that seems to be having the desired effect.

The ruling is as follows, viz:

"If an employee loses time three weeks in succession, except for reasons covered by provided excuses, he forfeits his rights to his entire bonus, until he shows a perfect time card for one week. He is notified that if he continues this delinquency, he is not considered desirable."

By showing delinquents how much they are losing in cold cash by being late and losing time, they are made to realize that it does not pay.

*Second.—Reduction in hours from 57½ hours to 52½ hours.*

During the period when men were so hard to get we tried to analyze the cause for men either not hiring with us or not staying with us and the employment department made the following report as to one of the contributing causes, viz:

"Our work from its very nature is hard and laborious, tiring men out, compared with work in the average factory.

"We figure that in order to hold our men, and make our plant attractive to new men it is necessary to reduce our week from 57½ hours to 52½ hours, with no reduction in pay.

"We figure it will not decrease our production, but will raise it."

After some discussion their report was adopted, and on December 4, 1916, all day rates were raised so that the pay equalled or slightly bettered on a 52½-hour basis the old pay on a 57½-hour basis.

All piece rates were carefully analyzed and adjusted in every case where the shorter hours affected the pay of the producers.

The results speak for themselves. The men felt better and appreciated our action. It is much easier to hire men than before.

The weekly production in one of our worst departments in spite of the shorter hours has increased 18.4 per cent and in the entire plant 10 per cent.

*Third.—Reform within a department.*

One of our departments demanded personal investigation, as we found it impossible to keep men or to maintain production.

An analysis by the employment department showed poor shop conditions in many phases:

(a) Inadequate artificial lighting at dusk, so bad that no one but the individual workman bent over his work could tell what he was doing. This part of room dark and cheerless.

(b) Bad drainage in the rear of the machines, which were fed with water. The water collected in spots. This section of the department had a dank unwholesome smell.

(c) The foreman was inefficient, had no control over his men, and therefore none over his department.

He wasted most of his time doing clerical work that he dragged out almost over the entire day.

The men who worked under him were as a class heavy drinkers and independent, worked when they wanted to and quit when they wanted to.

The following remedies were suggested and adopted:

(a) Improved lighting. 100-watt Mazda lamps were installed every 20 feet.

(b) Drain was put in which took care of all excess water, relieving both the discomfort and odor.

(c) The foreman was discharged, and a capable man from another department put in his place.

This move stiffened up discipline and improved personnel of department.

(d) The entire layout was inspected, safety guards put on all machines where there was any chance of a workman getting injured.

Everything possible was done to make the operation of the machines safe and convenient for the men.

(e) Two instructors were installed to teach new men.

(f) All piece rates were carefully analyzed and prices adjusted so that there were no "good jobs" and "bad jobs." They were all made "fair and square jobs."

Rates were equalized and set so that men could make an average sum per hour on any kind of work done in the department.

Since then there have been several adjustments and still a few to make, but we keep in close touch with the work, and "raise before we are compelled to."

This is the department that increased production 18.4 per cent with 5 hours per week less running time, and last month had the largest production in the past three years.

This attention to details had already proven it has paid, through the reduction in overhead per unit of production in this department.

#### *Fourth.—Interviews with men who quit.*

As all men are paid off through the employment department, even the men who quit without notice must return to the department to be paid wages due.

All others must secure the signature of the employment manager if they give notice or are discharged, so we have a chance to interview all dissatisfied men.

Some of the results are illuminating.

When men quit or are discharged they have no reason for withholding information.

Complaints are heard of nagging foreman, lost time in waiting for work, and other complaints bearing on shop efficiency.

Those are investigated, and if the fault is with us it is remedied.

These complaints brought to light the weakness of one of our best foremen.

He always had a "chip on his shoulder," approached his men with that attitude, and caused a great deal of friction before his fault was discovered.

A talk by our superintendent convinced him that while that sort of attitude may have been all right ten years ago, "it can't be done"—not now.

Another case; a man quit, and on being asked for reasons, stated that he had to lose too much time waiting for one indispensable tool, and for material for his work. Likewise was advised that his work was O. K. by one inspector, only to finish it up and have half a day's work thrown back by another inspector.

An investigation proved that the man was justified; the case was settled, and the man is still with us.

As this man was an experienced hand in the department in which, I stated, it cost us \$100 to "break in" a new man, it looks as though this was a fair day's work.

#### *Fifth.—Transfers in the factory.*

This was something never attempted. If a man did not suit his foreman, he was fired and no questions asked.

Now we look into unsatisfactory cases, try to find the cause, remedy it if we can, and if we can't, try to locate the unsatisfactory man in another department.

Just a few cases of what we have done:

We have one young man, of undoubted ability, good personality, pleasant, and obliging.

He became a regular Monday absentee, took all that was told to him, as a reprimand, with a lackadaisical air, and had evidently lost his "pep."

We found upon investigation that he was fast becoming disgusted with his outlook and felt that he was up against a blank wall.

We transferred him to a semiexecutive position in another department, gave him larger responsibilities, and a larger salary, and he has more than made good.

Another man was a boss trucker, who made a flat failure of the job.

He was then made head inspector of one of our hardest departments, and has done wonders in bringing up the general efficiency of the department. He was temperamentally unfitted for one job, and fitted for the other.

*Sixth.—Actual accomplishments.*

I will not inflict upon you any details of labor turnover, but will simply point out the reduction in the number of men who quit since the department has been in operation.

Taking April, 1916, as a basis, during the month of July, one of our worst months on account of heat, the number of men who quit was reduced 25 per cent.

This work has been steadily improving and in January, 1917, the reduction on the same basis was 48 per cent.

Since the installation of the employment department, we have decreased our working force 10 per cent, reduced our working time almost 9 per cent, and increased our total shop production 10 per cent.

*Seventh.—Indirect benefits.*

When we first started the employment department our men looked on it with suspicion, as being another one of the things the boss was trying to put over on them, under the guise of service.

This attitude of mind is common, and is no more than to be expected, through past relations of employee and employer.

Vanderbilt's phrase, "the public be damned," has been paraphrased over and over again with the "men be damned" and the "boss be damned."

Recollect that this feeling has been handed down from father to son, and is bred in the bone.

It is a survival of the days when "to the victor belongs the spoils," and "might is right."

We are now on the threshold of better things.

Employers know and workmen are learning that their interests are identical. One can not be prosperous without the other.

This, however, is the new viewpoint, and has only made headway within the past 10 years, and we can not expect to wipe out generations of suspicion and misunderstanding overnight.

Our employment department has adopted as its motto, "put yourself in his place," patiently listens to complaints, and does not make the common error of believing that lack of education actually means lack of knowledge.

Workmen do not put their kicks in the purest English, although sometimes they adorn them with the strongest.

Our men have learned that the employment department is built for them, that it is a place where they get a square deal, and that they will be treated right on all occasions.

To show you how far we have gone I will cite the way disputes were handled before and have been since the creation of this department.

Formerly men would stop work in a bunch demanding something, and refuse to return to work until it was granted. In one case they gave us one hour to consider a question involving 50 men in one department, and before we had time even to digest the demand the hour was up and they walked out.

Since April 1 we have had no strikes nor no threats. We have had two requests, and the men have stayed at work until a decision was reached.

I wish to say that if our employment department had done nothing but produce this feeling of personal responsibility to each other on the part of the men and on the part of the firm, it would have justified its existence and its cost.

In conclusion I feel that in the study of employment problems we are trying to solve issues ages old, and while the reward is great from the standpoint of efficient factory management the reward is still greater if we can but help to solve the principle of humanity involved, and so insure that cooperation without which we can make no progress, and with which the watchword will be "prosperity for all" and not "prosperity for one."

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#### TRAINING FOR WAGE EARNERS INJURED IN INDUSTRIAL ACCIDENTS IN MASSACHUSETTS.

The Massachusetts State Board of Education, which was directed by the legislature to investigate the subject of special training, primarily vocational training, for wage earners whose earning capacity has been permanently reduced through industrial accident, made its report in February, 1917. This report<sup>1</sup> suggests that the rehabilitation and treatment of injured workers involve five well-recognized stages—a period of surgical treatment, a period of convalescence and mental adjustment, a period of training, a period of placement, and a period of physical adjustment to the demands of position—and the board in pursuing its investigation established the following facts:

The number of serious industrial accidents is much greater among males than females.

The number of accidents to workers between the ages of 21 and 40 is greater than the number among all other groups combined. Between these ages experience has shown that people in general are still trainable; that is, motor coordinations and reactions can be established as habits, and degrees of skill, depending upon the capacities of individuals, can be attained.

The number of serious accidents occurring in skilled trades, with the possible exception of carpentry, is relatively small; on the other hand, the greatest number of accidents occur in unskilled and semiskilled occupations.

The number of serious accidents to immigrants with relatively little formal education or specific training for vocations is relatively large. These conditions must receive careful consideration in projecting plans for future training.

Through "compensation" a considerable number of individuals are enabled to change to another occupation in which they are self-supporting, or to leave the country.

No agencies exist at public expense, in Massachusetts, for ascertaining the number of people who might be trained.

There are in Massachusetts only private or semiprivate agencies for advising injured people as to methods of obtaining a livelihood, securing means of training, or placing them in position.

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<sup>1</sup> Massachusetts. Special report of the Board of Education relative to training for injured persons. February, 1917. House No. 1733. Boston, 1917. 62 pp.

In general, the problem of training blind or crippled adults, as distinct from blind and crippled children, has as yet received little public recognition in this country in the form of legislative enactment or provisions for training in institutions or elsewhere.

Experience in foreign countries and to a less degree in this country has shown that large numbers of people crippled as a result of accident or otherwise can in their adult years be trained to perform work enabling them to become self-supporting, but the methods of training are still in a tentative and experimental rather than a demonstrated stage of development. Accounts of many suggestive proposals and experiments have been found.

Injuries to one eye, while frequent, do not as a rule prevent the worker from pursuing the vocation upon which he has entered, while injuries to both eyes are rare.

The board finds that the commission for the blind is already training workers suffering from injuries of this nature, and is of the opinion that any extension of such work should be under the direction of that commission.

In view of the age, limited previous training, and type of occupations engaged in prior to time of injury, no positive assertions can be made regarding the numbers of people suffering from loss of or serious injury to a hand or other crippling injury who can be trained for skilled employments. Experience shows in individual cases that by an adaptation of tools and other means such possibilities exist and should be sought out. Research and experiment have shown that possibilities for training for profitable employment exist in a variety of semiskilled occupations, but in few of these have predetermined training courses been organized even for the uninjured, except such as are given on the work in the industries.

The organization of such training courses being a matter regarding which little positive knowledge is available, a considerable amount of research and experiment is desirable before it is attempted on any large scale.

It has been asserted by many people familiar with this work that employers prefer to employ persons suffering no handicap. Considerations regarding speed, amount of output, safety, and standardization of tools and equipment all contribute to this attitude. Although little first-hand investigation has been practicable with the evidence at command, it is believed that the problem of placing handicapped persons in industry in competition with the uninjured is, under present industrial conditions, a serious one, and one that requires further investigation and experiment before definite conclusions can be stated and final recommendations made.

It is admitted that data are not available to determine the number of people who, under present conditions, are in danger of becoming unemployable because of industrial accident (an estimate varying from 500 to 2,000 a year being given), but it is clearly pointed out that "there is in Massachusetts a large problem of rehabilitating injured workers through scientific methods of discovery of aptitudes, organization of means of training, development of agencies for placement in industry, and rendering assistance to the handicapped while adapting themselves to the demands of a new position."

After receiving all the expert treatment available the workers, it is stated, should be trained in special schools, in existing schools, or in industrial establishments through cooperative arrangements with employers for work they can perform after proper training. The State may cooperate by utilizing existing State-aided institutions and through traveling teachers under the direction of the board of edu-

cation who shall investigate the possibilities of training the handicapped worker both in schools and workshops or manufactories.

In an appendix to the report Dr. F. D. Donoghue, medical adviser of the industrial accident board, refers to the methods employed by the warring nations of Europe in restoring to work the cripples produced by the war and urges the establishment of institutions for a similar purpose in all our large industrial centers. He points out that in Massachusetts approximately 421 cases are reported annually in which the injured employees are incapacitated for work for a period of upwards of one year, and estimates that at least 50 per cent in compensation cost of these injuries "can be saved by the intelligent supervision of the work of rehabilitating injured employees. The cost for such supervision and the working out of the plan would be low after the first outlay had been made; probably it would be self-supporting and certainly the results would prove alluring to insurers."

The board recommends that a bureau be established under the direction of the board of education, which shall undertake in a limited way the training of persons whose earning capacity has been seriously impaired through accident or disease. A draft of a proposed act to effectuate this end is given and it is estimated that the expense of such a bureau for training crippled people, during the first year, would be \$17,000.

The report contains a description of typical agencies existing and projected for training in foreign countries<sup>1</sup>; an extract from an article on functional readaptation and professional reeducation of the disabled victims of the war<sup>2</sup>; an extract from an article on the organization of the training of the disabled<sup>3</sup>; an extract from a paper on training the crippled soldiers<sup>4</sup>; a statement furnished by the committee on cripples of the Cleveland welfare council; and a statement of the work being done by the industrial clinic at the Massachusetts General Hospital, Boston.

Dr. Amar, in speaking of the organization of the training of the disabled, emphasizes the fact that care should be exercised in determining the occupation each crippled individual is to pursue. He estimates that 80 per cent of the maimed are capable of vocational reeducation. Of this number 45 per cent may succeed in earning normal salaries, 20 per cent may not arrive at a full working capacity, and in 15 per cent the reeducation is entirely fragmentary. "The majority of the 20 per cent not capable of being reeducated," he

<sup>1</sup> Extract from a letter of J. Varendonck, Cardiff, Wales, as quoted in report of the commission of military hospitals, Ottawa, Canada, 1915.

<sup>2</sup> By Dr. Bourillon, director of the national refuge for convalescents, St. Maurice, France. Printed in the report of the commission of military hospitals, Ottawa, Canada, 1915.

<sup>3</sup> From an article by Dr. Jules Amar, directeur laboratoire des recherches sur le travail professionnel, Paris, prepared for the commission of military hospitals, Canada.

<sup>4</sup> By Frank B. Gilbreth, Providence, R. I., presented at a meeting of the American Society of Mechanical Engineers, New York, Oct. 12, 1915.

states, "are dependent upon relief institutions for work; nevertheless a very small minority attain sufficient productivity to be useful in the workshop."

In a general manner, it appears to be unreasonable, according to these totals, not to seek to reeducate almost all the mutilated. It is a question of science and of method; it demands the organization of training schools. \* \* \* It unites medical and technical knowledge, to the end that artificial limbs will be adapted to satisfy physical and vocational capabilities.

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### WHAT FRANCE IS DOING FOR HER DISABLED SOLDIERS AND SAILORS.

BY PERCY ALDEN, M. P.

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A great deal of interest has lately been aroused in the future welfare of our disabled and discharged soldiers. A large number of experiments are being made with regard to medical treatment, and especially with regard to the training and reeducation of men who otherwise would be entirely dependent upon their pensions. It is interesting to note that last autumn Sir Henry Norman, M. P., sent in a report to Mr. Lloyd George, who was then secretary of state for war, in which he described what France is doing in this direction. We propose to give some account of this work, drawn in the main from that report, and at the close of this article to print a list of the various societies and institutions in England that are already engaged upon this extremely important task.

French soldiers during the first eight months of the war were in a singularly unhappy position, owing to the fact that no arrangements whatever had been made to cope with the special needs of the mutilated and disabled. The only help available was the "assistance publique," which corresponds in the main to our poor law, and is administered by the Ministry of the Interior. This method naturally would offend the spirit of any self-respecting nation, and it had to be modified. No one wishes to include the disabled soldier in the category of the pauper, the abandoned child, or the person without visible means of support who may be a tramp or a beggar. Accordingly, in April, 1915, there was set up an "interministerial commission," under the chairmanship of M. Brisac, who was director of "assistance publique." The commission consisted of representatives of the ministers of war, marine, public instruction, commerce, and agriculture, and its duty was "to study the question in all its aspects, to settle the principles upon which it should be treated, and to assign parliamentary funds." Two schools were established for the reeducation of disabled soldiers and placed under the Ministry of the Interior, which

maintains them. At the same time all private institutions that were willing to do this important work were given subventions out of a credit of 2,000,000 francs (\$386,000) voted by parliament. Later on additional sums were granted for this purpose. These two schools were the Institut de Saint-Maurice, near Paris, and the École Normal, at Bordeaux; the latter, being an entirely new institution, was more scientific in character and was regarded as a forerunner of other institutions designed to do this reeducation work. At the head of it is a distinguished physician named Dr. Gourdon, and special attention is given in this school to those who have lost their arms.

#### CREATION OF A CENTRAL AUTHORITY.

It was not long before the Government came to the conclusion, owing to the large number of disabled men, that no one ministry can undertake the reeducation of these unfortunate soldiers. In any case, the Ministry of the Interior was hardly the right department to be responsible for it, and it was resolved that the time had come to constitute a new body which should deal with the whole problem and should prevent confusion, overlapping, and waste. Accordingly, on the initiative of the Ministry of Labor, a large coordinating scheme was created by interministerial decree, which came fully into operation in the spring of 1916. This new committee was called the national office for mutilated and discharged soldiers, and the presidents are the minister of labor, the undersecretary of state for war, who is responsible for the service of health, and the director of public assistance and hygiene, who is also president of the commission of reeducation. The Chamber of Deputies unanimously voted funds for the support of this office, which has its headquarters at 95 Quai d'Orsay. The special object of the national office is to coordinate the work of public departments and institutions dealing with discharged and mutilated soldiers, and to centralize all useful information on the subject. It is divided into two sections, an administrative committee, a commission of reeducation, and a council for the study of improvements (*conseil de perfectionnement*). The work of the national office includes the following:

(1) To keep a register of every soldier who by reason of wounds or illness resulting from the war has thereby suffered an important and permanent diminution of professional capacity, his civil status, his military situation, the nature of his invalidity, his previous occupation, and the new occupation he may have adopted because of his invalidity.

(2) To maintain a list of work and employment available to disabled soldiers, distinguishing the kinds of employment suitable for each type of invalidity.

(3) To coordinate all information received from institutions dealing with disabled soldiers and keep a statistical record of situations filled by them.

(4) To collect all legislative and other documents relative to the treatment of disabled soldiers in France and abroad.

(5) To unite in a common effort all departmental and local organizations for the welfare of disabled soldiers.

This program has not, however, been fully realized, because the different ministries concerned are allowed to continue their special activities and because some, at least, of the funds voted are still at their separate disposal. One of the most important objects was to secure that the two next stages of development should follow as soon as possible, otherwise coordination can not be obtained. The first stage is the transference to the national office of the authority and work of each ministry so far as this question is concerned, and the second is the bringing of the many separate private institutions and organizations under the control of the national office. The difficulties in the way of these two steps are just such difficulties as we have encountered in this country. When it is proposed to take away from one department a portion of its work and hand it over to another, for a time everything seems dislocated and it requires a rather ruthless hand to effect the change.

#### GENERAL PRINCIPLE OF FRENCH REEDUCATION.

Disabled soldiers naturally fall into two classes. First, those who are wholly disabled and permanently unable to do any kind of work; and, second, those who may by reeducation be restored to social and professional efficiency in varying degrees. The national office is not concerned with class 1; that is a problem which the State must deal with quite independently. Each of these men should be pensioned, and the pension should be in proportion to his need. With regard to the second class, viz, those who are capable of reeducation, there are two branches: (1) The reeducation of men for industrial employment, and (2) finding work for them when they have become capable of undertaking it.

Here clearly two alternative courses present themselves: (a) To endeavor to replace the reeducated man in his former employment, for which he would have the great advantage of knowing all the technical details of the work, in which he would have the sympathy of his fellow workers and the support of his trade-union, and in which he would be able to earn a greater or smaller proportion of his former wages, the State giving him a pension more or less the equivalent of that portion he can not earn; and (b) to reeducate the man for the kind of work he would be best qualified to perform, in

view of the nature and extent of his disablement, without regard to his previous employment. The French Government has adopted the first of these two courses.

Therefore, the principle upon which the national office, and indeed all French institutions are acting, is, so far as possible, not to uproot the disabled man either from his previous locality or his previous employment. Industries in France, as elsewhere, are largely local, and it has been thought eminently desirable to keep the man industrially localized. It is considered that previous knowledge of a trade, and the possession of a home or friends in the locality, are of such importance as to outweigh all other considerations. And, of course, the artificial limb supplied to the man should be such as to enable him to perform some job, or run some machine of his trade. This being the accepted French view, the national office proposes that an organization shall exist in every industrial district of France for the mutilated and disabled of that district, where both technical re-education and subsequent finding of employment will be provided for the men who joined the army from there.

#### EXISTING AND PROPOSED INSTITUTIONS OF REEDUCATION.

There are over 101 existing or proposed institutions for reeducation in various departments, and in addition there are four schools of reeducation, one of them being agricultural, founded and supported by the union of foreign colonies in France. In addition to this the Ministry of War announces that a large number of centers of surgical equipment and reeducation are to be established in different military "regions" covering the whole of France, the idea being that a disabled man shall be sent to a center of surgical equipment in the military region to which he belongs as a soldier. To this center is to be added a "Normal School of Reeducation," depending on the Ministry of War, or in close relation with it, and a State workshop of "prothesis," where artificial limbs are studied, made, and repaired. About 10 centers are being independently organized by the Ministry of War for disabled soldiers before their discharge from the army—a very important qualification. These schools are modelled on the Institut Saint-Maurice, which is under the Ministry of the Interior.

#### PENSIONS FOR DISABLED SOLDIERS IN FRANCE.

With regard to the two classes of discharged and the pensions to which these disabled soldiers are entitled in France, the distinction is that class No. 1 is accorded to men with severe and incurable wounds, or grave and incurable infirmity resulting from military service. In this case an annual pension is allowed. In the case of class No. 2 the discharge gives no right to pension because the men are suffering from infirmity not recognized as due to their military

service, and only a provisional grant is made; but in France, as in England, there is a very strong feeling that if a man has been passed as fit for military service, and subsequent to his enlistment some infirmity should be developed, it should be recognized as due to that service. There can be little doubt that in England this recognition will obtain before long; but in France up to the present, apart from private benevolence, only a small sum of 30 to 50 francs [\$5.79 to \$9.65] monthly is allotted, and that only temporarily until a new pension law is passed. The different classes of pensions are as follows:

Class I.—Amputation of two limbs, or total loss of sight.

Class II.—Amputation of one limb, or total loss of use of two limbs.

Class III.—Severe wounds, the pension depending upon number of years of service, unless received in action.

Class IV.—Slighter wounds, the pension depending upon number of years of service, unless the wound was received in action against the enemy.

Class V.—In case of death, pension for widow, or orphans if no wife living.

The scale of these pensions is regarded as quite inadequate, and will probably be modified. It is the old scale of 1870-71, but so far as class No. 1 is concerned the pension once given is given for lifetime, and is not subject to withdrawal or modification. Further, in fact, though not by right, almost every soldier who has lost a limb has received the military medal, which carries an annual grant of 100 francs [\$19.30]. The Legion of Honor, which many have also received for acts of exceptional courage, carries an annual grant of 250 francs [\$48.25]. The sum payable to a disabled man while awaiting his discharge No. 1 is 2.25 francs [43.4 cents] a day for a sergeant, 2 francs [38.6 cents] for a corporal, and 1.7 francs [32.8 cents] for a private, say, respectively, 1s. 10d., 1s. 8d., and 1s. 5d.

#### THE SUCCESSIVE STAGES OF THE FRENCH SYSTEM.

Casualties may be divided into six classes, as follows, dealt with as here specified:

1. *Dead*.—A pension is granted to the widow, or if no wife, to the children.

2. *Totally disabled*.—A pension is granted if they can live with friends. Otherwise they are supported in State institutions, and it is suggested for this purpose to restore the great Hotel des Invalides in Paris to its original object.

3. *Blind*.—These are trained in separate institutions.

4. *Sick*.—These, if they recover, return to the army, or, if unfit for service, receive, if the unfitness is recognized as arising from their service, discharge No. 1 with permanent pension, or otherwise, discharge No. 2 with provisional allowance.

5. *Functionally injured*.—These are treated in a center of physiotherapy, whence in due course they (a) return to the army for active or base duties, (b) pass into class 2, or (c) receive discharge No. 1 from the army with fixed permanent pension, and enter, at their own wish, a school of reeducation.

6. *Amputated*.—These enter a center of surgical equipment, where they are fitted with an artificial limb, receive discharge No. 1 with permanent pension, and enter, at their own wish, a school of reeducation.

The men in classes 5 and 6, who have passed through a school of reeducation, are provided with work by an employment bureau, and thus return to the civil industrial life they quitted on mobilization.

#### DISABLED MEN AND AGRICULTURE.

The problem of the maimed agriculturist is a particularly difficult one in France, since 60 per cent of the maimed soldiers are agriculturists. This is due to the fact that munition workers are often town dwellers, so that the townsmen are more likely to be working in safety at munition making, and receiving high wages instead of serving in the trenches. The French peasant perceives this, and is anxious that his son who succeeds him should not have to go through the same hardships in case of another war. He desires his son to be a town dweller rather than an agriculturist. This means that there is some probability of a shortage of labor on the land in France after the war. In addition to this the maimed soldiers themselves are not anxious to go back to the land, first, because they think they will be handicapped by the loss of an arm or leg; and secondly, because the city is more attractive. Accordingly, the French Government is anxious to secure that wherever possible the reeducation schools should be agricultural in character, and when men complain that they can not dig and do not wish to go back to the land, they are offered the option of learning other agricultural operations, such as poultry keeping, beekeeping, horticulture, cheese making, butter making, shepherding, and market gardening. If the right kind of inducement can be offered, there is no reason why men should not choose to earn their living in the future in one of these subsidiary industries. The main thing is to keep them on the land. An effort is being made to induce men to become proficient motor mechanics for agricultural tractors and motor implements. There can be no doubt that the future of agriculture in France will depend to a considerable extent upon the way in which the French farmer and peasant adapts himself to new methods. A knowledge of mechanics will be of great commercial value when the men return to their own country districts.

## CENTERS OF PHYSIOTHERAPY.

Before speaking of the various schools of reeducation a word is necessary about the centers of physiotherapy. At these centers injuries which are called "functional wounds" as distinct from amputations are treated. Men who are suffering from impaired muscular or articular functions are treated in these centers by means of mechanical appliances by heat, electric-light baths, water, gymnastics, massage, electricity, and radium emanations. The chief center is situated at the Grand Palais, Paris, of which Dr. Jean Camus is chief medical officer. A similar equipment to that of the Grand Palais and the Zander Institute, which is situated in the Rue d'Artois, has been set up by a committee of physicians in Portland Place. Very striking results have been achieved at these institutions. The average incapacity of patients during the month of December, 1915, on entering was 28.11, and on leaving, 0.96. During the four months ending December 31, 1915, 1,780 "functionally wounded" men, whose morbid condition had existed for an average period of six months before their treatment, were returned to the military depots, 290 to base duties, and 92 recommended for discharge, at a gain to the State on their pensions and allowances, represented by a capital sum of 10,000,000 francs [\$1,930,000], say, £400,000.

## SCHOOLS OF REEDUCATION.

We now proceed to deal with the schools of reeducation. Men are sent from the centers of surgical equipment and the centers of physiotherapy to these schools, one of the most notable of which is the Institute of Saint-Maurice. The Institute of Saint-Maurice is situated on the outskirts of Paris, and was before the war in some measure devoted to those who were permanently disabled by accidents. The other portion is a convalescent home for those discharged from Paris hospitals. It is this part which has become a military hospital and a center of surgical equipment. It is under the Ministry of the Interior, and Dr. Bourillon is at its head. The school is attended by men who are undergoing treatment in the adjoining hospital, but it is open to all discharged soldiers and sailors recognized as incapable of returning to their previous employment. They may come either as boarders or as day scholars. During this time those who are in receipt of a provisional pension of 1.7 francs [32.8 cents] per day pay 1.2 francs [23.2 cents] of this to the school, keeping the remaining 0.5 franc [9.6 cents] as pocket money. When they receive their final military discharge and pension, they are admitted gratuitously. Boarders are provided with board, lodging, washing, lighting, and heating. Day scholars receive 5d. [10.1 cents] a day, and keep their pension as well. Half of all pensions is retained, to be given in a single sum when the student leaves. The hours of work

are eight per day. When men produce goods which are sold, they receive the balance, less 10 per cent, left after deducting the cost of raw materials. Prizes are given for special diligence, and these often take the form of an outfit of tools for the trade which has been learned. The disabled man chooses what trade he will be taught, and may change to another if he thinks he could do better at it. Any man is free to leave at any moment, only moral pressure being applied to induce him to stay until he is really equipped to earn a living. The average time taken to train men to earn their living at different trades are stated by the director of this school to be as follows, based upon 16 months' experience, with about 700 men:

Clerk, 3 months.

Draftsman, 10-12 months.

Leather worker, 8 months.

Shoemaker, 6 months for repair work.

Shoemaker, 8 months for repair work and new work.

Mechanic, 6 months.

Tailor, 8 months.

Tinsmith, 4 months for a town workshop.

Tinsmith, 8 months to work on his own account in the country.

"In separate temporary buildings in the grounds a number of expert mechanics, released from the army for the purpose, were making artificial limbs and other surgical appliances. Plaster-of-paris casts were made of the stumps of limbs or other injured parts of the body to be fitted, and of one whole leg when another leg was to be made to match it. This was admirably done, and, of course, obviated the necessity of repeated and tiresome fitting and trying on. The artificial limbs made here were of steel, leather, and felt of beautiful workmanship, but they appeared to me rather elaborate, expensive, and heavy."

The average number of men under training at one time, both at Saint-Maurice and in Paris, is between 250 and 300. The State gives a subsidy of 5 francs [96.5 cents] per man per day. That is, the total cost to the State for the Institution and the Hotel-Annexe is from 1,250 to 1,500 francs [\$241.25 to \$289.50] per day, say, £18,000 a year; to which must be added the private subsidy above mentioned. This includes all expenses of whatever nature.

#### THE REEDUCATION SCHOOL AT GRAND PALAIS.

The school at the Grand Palais is situated in the Champs-Élysées in Paris. It is supported by a benevolent society, composed of the leading members of the foreign neutral communities in France, and the funds are obtained by committees in all the principal cities of Europe and America. The president is Mr. J. B. Schoniger, the president of the American Chamber of Commerce in Paris, and one

of the chief benefactors is Mr. E. Stotesbury, of Philadelphia, who has given large sums of money to this school. The director of the school is Dr. Charles Vallée, an eminent specialist, who was himself wounded at the front. The men in training here are not discharged men, but are still in the army, and therefore subject to discipline. Most of them are finally discharged when their medical treatment and school training are completed. Almost all trades and employments are taught: Bookkeeping, draftsmanship, typewriting, shorthand, English, harness making, shoemaking, hairdressing, carpentry, cabinetmaking, tinsmith's work, mechanics, tailoring, soap making, etc. Each workshop is under the charge of a "foreman" or "professor," who was at first himself a maimed man, but now, since the military authorities took too many of these best men back into the auxiliary services, is a civilian expert paid a regular salary. The men work (including their medical treatment) seven hours a day, and they are paid a penny [2 cents] an hour, rising to 2d. [4.1 cents] as they advance in skill. They do work for the army or the public, or the product of their labor is sold commercially.

Dr. Vallée states "his fundamental aim to be to give the maimed man a genuine professional value, enabling him to resume his place in social life, and to gain honorably his livelihood. To this end, the first question he puts to himself with regard to each man is: Can he be fitted to return to his previous employment? If so, every effort is made to enable him to do so, and he is reeducated in the appropriate workshop. If this is impossible—as when, for instance, a man who has been a carpenter can no longer climb a ladder—then he is trained in the job most nearly resembling his old one, to make use of as much as possible of his previous professional knowledge. Thus a disabled carpenter should become some kind of woodworker, or a disabled plumber a tinsmith. The choice of a trade should depend upon a man's previous knowledge combined with his actual physical aptitude.

#### THE SCHOOL AT "MAISON BLANCHE."

This school is attached to the great military hospital, formerly a large civil convalescent home and hospital at Neuilly-sur-Marne, about 8 miles from Paris. It was opened on July 24, 1916, and is under the charge of Dr. Kresser. At this hospital only men who have suffered amputations are received. While undergoing treatment, and not yet discharged from the army, they can, if they choose, receive instruction in the reeducation school. The average number in hospital is about 700, and of these about 270 avail themselves of the privilege. Unlike the Institute of Saint-Maurice, their training comes to an end when their hospital treatment is finished, and the average length of stay is only from two to three months. The installation of the school cost 39,000 francs [\$7,527], and the equip-

ment 15,000 francs [\$2,895]. This year's budget for an average of 300 students, and including the cost of an agricultural annex, under construction, and 50 acres of land, allows for a total expenditure of 300,000 francs [\$57,900], say £12,000.

An employment bureau has been established, which corresponds with employers of labor in the district to which the men belong, and places have already been found for a good many men. All the usual trades are taught in this school. Some officers are in the bookkeeping class, but men are learning basket work and leather work, shoemaking, french polishing, and woodcarving. Dr. Kresser has purchased 50 acres of land, and hopes to start before long an agricultural school, in which will be taught farmyard work, beekeeping, and the use of motor tractors. He is strongly of opinion that professional reeducation should be made obligatory since, if men do not take up any work, the effect of the months of aimless unoccupied hospital life is to render them useless later on. There is another school of reeducation at Lyon and a further one at Bordeaux.

#### AGRICULTURAL TRAINING IN FRANCE.

##### THE STATE SCHOOL AT ONDES (HAUTE-GARONNE).

This school has 90 beds. The course of instruction lasts three months, and 300 men per year receive an agricultural training. The subjects taught are farm work, vineyard and nursery gardening, horticulture, blacksmithing, carpentry, and basketwork. An employment bureau has been established, but there are many more places offered than men to fill them. The director's report contains the following passage, and expresses the general feeling on this subject: "It appears to us indispensable that the disabled man should be reeducated while he is still a soldier; that is, while still subject to military discipline. Once become a civilian, the disabled man, almost in spite of himself, has but one wish—to return home, even if he vegetates there."

##### THE SCHOOL AT JUVISY.

Juvisy is a small town on the Seine, about 20 miles from Paris, which, in addition to being an agricultural training school, is also a center of physiotherapy. Near Juvisy is a farm of 1,000 acres, and over 100 acres of this, together with farm buildings, has been taken on a three years' lease for the purpose of training disabled men. Everything is provided for agriculture and rural industries, including cow houses, stables, dairies, piggeries, fowl houses, kennels, while a large garage and motor shop is being erected for the study of agricultural tractors. Although this school is primarily designed for men with all their limbs—of course, in a more or less disabled condition—it is intended to add to the number a few men with artificial limbs.

This school is a free gift to France from foreign sympathizers, and it is hoped that the whole of the thousand acres will eventually be taken over. This school has been so recently established that it is impossible to say how far it is likely to be successful, but much money and thought is being expended upon the treatment that is there given, one of the main objects being to save men for country life, first by restoring to them, as far as possible, the use of their disabled limbs; and secondly, by teaching them the principles and practice of subsidiary rural industries by which they can earn a good livelihood on the land they already possess.

#### THE TRAINING OF FRENCH BLIND SOLDIERS.

There are two main institutions for the training of blind soldiers in France. One is the "Maison de Convalescence," at Reully, and the other is "Le Phare de France," in the Rue Daru, Paris. The Maison de Convalescence was opened on March 29, 1915. It was erected by the ministry of the interior, but is partly dependent upon the ministry of war since it receives undischarged soldiers. The State contributes 2.5 francs [48.3 cents] per man a day, and the difference is made up by an allowance from the budget of the hospital.

A further important contribution, without which the benevolent activity of the school would be greatly diminished, is made by a charitable society, known as "L'œuvre des Amis Soldats Aveugles," supported by contributions from French sympathizers in many parts of the world. A gift of 100,000 francs [\$19,300], for instance, has been received from South America. "This society presents an outfit of tools for his trade to every man leaving, and gives him a supply of raw material to start with, until his handicraft begins to bring in money. It also gives the man an outfit of clothing, called his 'trousseau.' It presents him with 500 francs [\$96.50] on his marriage—30 men have married from the school—and treats all his comrades to coffee and a cigar on his wedding day. It also buys raw material in commercial quantities, and resells it at cost price to the men after they have set up business for themselves. It has, for example, just bought £12,000 [\$58,398] worth of fiber for household brushes. In a word, the society adds a humanizing factor to the bare essentials provided by the State. Doubtless, the cheerfulness and briskness of the blind men throughout the school was a reflection of this wise and intelligent sympathy."

The school has 233 beds, and also receives a number of men who live in the neighborhood. Altogether it has had about 500 men in training, and about 300 have left it with a handicraft by which they can make a living. The director is Monsieur Emard. The subjects taught are brush making, basket making, typewriting, piano tuning, net making, upholstery fringes, cooperage, and massage.

## THE PHARE DE FRANCE.

The "Phare de France" was founded and is directed by Miss Winifred Holt, an American lady, who for many years devoted herself to the care of the blind in the United States. The funds are raised by an influential committee in America, and this Paris "lighthouse" was established in a large and pleasant house in the fashionable quarter of Paris. The esteem in which Miss Holt and her work are held is shown by a recent official visit of the President of the Republic and the fact that she is allowed to take for training any blind soldier she may find in a hospital. The "Phare de France" was opened on August 18, 1916, so that there has not yet been time for complete training. Officers and men are alike admitted, 43 in residence and about 20 living outside. Intelligence and industry, besides total blindness, are the only qualifications for admission.

The subjects taught range over a wide field and include more of what may be called the humanities than is usually found in such institutions—artistic pottery work, for example, which is stenciled by the blind, mathematics, music, foreign languages, weaving on elaborate looms, etc.

"The 'Phare' leaves the impression of a happy house party or a social center rather than an institution. The pupils clearly regard the place as a home, and blind officers and their friends came in to tea almost as in a club, sure of a hearty welcome and a pleasant hour of conversation, and music and laughter. This atmosphere is due, first, to Miss Holt's long experience with the blind; and second, to her own sunny and energetic temperament, which diffuses cheerfulness and vivacity wherever she passes."

It is hoped to establish similar "lighthouses" in other parts of France.

Miss Holt's admirable and devoted work seems to supply a need hitherto unmet in France, whereby officers and those blind who require it, may adapt themselves to an occupied but more or less leisured life, rather than to the training of those who will have to return to a workingman's environment and earn their livelihood at a trade.

Sir Henry Norman, in commenting on the conclusions to which he arrived, makes the following statement concerning the treatment of the blind soldiers in England:

"The training of the blind French soldier at the 'Maison de Convalescence' suggests several considerations bearing upon our own treatment of this problem.

"First, the industrial training of the blind should be genuine professional training, not the well-meant efforts of amateurs. A man should be taught by a professional, the work he does should be work having a definite industrial and commercial value, and his training

should not be regarded as complete until it has been a thorough apprenticeship, rendering him capable of doing industrial work with accuracy and at fair speed.

"In this connection it may be said that the best teacher will probably be found to be a man who was an expert at his job and has himself become blind.

"No handicraft should be permanently taught, the product of which requires an appeal to charitable sentiment for its disposal.

"Second, besides the teaching of what may be called the coarser kinds of work, advantage should be taken, in case of suitable men, of the qualities in which the blind man excels the seeing man to train the former to do work on a higher intellectual level. The blind man's superiorities lie (1) in the exquisite development of the sense of touch; (2) his infinite patience; and (3) the pride he takes in the excellence of his workmanship. Clearly, therefore, precision work involving repetition is peculiarly suitable to the blind.

"Indeed, 'repetition' in the workshop sense of the word will be found to lie at the basis of a blind man's success. He is unduly handicapped in making a number of different parts and assembling them, whereas he is specially capable of dealing with a large number of identical parts requiring careful finishing.

"In conclusion, this French experience shows that many a blind soldier, if wisely and efficiently trained, may be restored to a higher degree of industrial efficiency, bringing with it greater earning power than he possessed before his loss of sight."

#### PROTHESIS.

It is impossible to give any adequate account of that portion of the report which deals with the work in prothesis by Prof. Amar, who for many years has studied the problems of the physiology of the workman performing the work of his trade. Up to the present he has restored to work about 1,300 men. "Prothesis" is the Greek word meaning "addition," and signifies the provision of artificial apparatus to perform, so far as possible, the work of an amputated limb or replace a lost function.

The Amar system of prothesis comprises in every case three stages:

(1) The investigation of physical fatigue and mental aptitude. That is a scientific determination of exactly what is physically left to the man as the result of his wound and amputation, and what his mental coefficient is.

(2) Education of the amputated man's stump in sensitiveness.

(3) Education of the complete limb, consisting now of both stump and artificial limb.

It is only when the man has passed through these three stages that his "professional reeducation"—that is, his training to perform his actual industrial job—takes place.

"England, up to a short time ago, appeared to be ignorant of Prof. Amar's work. But recently the officer commanding the hospital of the Canadian contingent at Ramsgate has been to Paris, and has ordered an equipment, and Dr. R. Fortescue Fox is endeavoring to procure apparatus for the privately established 'Physical Clinic' in London. That is all. Not even an inquiry had been made, Prof. Amar told me, until my visit, on behalf of the British Government. Thus the situation, as I am informed, is that, whatever our enemies may be doing, our allies will soon be dealing with this grave problem on scientific principles."

The cost of a complete single equipment of apparatus is under £400 [\$1,946.60], and Prof. Amar estimates that the total cost of a center of reeducation, to treat 3,000 amputated as boarders and 10,000 wounded living outside, would be about £18,000 [\$87,597] for the first year, and £8,000 [\$38,932] for the second. The cost of establishing the Italian centers has been less than this.

After two years from the conclusion of the war the centers would no longer be needed for the reeducation of the disabled soldiers, but they would remain of permanent value as schools of scientific "professional"—that is, industrial—apprenticeship. "The war," he says, "will be over, but industrial work and the necessity for the scientific study and physical organization of it will be with us forever."

#### SUGGESTIONS REGARDING THE TREATMENT OF DISABLED SOLDIERS IN THE UNITED KINGDOM.

In view of the fact that we are appending a list of all the societies that deal with the training of disabled soldiers and sailors in England, it is advisable to state fully what are the suggestions made by Sir Henry Norman regarding the treatment of disabled soldiers in the United Kingdom. They are as follows:

"1. The necessity of absolute coordination of authority. This great task should not be divided among a number of already overburdened departments, with a multitude of uncontrolled private institutions working independently along different lines, and often without specialist guidance.

"2. The proper course would appear to be the creation of a central committee under the authority of a minister with varied departmental experience, who would preside over its sittings when necessary, and would represent it in the House of Commons. But such a committee should not be part of, or in any respect dependent upon, a particular department of state.

"3. The membership of this committee should include representatives of the War Office (preferably young officers with modern views, and readiness to assimilate new ideas); civilians with special

knowledge of social reform work; one or more labor and trade-union representatives; an educationist with special knowledge of technical training; an employer of manual labor; two women with special experience of the care of soldiers and knowledge of this particular subject; representatives of the benevolent societies dealing with disabled men (such as the Soldiers' and Sailors' Help Society); and at least two scientific medical men who have made a special study of the problems of prosthesis.

"4. All centers of surgical equipment and schools of reeducation, whether official or private, should be subject to the authority of this committee.

"5. The committee should alone have the disposal of the funds supplied by the treasury, and would make grants to private and philanthropic organizations and existing institutions, such as polytechnic and trade schools, which would receive disabled men for technical training.

"6. These schools should be, so far as possible, employed in this movement. But the time to begin a man's reeducation, it must always be remembered, is while he is receiving hospital treatment.

"7. A limited number of centers of reeducation, few and good, rather than many and less well-equipped, should be established in suitable places to cover the whole of the United Kingdom.

"8. These centers would, of course, cease to exist more or less soon after the war, but at least two of them should be established in such a manner and in such places that they could remain permanently as centers of physiological research into industrial problems and scientific training.

"9. It will be for the Government to decide whether in any acceptable manner, by military authority, by conditions attached to the grant of pensions, by conditions attached to health or unemployment insurance, or in any other way, it can be secured that men receive industrial reeducation before they return to civil life.

"10. As many men as possible should be trained in scientific agriculture and technical allied rural occupations. Men in hospitals for a long time near towns naturally acquire a taste for urban life. Therefore it is of great importance that those who have come from the land should be transferred as soon as possible for training to country districts, where everything should be done to render agricultural life attractive.

"11. Disabled men should be discouraged from seeking in large numbers merely clerical posts.

"12. In general, the aim should be to reeducate men for their previous or a kindred employment, and especially to train those possessing the requisite natural aptitude to a higher degree of intel-

lectuality than they had before their injury, that is, to become foremen, overseers, instructors, etc.

"13. All employment should be through the employment exchanges.

"14. Special conditions of health, unemployment, and accident insurance should be created for disabled men returning to industrial life.

"15. The State should assume responsibility during a man's lifetime for the provision, repair, and replacement of artificial limbs and surgical appliances.

"16. Every man should be given and required to retain a book in which would be entered all particulars regarding his qualifications, disablement, appliances, employment, the training schools in his locality, the appliance agency to which he should apply, etc.

"17. Pensions should be of two kinds, as in France. First, those of amputated men, and men with permanent functional disablement. These pensions should be divided into classes, according only to the nature of the invalidity. Once granted, these pensions should not be subject to withdrawal or modification for any reason whatever, and should have no relation whatever to a man's present or future industrial efficiency. A higher pension should be given for an arm amputation than for a leg amputation. Second, those of 'functionally injured' men. These men should be subject to periodical medical examination, and their allowances, divided into several classes, should increase or diminish as their invalidity becomes greater or less."

Sir Henry Norman, in the report referred to in the previous article, presses for a central committee to deal with our maimed and disabled soldiers in this country. Such a committee would represent the War Office, the trade-unions, education and medicine, and would have entire control of all the institutions which are dealing with this important question. Sir Alfred Keogh, writing on this subject in November, 1916, said: "Since training and treatment must go together this postulates the necessity for inspection by the authorities of the technical institutions and of the local hospitals to produce an efficient working system. The problem varies with the locality. Each such combination should work out its own local problem in its own way. Thus a combination of doctors, trainers, employers, and employees, and municipal or civic authorities, is the first step to be taken, and the sooner that is done on their own initiative the better. This problem is vitally bound up with the question of unemployment. Nothing can be more distressing than the spectacle of men who have been maimed and broken in the war going about seeking the bread of charity. A disabled man attempting to pick up an income in the casual labor market is a state of things which

ought not to be allowed. The moral of previous wars should be ever before us, and we should make a resolute attempt by training and re-education to create skilled men of these maimed soldiers and a definite place in the world of industry. First, the disabled man needs advisory assistance, which includes medical advice. He also needs advice as to the most suitable vocation after his training and reeducation have been completed. When a course of training has been decided on the medical officer should still follow them up, and he should make sure that when a man is discharged to take up employment he really has been fitted as a productive unit in the economic system. The cost of maintenance and training should, of course, be borne by the State, and the provision made should be ample to meet the terrible strain which will be placed upon the institutions specially concerned. There are no accurate figures available, so far as I am aware, but it is probable that no less than 100,000 disabled and maimed men are already claiming our sympathy and practical help in this country.

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### VOCATIONAL TRAINING FOR DISABLED SOLDIERS IN CANADA.<sup>1</sup>

#### THE MILITARY HOSPITALS COMMISSION.

It has been recognized by the Government of Canada that it is not sufficient to grant a disabled soldier a pension and leave him to follow his own course, but that where it is possible to educate him for some new occupation such education should be given at public expense. This policy of the Government is being carried out by the military hospitals commission of Canada.

The military hospitals commission was formed at the instance of the Prime Minister, Sir Robert L. Borden, by order in council dated June 30, 1915, its powers being extended by order in council dated October 12, 1915. The commission's charter provided among other things "that it be empowered to deal with the question of employment for members of the Canadian expeditionary force on their return to Canada, and to cooperate with provincial governments and others, for the purpose of providing employment as may be deemed necessary." The commission early recognized that its work fell under three main headings: (a) The provision of convalescent hospitals and homes in different parts of the Dominion; (b) The provision of vocational training for those who, through their disability incurred on active service, would be unable to follow their previous occupations; and (c) the establishment of the necessary machinery for the pro-

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<sup>1</sup> Military Hospitals Commission Bulletin, Nos. 1, 2, and 3, Ottawa, Canada, March, June, and December, 1916.

vision of employment for those who require vocational training and for those who will return during and at the conclusion of the war.

At the instance of the president of the commission, Senator Loughheed, a report was prepared in October, 1915, by the secretary, containing definite proposals for the installation of the necessary machinery throughout the Dominion for dealing with the problems of employment and vocational training, and on October 18 and 19, 1915, a conference was held between the military hospitals commission and representatives of the provincial governments on the invitation of the prime minister. As the outcome of this conference all provincial governments organized central provincial committees as branches of the military hospitals commission and under the latter's direction, the chairman of each provincial committee becoming *ex officio* a member of the commission. All expenditures in connection with the organization and administration of provincial and other purely local committees are borne by the provincial or local authorities or by voluntary contributions. Each of the Provinces of Canada, working through its central committee, assumes the responsibility of endeavoring to find employment for discharged soldiers who, upon their return to Canada, are physically and otherwise fit to assume such employment, the Province bearing the expenditures required for the performance of this task. The military hospitals commission, on the other hand, assumes the responsibility of taking care of and providing for all returned soldiers who for any cause are incapacitated for employment, or who require special training or treatment before being able to undertake any employment. All expenditures necessary in this connection are borne by the commission.

#### PLAN OF ORGANIZATION OF VOCATIONAL TRAINING COURSES.

In making vocational training of disabled soldiers one of its principal activities, the military hospitals commission experienced serious difficulty in the way of setting in operation a plan which would secure best results. This difficulty arose from the fact that many questions in regard to this problem were still unsettled. This, however, was not particular to Canada. It has been found to exist by all those who devoted attention to this phase of care for the disabled soldiers in European countries, even in Germany, where, within a fortnight after the outbreak of the war, this matter was placed in the hands of an already existing association of all institutions for the care of disabled persons; while France and England had so far taken action which the authorities themselves regarded as still experimental. Investigations have been made into the methods adopted in European countries, and various conferences have been held with prominent specialists in technical education, and others.

In view of the fact that in Canada education is under the authority of the provincial governments, a plan of organization set forth in the memorandum reprinted below has been put into effect, except in those Provinces where the Government, through the provincial commission, has requested the military hospitals commission to carry on the work through its vocational officer. In all cases the cost of training, where this involves expenditure on the part of the provincial educational authorities, and the salaries of teachers specially appointed, are borne by the military hospitals commission, also the cost of maintenance of the men undergoing training.

## MEMORANDUM.

The facilities for training disabled soldiers referred to in this memorandum are intended to apply only to men whose disability, incurred on service, is such that they can not follow their previous occupations, except that all men undergoing treatment in any of the military convalescent homes and hospitals under the commission may be given instruction in general subjects and elementary vocational training while they are inmates or out-patients of such homes or hospitals.

In order to carry out such a scheme with efficiency and economy, it would seem necessary to provide for—

1. A board or boards competent to consider and determine who would be fit subjects for such training;
2. A body for each Province which would have general advisory powers for the coordination of local efforts and for securing the cooperation of training and educational institutions;
3. Vocational officers who would be in immediate charge of the work in each locality.

The following procedure is suggested:

## 1. BOARD TO CONSIDER WHO WOULD BE FIT SUBJECTS FOR TRAINING.

The commission to arrange for a board or boards, as may be deemed necessary, each of three persons, to be termed a "Disabled soldiers' training board," in each place where it may be deemed necessary. The board to consist of—

- (a) A member of the provincial advisory committee.
- (b) A vocational officer.
- (c) A medical man.

NOTE.—As the training of disabled men for new occupations is likely to involve a considerable sum of money for the support of men and their dependents (if any) and, in many cases for tuition, each case for training should be considered individually on its merits.

*Duties of board.*

(a) To consider all cases which, in the light of the medical reports, appear to be subjects for special training and to report upon each, with suitable recommendations, to the military hospitals commission.

(b) To consider from time to time reports of the progress of men undergoing training and to make recommendation as to change of treatment, or of training, or its discontinuance.

## 2. PROVINCIAL ADVISORY COMMITTEE OF TRAINING.

The provincial commission to be asked to nominate suitable persons in each province to act as an advisory committee on the training of disabled soldiers.

The personnel of a provincial advisory committee might include—

- (a) Some person acquainted with the processes of education.
- (b) An agricultural educationist.
- (c) An employer.
- (d) A labor representative.

*Duties of a provincial advisory committee on training.*

(a) To prepare, with the assistance of the vocational officer, schemes of instruction in general subjects and elementary vocational training, in, or in connection with the convalescent homes or hospitals of the Province, for the approval of the military hospitals commission, which may then sanction the expenditure involved in any scheme, or suggest modifications, or otherwise of the scheme.

(b) To organize and carry out such schemes as may be approved by the military hospitals commission.

(c) To maintain a regular inspection, preferably through the vocational officer, of all instruction being carried on under schemes approved by the military hospitals commission.

(d) To make a survey of the facilities at present, and from time to time, available for vocational training in (a) public educational institutions; (b) private educational institutions; and (c) private workshops, farms, etc.

(e) To assist the employment commission by providing definite information as to the training received by men who desire assistance in obtaining employment.

(f) To appoint or approve local subcommittees on training in connection with local employment committees in centers where it may appear to be necessary to have such a committee.

(g) Generally to advise and assist in the training of returned soldiers in every possible way.

3. OFFICERS IN IMMEDIATE CHARGE OF THE WORK IN EACH LOCALITY.

The military hospitals commission to appoint qualified persons, to be termed vocational officers, whose sphere of work may extend over one or more Provinces; every such officer to be *ex officio* a member of and to act as executive officer of the advisory committee on training in the Province or Provinces to which he may be assigned.

*Duties of a vocational officer.*

(a) To act in cooperation with the advisory committee on training of the Province, or Provinces, to which he may be assigned, as indicated in section 2.

(b) To make personal surveys, when necessary, of all cases where the man indicates his desire to be helped to obtain employment and to transmit suggestions on each case to the provincial employment committee or its local subcommittee.

(c) To act as a member of the local disabled soldiers' training board and to transmit its recommendations to the military hospitals commission.

(d) To arrange, through the advisory committee on training or otherwise, for the placing in educational institutions, private workshops, farms, etc., of all men who have been passed for training by the commission, and to maintain a regular inspection of all such men and report upon each case at stated intervals to the commission.

(e) To arrange for regular or occasional meetings of the local disabled soldiers' training board, as the circumstances may require.

(f) Such other duties as may be assigned him by the commission from time to time.

Local vocational officers to be associated with the vocational branch of the commission through the vocational secretary.

In carrying out the work of vocational training the commission has adopted the following method:

*"Determining eligibility.*—Each man, who from his medical record appears to be unable to follow his previous occupation, is specially examined by a small board known as a "disabled soldiers' training board," composed of three persons: (a) The district vocational officer; (b) the medical officer in charge of unit; and (c) a member of the provincial advisory committee on training. The findings of the board are transmitted to the head office of the commission, and, if approved, the vocational officer is notified to arrange for the training of the man in some suitable institution or private establishment.

"Already a great many men have been surveyed by disabled soldiers' training boards and have entered upon courses of reeducation. In one Province in particular practically every man who appeared likely to be a case for reeducation has been surveyed and his case reported to the commission.

*"Choice of occupation.*—The question as to what new occupation a disabled man may be trained for is clearly, first of all, a medical one. But it is also a question for a technical specialist or "vocational counselor," a man well versed in a knowledge of the methods of various industries and of the training necessary for those who desire to pursue them. But, further, and this is an important consideration, it is an economic question, touching the law of supply and demand. While there are a number of occupations for which it is not difficult to train men, it does not follow that employment can readily be obtained in them. Last, but by no means least, the man's own wishes and desires for his future must be consulted.

"The question, therefore, is an individual one, and every case is investigated separately. The decision as to the occupation for which an opportunity of being trained is to be offered to a man is made in the light of the medical, technical, economic, and personal factors of his case."

#### TRAINING DURING CONVALESCENCE.

It has been realized at the outset that both physical and mental training must be carried on concurrently in order to obtain the best results. The value of occupation on its medical side is universally recognized, and when the painful state of the wounds has passed away, a soldier, before complete restoration, has much time which can be used in fitting him for civil life.

In order to reduce the bad effects on the character of men, owing to prolonged stays in hospitals, which are well recognized by medical men and social workers, the commission, aided by the provincial commissions, has begun the establishment of schools at the convalescent homes for the present, principally for the improvement of the men in general education or in such manual work as will prove recreative.

The sedentary training in classrooms given in convalescent homes includes courses in arithmetic, language, penmanship, and other general subjects, so that the men may brush up their general education. In most of the homes this program has been extended so as to include bookkeeping, shorthand, and typewriting. For the numerous foreign-born members of the Canadian expeditionary force instruction in English has been provided for such as are under treatment in convalescent hospitals.

"In addition to the foregoing training, active occupational work of several kinds is also carried on. Arts and crafts work of various types, such as woodworking, light metal working, mechanical drawing, clay modeling, and other forms of handwork are undertaken in rooms equipped in the hospitals. Active work outdoors is provided in gardening, poultry keeping, bee keeping, vegetable and flower raising, and similar pursuits in the grounds surrounding hospitals. At several centers short courses in automobile and internal-combustion engine work are being given. Shoe repairing is also being taken up in some centers.

"*The day's program.*—The whole of this work forms part of the daily routine of the hospitals. After breakfast and morning fatigue duties are over, a regular program is followed from 9 to 12.30, and after dinner, from 2 to 4.15. The program for the day includes: (a) Parades for physical exercises, or walks, for about 30 minutes in the morning and 30 minutes in the afternoon, for all but bed cases; (b) the necessary therapeutic treatment when ordered by the medical officer; and (c) classroom, workshop, or garden work. Throughout the hours named, each man is required to be engaged in one or other of these ways, unless excused by the medical officer. The program for each hospital is arranged jointly by the officer commanding, the medical superintendent, and the vocational secretary, acting through their local officers.

"*Object and effect of the training in convalescent hospitals.*—This training during convalescence is undertaken primarily for its curative value and in that direction is reported as having had excellent effects. Men who, from the experiences they had gone through, were nervous, irritable, and out of key with a normal environment, are benefiting wonderfully from the active work of the classes in which their minds and bodies are healthfully occupied. Their interest in life is rearoused, and their ambition to succeed in civil life again is developed by the work undertaken.

"But while the work has been primarily curative for mind and body, a great many men have found the training received during convalescence to be of actual commercial value in after life." It is, for instance, a well-known fact that a little skill in mechanical drawing, the ability to read and interpret a blue print, and a knowledge of

simple shop arithmetic or mathematics will enable the ordinary mechanic, in most cases, to become a foreman or superintendent. These things can be and are being imparted to men in the convalescent hospitals, and cases have already occurred in which men have returned to civil life and taken better positions than they held before enlistment in consequence of the training received during convalescence.

"In practically every center the classes in general subjects have developed a distinct commercial side, in which typewriting, shorthand, bookkeeping, and related branches are taught. There is at present a considerable demand for male help in these lines in various parts of the country, and many slightly disabled men of no particular occupation have been able to qualify for clerical positions in this way."

**GOVERNMENT ALLOWANCES FOR DISABLED SOLDIERS IN VOCATIONAL TRAINING,  
AND FOR THEIR FAMILIES.**

Two orders in council have been issued, both of which are of importance in connection with the vocational training of disabled soldiers. The order in council P. C. No. 1334, of June 3, 1916, making regulations for pensions, contains the following section:

SECTION 9. No deduction shall be made from the amount awarded to any pensioner owing to his having undertaken work or perfected himself in some form of industry.

The importance of this regulation becomes evident when it is considered that the accident insurance systems of both Germany and France have encountered the greatest obstacles in the way of training the disabled through the disabled men's fear that their earnings will be made a pretext for reducing their pension. In Germany this has been so marked that this state of mind has been named "pension hysteria."

The order in council P. C. No. 1472, of June 29, 1916, establishes a scale of maintenance allowances for disabled soldiers and their families in the case of men unfitted for their former work and therefore undertaking vocational training for new occupations. The period of training will vary according to the previous education and experience of the individual. Provincial and municipal authorities are cooperating in this matter with the Dominion Government, and the training will be given free of cost to those concerned. Disabled reservists of the British and allied armies who were bona fide residents of Canada when the war broke out are eligible equally with disabled members of the Canadian expeditionary force.

The scale which the commission has been empowered to establish is the following: <sup>1</sup>

1. A single man, with pension, living in, receives free maintenance; that is, board, lodging, and washing.

<sup>1</sup> The term "maximum age" used in this scale means 16 years in the case of a son and 17 years in the case of a daughter.

2. A single man, with pension, living out, 60 cents a day.

3. A married man, with pension, living in, free maintenance and \$8 a month, with the following additions:

For wife having no children, \$35 a month, less her husband's pension.

For wife and one child, if child is under 5, \$38; from 5 to 10 years, \$39.50; from 10 to maximum age, \$42.50; less, in every case, the amount of husband's pension and children's allowances under the pension regulations.

For wife and two children, from \$41 to \$47 a month (less pension and allowances) according to age of children.

For wife and three children, \$44 to \$50 (less pension and allowances), according to ages.

For wife and four children, \$47 to \$53 (less pension and allowances), according to ages.

For wife and five children, \$50 to \$55 (less pension and allowances), according to ages.

For wife and six children, \$53 to \$55 (less pension and allowances), according to ages.

A wife with seven or more children under the maximum age may be given the maximum allowance of \$55, less pension and allowances.

All these allowances for wife and children will be paid direct to the wife, unless otherwise thought fit by the commission.

4. A married man living at home will receive 60 cents a day. (This of course is in addition to the allowances for wife and children.)

5. A widowed mother, if dependent entirely upon the unmarried son who is receiving training, and if the son made an assignment of his pay to his mother and also arranged for her to receive separation allowance while he was on service, may be paid at the same rate as the wife of a married man with no children.

6. The parents of a man undergoing training, if both are old and past work and entirely or partially dependent upon him, may also be paid at that rate.

7. The guardian of a widower's children (under the maximum age) will be paid monthly: For one child, \$10; for two, \$17.50; for three, \$22; and \$3 for each child in excess of three, with a maximum of \$35.

Payments under these regulations will be continued for one month after the completion of vocational training, whether the man has secured employment or not.

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#### PENSIONS AND MONEY ALLOWANCES TO MEMBERS OF CANADIAN EXPEDITIONARY FORCES SINCE BEGINNING OF WAR.<sup>1</sup>

This is a report of the committee appointed to advise on the question of providing adequate pensionary assistance for men disabled or partially disabled or for the dependents of those killed. According to this report the following scale of pensions has been in effect since September 1, 1914, for militiamen wounded or disabled in active service:

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<sup>1</sup> Canada. Pensions granted and money allowances made to members of Canadian expeditionary forces since beginning of war to Feb. 16, 1916. Sessional Paper No. 185. Ottawa, 1916. 83 pp.

RATES OF PENSIONS PAID TO MILITIAMEN IN CANADA.

Rank held at time of injury or illness.	First degree.	Second degree.	Third degree.	Fourth degree.
Rank and file.....	\$264	\$192	\$132	\$75
Sergeant.....	336	252	168	100
Squad, battery or company, sergeant major.....	372	282	186	108
Squad, battery or company, quartermaster sergeant.....	372	282	186	108
Color sergeant.....	372	282	186	108
Staff sergeant.....	372	282	186	108
Regimental sergeant major, not warrant officer.....	432	324	216	132
Master gunner, not warrant officer.....	432	324	216	132
Regimental quartermaster sergeant.....	432	324	216	132
Warrant officer.....	480	360	240	144
Lieutenant.....	480	360	240	144
Captain.....	720	540	360	216
Major.....	960	720	480	288
Lieutenant colonel.....	1,200	900	600	360
Colonel.....	1,440	1,080	720	456
Brigadier general.....	2,100	1,620	1,050	636

In explanation of the above table the report states that the first degree shall be applicable to those only who are rendered totally incapable of earning a livelihood as the result of wounds or injuries received or illness contracted in action or in the presence of the enemy; that the second degree shall be applicable to those who are rendered totally incapable of earning a livelihood as a result of injuries received or illness contracted on active service, during drill or training, or on other duty, or are rendered materially incapable as a result of wounds or injuries received or illness contracted in action or in the presence of the enemy; that the third degree shall be applicable to those who are rendered materially incapable of earning a livelihood as a result of injuries received or illness contracted on active service, during drill or training, or on other duty, or rendered in a small degree incapable as a result of wounds or injuries received or illness contracted in action or in the presence of the enemy; and that the fourth degree shall be applicable to those who are rendered in a small degree incapable of earning a livelihood as a result of injuries received or illness contracted on active service, during drill or training, or on other duty. The monthly pensions being granted to dependents, based on the rank held by the deceased soldier, are as follows:

RATES OF PENSIONS BEING PAID TO DEPENDENTS OF MILITIAMEN IN CANADA.

Rank held by soldier at time of death.	Widow's allowance.	Allowance for each child.
Rank and file.....	\$22.00	\$5.00
Sergeant.....	28.00	5.00
Squad, battery or company, sergeant major.....	30.00	5.00
Squad, battery or a. m. sergeant.....	30.00	5.00
Color sergeant.....	30.00	5.00
Staff sergeant.....	30.00	5.00
Regimental sergeant major, not warrant officer.....	30.00	5.00
Master gunner, not warrant officer.....	30.00	5.00
Regimental quartermaster sergeant.....	32.00	5.00
Warrant officer.....	37.00	6.00
Lieutenant.....	45.00	7.00
Captain.....	50.00	8.00
Major.....	60.00	10.00
Lieutenant colonel.....	75.00	10.00
Colonel.....	100.00	10.00
Brigadier general.....		

A comparative statement of pension rates paid in Canada and certain other countries, including Great Britain, Australia, New Zealand, and the United States, is given; also a "memorandum upon the Civil War pensions evil in the United States." It is suggested that the measures to prevent pension frauds taken at the time of the Spanish-American War might well be adopted in the British Army.

Since the outbreak of the war to February 14, 1916, pensions amounting to \$267,835 have been granted to 1,449 widows, widowed mothers, and children; and pensions amounting to \$154,617.75 have been paid to 1,053 officers, noncommissioned officers, and men.

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#### HOURS, FATIGUE, AND HEALTH IN BRITISH MUNITION FACTORIES.

Hours, fatigue, and health in British munition factories is the title of Bulletin 221, just issued by this bureau as the first of a series of bulletins prepared at the instance of the Council of National Defense for the purpose of giving wide circulation to the experiences of Great Britain, France, Canada, and other countries in dealing with labor in the production of the largest quantity of munitions in the shortest space of time. The bulletin contains the reprint of eight memoranda published by the British Health of Munition Workers' Committee which was appointed in September, 1915, "to consider and advise in questions of industrial fatigue, hours of labor, and other matters affecting the personal health and physical efficiency of workers in munition factories and workshops." These memoranda deal with Sunday labor, hours of work, output in relation to hours of work, industrial fatigue and its causes, sickness and injury, special industrial diseases, ventilation and lighting in munition factories and workshops, the effects of industrial conditions upon eyesight.

In the opinion of the committee Sunday labor is not profitable and continuous work "is a profound mistake" and does not lead to increased output; a system of shifts, although impracticable in some cases, is to be preferred to overtime, since the latter taxes the strength of workers too severely, results in loss of time because of exhaustion and sickness, and curtails unduly the period of rest; night work should be discouraged, and output can not be maintained at the highest level for any considerable period if the conditions are such as to lead to excessive fatigue and to deterioration in the health of the workers. It is recommended that hours should not exceed 56 per week for men engaged in very heavy labor or 60 for men engaged in moderately heavy labor, while 64 should be a maximum.

The committee's study of industrial fatigue and its causes sums up its own studies of hours of labor, emphasizing the importance of regularity of hours and of daily and weekly rests made with due con-

sideration of the character of the work performed. In its report on sickness and injury the committee points out certain injurious conditions which should be guarded against as likely to diminish seriously the efficiency of the labor force. "To conserve energy and efficiency is, other things being equal, the way to improve output." The medical examination of all workers before employment is recommended, and it is suggested that factories should provide proper sanitary facilities, safeguard machinery, make arrangements for adequate medical and nurse schemes, etc. The value of first aid is emphasized.

The report on special industrial diseases gives the causes, methods of prevention, and treatment for the principal industrial diseases which have been found to affect munition workers. Particular attention is directed to the importance of adequate lighting and ventilation, which are absolutely essential for the maintenance of health and comfort and therefore the efficiency and capacity of the workers. Special measures to prevent undue strain upon eyesight and to reduce the liability of accidents to a minimum are recommended.

In addition to these memoranda the bulletin includes the British treasury agreement as to trade-union rules affecting restriction of output, the Munitions of War Act of 1915, and the amendment thereto of 1916, the rules for constituting and regulating munitions tribunals in England and Wales, and a brief account of compulsory arbitration in the munitions industry in France.

The committee calls attention to the added danger of industrial accidents: "Moreover, at the present time the introduction of new labor and of employees unaccustomed to the processes concerned, particularly in conjunction with the need for speed and pressure, overtime, and night work, with the consequent fatigue, must inevitably lead to greater risk of accident."

This corresponds exactly with American experience as stated in a safety bulletin on the effect of the war on industrial accidents, issued by the Utica Mutual Compensation Insurance Corporation.

The war has caused indirectly an enormous increase in the number, severity, and cost of industrial accidents, especially during the year 1916.

The principal reasons for this large increase of industrial accidents are as follows:

1. Employment of incompetent, unskilled, and inefficient labor.
2. Increased pressure for larger output.
3. Disregard and nonenforcement of safety rules and regulations.

During the past few months the accident rate has been somewhat reduced, because employees have become more accustomed to their work. However, many of our industrial workers will now enlist to fight for our country, and the services of many skilled workmen will be placed at the disposal of the war department. To fill their places new employees will have to be hired who are unfamiliar with their jobs. In fact, women will probably fill the places of many of the men who are called for service. With these changed conditions there will be even greater necessity for safety measures to prevent accidents.

**EMPLOYMENT OF WOMEN AND JUVENILES IN GREAT BRITAIN  
DURING THE WAR.**

The extent to which women have replaced men in industry in Great Britain during the war, the operations which they are required to perform in factories and other lines of endeavor, periods of employment, arrangements for rest and meals, and the physical condition of women workers, together with a discussion of matters affecting the employment of juveniles, including hours of labor, and supervision of health and welfare, are set forth in Bulletin 223, recently issued by this bureau.

This bulletin, entitled, "Employment of women and juveniles in Great Britain during the war," is the third one made up of reprints of official and quasi-official documents, giving the experience of Great Britain and other foreign countries in dealing with labor conditions resulting from the war. It embraces reprints of two memoranda issued by the health of munition workers committee, and a summary of a comprehensive statement relating to replacement of men by women in industry as published by the British Association for the Advancement of Science in its book, "Labor, Finance and the War." There is a supplementary statement respecting the extension of the employment of women during 1916; a collection of orders relating to employment and remuneration of women; a report of the mission appointed to study output of munitions in France; and a statement of the migration of women's labor through employment exchanges.

It is estimated that since the war began and down to October, 1916, 988,500 women or 30.6 per cent of the number employed in July, 1914, had been drawn into the various governmental, industrial and commercial activities, and that in October, 1916, 933,000 women had directly replaced men in industry. Many of these women are performing operations never before considered possible for them to do.

In seeking to conserve the health and thus promote the efficiency of these workers, the health of munition workers committee reached the conclusion that long hours, particularly at night, are perhaps the chief factors in fatigue and that in the interest of output and health they should be restricted. There should be suitable pauses for rest during the working period and adequate cessation from work at each week end in addition to periodic holidays. The system of three shifts of 8 hours each appears to yield better results than one shift of 13 to 14 hours or 2 shifts of 12 hours each, because "the strain of night work, indeed the strain generally, is sensibly diminished, greater vigor of work is maintained throughout the shift, less time is lost by unpunctuality or illness, and there is less liability to accident." Employers are increasingly recognizing the disadvantages of an overtime system. Well managed industrial canteens, facilities for rest

at night, and a high standard of sanitary conditions are essential, for "cleanliness and good order contribute to increased output as well as to the discipline and morale of the factory." Wise and suitable arrangements for the management and supervision of women's labor are extremely important.

During 1914 the number of women who obtained employment in other districts through the employment exchanges was 32,988; in 1915, 53,396; in 1916, 160,003; indicating the increasing mobility of women's labor due to war conditions.

To maintain the physical well being of children, opportunities for recreation, time for plenty of sleep, canteen facilities and the efforts of welfare supervisors are regarded as highly important. Sunday work should be eliminated and children should be employed at night only when other labor can not be obtained. Employment of boys under 16 should be restricted to 60 hours per week. It should be borne in mind that this limit recommended by the committee expresses their opinion of the maximum which may be permitted to meet the imperative need of necessary military and other supplies in a time of great emergency. From all that is known of the effects of industrial employment upon the health of young persons, it is evident that a 60-hour week for boys under 16 years is the absolute maximum, to be permitted only in case of the direst necessity to secure the production of indispensable supplies and munitions. It is estimated that 450,000 children at or about the age of 14 normally leave the elementary schools annually, and that in 1915 this number was exceeded by about 45,000 with the probability that it is now much greater.

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#### EXTENSION OF EMPLOYMENT OF WOMEN IN GREAT BRITAIN.

[Reprinted from the British Board of Trade Labor Gazette, April, 1917.]

The figures in the following tables are based on returns made by employers to the industrial (war inquiries) branch of the board of trade; they relate to employed persons only, excluding home workers, and the persons employed are classified according to the nature of the employer's business.

The position as regards the employment of females is summed up in the following table, which shows: (a) The expansion in the employment of women since July, 1914; (b) the extent to which women are directly replacing men, according to the returns made by employers.

JANUARY, 1917.

	Estimated number of females employed in July, 1914.	Increase (+) or decrease (-) in the employment of females since July, 1914.		Direct replacement of men by women.	
		Number.	Per cent of those employed in July, 1914.	Number.	Per cent of those employed in July, 1914.
Industries <sup>1</sup> .....	2,172,000	+ 423,000	+ 19.5	376,000	17.2
Government establishments <sup>2</sup> .....	2,000	+ 147,000	+6,997.5	139,000	6,620.0
Agriculture in Great Britain (permanent labor).....	80,000	<sup>3</sup> - 14,000	<sup>3</sup> - 17.6	23,000	28.2
Transport <sup>4</sup> .....	19,000	+ 51,000	+ 269.8	52,000	271.8
Finance and banking.....	9,500	+ 43,000	+ 452.2	42,000	442.9
Commerce.....	496,000	+ 274,000	+ 55.3	278,000	56.1
Professions.....	67,500	+ 18,000	+ 27.5	17,000	25.1
Hotels, theaters, public houses, cinemas, etc.	176,000	+ 10,000	+ 5.4	31,000	17.4
Civil service.....	66,000	+ 76,000	+ 115.0	73,000	110.6
Local government.....	184,000	+ 44,000	+ 23.8	40,000	21.6
Total.....	3,272,000	+1,072,000	+ 32.8	1,071,000	32.7

<sup>1</sup> Including controlled firms, but excluding all kinds of Government establishments.

<sup>2</sup> Including arsenals, dockyards, and national shell filling and projectile factories.

<sup>3</sup> Decrease due to variation in season.

<sup>4</sup> Estimated figure.

Since the war about 1,072,000 women, or 32.8 per cent of the number employed in July, 1914, have been drawn into the various occupations shown in the table. This figure makes no allowance for a displacement of women, estimated at about 300,000, from domestic service and from very small workshops and workrooms in the dress-making trade; it also excludes an increase in the number of women employed in connection with the nursing of soldiers and sailors, which is estimated at 37,000. Allowing for both these factors, it is estimated that the net increase since July, 1914, in the number of women regularly engaged in occupations outside their own homes is approximately 809,000. The increase since October, 1916, in the total number of women employed in the table given above is 95,000, which is roughly equal to the increase during the previous three months.

In industrial occupations there has been an increase since October, 1916, amounting to some 29,000, as compared with 32,000 between July, 1916, and October. In the metal and chemical trades alone there has been an increase since October of 43,000, leaving a decrease of 14,000 for all other trades; this corresponds to a decrease of 10,000 in other industries between July, 1916, and October. In both periods this contraction is accounted for primarily by a decrease in the numbers employed in the clothing and textile trades, the decrease since October in these industries being respectively 17,000 and 5,000, as against 15,000 and 6,000 during the previous quarter. The decrease in the clothing trades is mainly due to a drop of 8,000 in dress-

making, but there has also been a contraction in all other branches except in the boot and shoe industry, in which the employment of women continues to grow steadily, the numbers now employed in this industry being 12,500 above the prewar level, whereas the numbers employed in the whole group is 32,000 below that level. In the textile trades, in spite of the continuous decline during the last six months, there are still 25,000 more women employed than in July, 1914. Between July, 1916, and October there had also been a decrease in the numbers employed in the paper and printing trades, but the figures for women in these trades during the last three months have remained stationary. On the other hand, there has been a slight decrease in the numbers employed in the food trades, although between July, 1916, and October that figure had increased by 7,000. The number now employed, however, is still 41,000 greater than the number employed in July, 1914.

It was pointed out in the article that appeared in the January number of the Labor Gazette<sup>1</sup> that the decrease in the number of women employed in industries such as the clothing and textile trades had been accompanied by an increase in shortage of women's labor. This still remains true, as is shown by the following table:

Occupation.	Percentage of firms reporting a shortage of female labor.		Increase (+) or decrease (-) in the number of women employed since July, 1914.
	October, 1916.	January, 1917.	
INDUSTRIAL OCCUPATIONS.			
Metal trades.....	5	5	+270,000
Chemical trades.....	3	4	+45,000
Textile trades.....	40	42	+25,000
Clothing trades.....	21	23	-32,000
Food trades.....	7	7	+41,000
Paper and printing trades.....	19	22	-5,000
Wood trades.....	8	7	+19,000
All industrial firms making returns, including some in trades not specified above.....	10	11	+423,000

The number of women employed in Government establishments has increased between October, 1916, and January, 1917, by 29,000, as compared with an increase of 38,000 during the previous quarter. The Ministry of Munitions establishments have drawn in an additional 26,000 women, of whom 8,000 are employed in the national filling factories. The largest proportionate increase has, however, been in Admiralty dockyards, the number of women employed increasing from 4,000 to 6,500. This constant increase in the number of women employed on munition work in Government establishments is responsible, in part at least, for the shortage of female labor

<sup>1</sup> This article was reviewed in the March, 1917, number of the MONTHLY REVIEW.

for the textile and clothing trades and other occupations in which women are normally employed.

In commercial occupations there has been an increase since October of 32,000 in the numbers of women employed as compared with 25,000 between July, 1916, and October. It appears, therefore, that there has been a certain increase in the rate of expansion in commerce which was not found in industry. In spite of this there does not appear to have been any increase in the shortage of women for commercial occupations, the percentage of firms reporting a shortage being 9 per cent, both in October, 1916, and January, 1917. The shortage is noticeably greater in the group which covers drapers, haberdashers, and clothiers, the proportion of firms reporting a shortage being 22 per cent. This rather suggests that in commerce as in industry it is the groups in which women's employment is on the whole most common in normal times which find it most difficult to obtain women.

The actual increase in the number of women engaged in the various occupations is no guide to the number of women who are being employed to replace men. For example, it is common to find a firm working with a reduced staff replacing men with some of its existing female staff without engaging fresh women; while, on the other hand, a firm with a pressure of work on hand may be employing a large number of extra women without using any of them as substitutes for men. According to the returns received, about 1,071,000 women are directly replacing men; the largest number are to be found in industrial and commercial occupations. Compared, however, with the numbers usually employed, replacement has been most common in the case of Government establishments, the civil service, banking and finance, and transport. In industrial occupations there has been an increase since October, 1916, of 55,000 in the numbers of women replacing men; so that the number of women replacing men is increasing more rapidly than the total number of women employed. This increase in the extent of substitution is found even in industries which are employing fewer women than they were three months ago. In the textile trades the number of women stated to be replacing men has increased by 8,000 since October, 1916; and in the clothing trades by 3,000; and in the food trades by 6,000. In commercial occupations the increase in the number of women acting as substitutes for men was 33,000, both between July, 1916, and October, and between October and January. It appears, therefore, that there is less disproportion between the rate of increase in the numbers of women employed and the number of women acting as substitutes in commerce than in industry, which is doubtless due to the fact that there is more scope for reorganization in industrial than in commercial occupations.

## WELFARE WORK IN BRITISH MUNITION FACTORIES.

The efforts being made in Great Britain to conserve the health of munition workers through systematic and carefully planned welfare supervision in factories and workshops are described in Bulletin 222, just issued by this bureau. This bulletin, the second one in the group reproducing documents giving foreign experience in dealing with labor conditions growing out of the war, includes reprints of the memoranda published by the British Health of Munition Workers Committee covering the subjects of welfare supervision, industrial canteens, canteen construction and equipment, investigations as to workers' food and suggestions as to dietary, and washing facilities and baths. The bulletin also includes an article on The value of welfare supervision to the employer, by B. Seebohm Rowntree, a manufacturer, and director of the welfare department, British Ministry of Munitions.

The Home Secretary has been given powers to secure the welfare of munition workers by issuing orders regulating such matters as arrangements for preparing or heating and taking meals, supply of drinking water and protective clothing, ambulance and first-aid provision, supply and use of seats in workrooms, facilities for washing, accommodation for clothing, and supervision of workers. No contribution may be exacted from workers for these benefits, but for additional benefits which the employers may not reasonably be expected to provide, an assessment may be made if two-thirds of the workers assent, in which event the workers are permitted to have representation in the management of the arrangements, accommodation, or other facilities to be provided.

It appears from the welfare memoranda that industrial efficiency depends largely upon consideration of the health of munition workers through proper attention to such questions as housing, transit, canteen provision, and individual welfare of the employees, which have become of vital concern to manufacturers who appreciate the necessity of conserving their labor force in order to attain a maximum of production in the shortest space of time. Managers generally testify to the value of the services rendered by welfare supervisors. The committee recommends as particularly important the appointment of a competent woman welfare supervisor of experience and sympathy who shall devote her attention exclusively to problems affecting the health of women and girls, to the character and behavior of fellow women workers, to the maintenance of suitable and sufficient sanitary accommodations, to the capacity of workers to withstand the physical strain and stress of work, and to their power to endure long hours, overtime, and night work.

Closely allied to welfare supervision as noted is the necessity for adequate provision of canteen facilities where workers may obtain a dietary containing a sufficient proportion and quantity of nutritive material, sufficiently varied, easily digestible, and at a reasonable cost, which will enable them to maintain their health and output. It is the conviction of the committee that "in the highest interest of both employers and workers proper facilities for adequate feeding arrangements should be available in or near, and should form an integral part of, the equipment of all modern factories and workshops." This policy "has abundantly justified itself from a business and commercial point of view." Marked improvement in the physical condition of workers, a reduction of sickness, less absence and broken time, less tendency to alcoholism, and increased efficiency and output, a saving of time to the workmen, greater contentment, and better midday ventilation of the workshops are some of the benefits noted.

The bulletin includes some suggestions as to dietary for munition workers, based upon a careful analysis of meals provided by canteens and hotels and the food brought by workers.

The committee urges the importance of providing opportunities for washing, so that workers may be clean and tidy when they leave their employment. Bathing facilities should be provided in many industries, especially where workers are exposed to great heat and excessive dust or brought into contact with poisonous materials.

The article on the value of welfare work to the employer is based upon the proposition that since the employer gives careful attention to his machinery in order to maintain output, he should give at least as much consideration to human beings, which are infinitely more complex and delicate than machines, if he would obtain a satisfactory output.

#### JUVENILE EDUCATION IN GREAT BRITAIN.

[Reprinted from the British Board of Trade Labor Gazette, April, 1917, pp. 131-133.]

The final report<sup>1</sup> of the departmental committee on juvenile education in relation to employment after the war has recently been issued. The terms of reference were: "To consider what steps should be taken to make provision for the education and instruction of children and young persons after the war, regard being had particularly to the interests of those—

"(1) Who have been abnormally employed during the war.

"(2) Who can not immediately find advantageous employment.

"(3) Who require special training for employment."

Evidence was taken from a large number of employers, trade-union officials, teachers, social workers, Government officials and other sources, including a large amount of information from local

<sup>1</sup>C. D. 8512. Price, 6d.

education authorities with powers under the Choice of Employment Act and from the juvenile branches of the labor exchanges on the subject of the changes caused by the war in the conditions of juvenile employment. A special memorandum dealing with the rural side of the problem is appended to the report, contributed by one of the members of the committee.

Investigation showed that the problem before the committee was not fundamentally a war-time problem, but the long-standing problem of the juvenile wage earner aggravated and emphasized by war-time conditions. This problem in different forms has been referred to various committees from time to time, such as the committee on partial exemption from school attendance and the consultative committee on attendance at continuation schools, but it still remains, to a large extent, unsolved. In the opinion of the present committee the solution lies not only in certain reforms of our educational system, but in a complete change of temper and outlook on the part of the people of this country as to what they mean to make of their boys and girls. The conception of the juvenile as primarily a wage earner must be replaced by the conception of the juvenile as primarily the workman and the citizen in training. The two main educational reforms recommended by the committee, for which early legislation is considered necessary, are briefly as follows:

(a) To establish a uniform elementary school leaving age of 14, which entails the abolition of all exemptions, total or partial, from compulsory attendance below that age.

(b) To require attendance for not less than 8 hours a week, or 320 hours a year, at day continuation classes between the ages of 14 and 18.

These suggested reforms are dealt with separately in the report, but it is emphasized that they are really integral parts of the one reform, and that juvenile education, to be effective, must be continuous and progressive throughout both the full-time and the part-time stage—at whatever age the child leaves the elementary school, there should be no gap between elementary and continuation teaching.

The first proposal indicated above had the support of the great majority of the witnesses, and the committee are strongly of opinion that a uniform minimum leaving age of 14 ought now to be enforced by statute, both in town and country. It is true that the statutory leaving age is already 14, but the ways in which earlier exemption can be obtained are so numerous, and in many localities are so freely taken advantage of, that the effective leaving age often approximates rather to 13 than 14. No precise statistics exist to show how many children do, in fact, remain at school until they are 14, but broadly speaking the effective leaving age approximates to 14 in London and in 105 other areas with an aggregate population of about 14,000,000,

in 63 areas with a population of 6,000,000 it approximates to 13, and in the remaining 150 areas with a population of 16,000,000 the average leaving age is somewhere between 13 and 14. The main determining factor is the nature of the by-laws adopted by the locality, and the enforcement of a uniform school-leaving age of 14 will entail the sweeping away of the whole system of attendance by-laws and the difficulties due to local option. The committee further recommended that any new educational legislation of this kind should override the factory acts in so far as they are inconsistent with its provisions, and thus abolish the system of half-time exemption below the age of 14, which step they regard as imperative at the earliest possible moment. At the present time there are about 20,000 half-timers in Lancashire, 11,000 in the West Riding, and 4,000 elsewhere. Of these about 26,000 entered upon half-time employment at the age of 12 and 9,000 at the age of 13. The report states that even within the textile industries, which are practically the only occupations much affected, there is, and always has been, a strong body of opinion in favor of the change, and the special provisions for agricultural half-time have been little utilized and would not be missed.

The second main proposal, which contemplates continuation classes for all up to the age of 18, is discussed at some length. It is shown that before the war there was little public education after the elementary school leaving age. In 1911-12 there were about 2,700,000 juveniles between 14 and 18, and of these about 2,200,000, or 81.5 per cent, were enrolled neither in day nor in evening schools. The report points out that there are, of course, no substitutes for a sound early education, but that such education, when it terminates at 14, or even at 15, leaves the child with intellect and character still unformed at perhaps the most critical stage of his development. The committee are of the opinion that compulsory continuation classes will carry on the moral and disciplinary influence of the elementary school, will conduce to a far higher standard of physical well-being, will increase the industrial efficiency of the mass of the population, and will give those able to profit by it full opportunity for the foundation of a valuable technical training.

The principal recommendations in connection with the carrying out of this part of the scheme are as follows:

(1) The local education authority in each area shall be under statutory obligation to provide day continuation classes, and all young persons between 14 and 18 (with certain strictly defined exemptions) shall be obliged to attend such classes for not less than eight hours a week for forty weeks in the year.

(2) All employers of young persons under 18 shall be required to give the necessary facilities for attendance at such classes, which must be held between the hours of 8 a. m. and 7 p. m.

(3) That in suitable cases the young persons be liable to a penalty for nonattendance; and that the parent or the employer be also liable in so far as any act or omission on his part is the cause of failure in attendance.

(4) That the curriculum of the continuation classes include general, practical, and technical instruction, and that provision be made for continuous physical training and for medical inspection, and for clinical treatment where necessary, up to the age of 18.

(5) That the system of continuation classes come normally into operation on an appointed day as early as possible after the end of the war.

(6) That during the first year from the establishment of this system the obligation to attend classes extend to those young persons only who are under 15, during the second year to those only who are under 16, during the third year to those only who are under 17, and subsequently to all those who are under 18.

With a view to compensating for the abnormal employment of children and their early withdrawal from school during the war, it is further recommended that the obligation to attend continuation classes be extended to children who are under 14 when the act comes into operation, although they may already have left day school, and that the attention of the local education authorities be drawn to the possibility in certain cases of providing special full-time courses for children who have been abnormally employed.

As regards the possible dislocation of juvenile employment after the war, the report states that the committee have no means of estimating the extent of the probable shortage of employment, but even if there is no general shortage of work there must be a great deal of dislocation while juveniles are moving from one job to another. They therefore recommend (1) that the system of juvenile employment bureaus be strengthened and extended before the termination of the war, and that further financial assistance be given to local education authorities for their maintenance; and (2) that in areas where there is a probability of juvenile unemployment, teachers and other suitable persons explain to children and their parents the difficulties of obtaining work and the advantages of prolonged attendance at school.

With regard to the cost of the proposals the committee state that only a very rough estimate can be given, seeing that the buildings factor and the staff factor will ultimately govern the question. Assuming, however, that the cost of an elementary school place remains much at its present figure, the cost of converting all half-timers into full-timers and keeping at school all children up to the age of 14 may be put at anything from £1,000,000 to £1,250,000 (\$4,866,500 to \$6,083,125). The cost of continuation classes will, of course, depend upon the extent to which they can be made universal.

On the perhaps somewhat improbable assumption that all juveniles between 14 and 18 not otherwise educated will come within their operation by 1921, it is estimated that the country would then have about 2,600,000 pupils to deal with, and these would require about 32,000 full-time teachers. The gross maintenance cost on such a basis is put at anything from £6,000,000 to £8,000,000 (\$29,199,000 to \$38,932,000) a year, in addition to the £1,000,000 (\$4,866,500) or thereabouts now spent upon evening classes for juveniles. The committee recommend that the State grants in aid of present as well as future expenditure on education be simplified and very substantially increased.

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#### RELAXATION OF SCHOOL-ATTENDANCE LAWS IN GREAT BRITAIN.

Little information on this subject is available, but a recent report<sup>1</sup> to Parliament by the board of education, although limited to four pages, of which one is the cover page, and a second contains nothing but the table of contents and a prefatory note, gives some interesting facts. The prefatory note describes in brief terms the nature of the report:

The present return is compiled from the returns furnished by local education authorities to Circular 969 (England) and Circular 115 (Wales). It gives particulars of the number of children who, on the 16th day of October, 1916, were absent from school because they had been excused from attendance at school by the local education authority or their school-attendance committees for the purpose of agricultural employment. Authorities were informed that the return should not include any children who were on that date exempt from liability to attend school by reason of having satisfied the conditions of total exemption contained in the by-laws.

The last sentence is significant. Before the war began, a child who was to be employed in agriculture was totally exempt from school attendance at 13, and partially exempt between 11 and 13, those who were partially exempt being required to attend school for 25 weeks in the year. As early as August 28, 1914, in response to parliamentary questioning, the prime minister publicly stated that the education board would not interfere with the local authorities if they wished to suspend the operation of the school laws so that children of 11 might be totally exempt, provided farmers wished to employ them. In a number of cases local authorities since that time have adopted by-laws relaxing the antewar conditions of exemption, so that numbers of children who would formerly have been required to attend school for the whole year are now totally exempt from attendance, provided they are desired for agricultural work. The prefatory note means, therefore, that the children covered by this report are those who,

<sup>1</sup> School attendance and employment in agriculture. Summary of returns supplied by county local educational authorities of children excused from school for employment in agriculture on October 16, 1916. (Cd. 8171.)

under even the lowered standards of the war period should have been in school, but who nevertheless had been excused from attendance to go to work. The number, by age, of the children thus returned, was as follows:

Age.	Boys.	Girls.	Total.
Between 11 and 12 years.....	389	31	420
Between 12 and 13 years.....	7,345	494	7,839
Between 13 and 14 years.....	6,089	567	6,656
Total.....	13,823	1,092	14,915

These numbers fall short of the truth, since the returns for the Isle of Ely which show a total of 227 excused do not "include any scholars attending a number of schools closed for the potato harvest," and in the returns from Oxfordshire which show 361 children excused, it is stated that the "education committee have not received the figures relating to four schools." On the other hand, in regard to 1,142 of the children under 13 it is noted either that they had been excused "for a short period" only, or that the authorities had definitely decided to require their return to school by some specified date.

These figures, it must be repeated, show only the children excused from school by exception, not the number at work. The difference between these two groups is large. These returns, for instance, show 135 children of 11 years of age excused in Worcestershire and none at all in Wiltshire. But in Wiltshire eight months before these returns were made the local board of education had decided "to release children of 11 years of age who had passed the fourth standard from further attendance at school for work upon the land." In Wiltshire, therefore, any number of children 11 years old might be absent from school for farm work and so long as they had passed the fourth standard they would not appear in these returns. About half of the counties had made special by-laws lowering the standards of attendance required before the war, so that unquestionably there are very large numbers of children from 11 to 14 at work who do not appear in these lists. How large these numbers may be it is impossible to estimate, but one comparison is possible. In one of the counties at the time the census of 1911 was taken there were 27 boys between 10 and 13 years old normally employed on farms. This county has greatly relaxed its standard of attendance, permitting children of 11 who have reached a certain low grade to be totally exempted from further attendance, yet it shows 145 boys between 11 and 13 excused by exception—five times as many as the total number employed before the war, in addition to all who have been released by the lowering of the standard.

It has been strongly asserted by those who oppose the lowering of the standards that the farmers could secure plenty of adult help<sup>1</sup> if they would pay adequate wages, that there is no more need of excusing children for farm work than for any other occupation, and that the tendency of these exemptions is to break down the protection hitherto afforded children against premature employment and to render them liable to exploitation in any direction. This report, brief as it is, appears to afford some support to their contention. One county which shows 41 children excused by exception for agriculture, reports that 96 other children, not included in the above lists, had been excused for employment other than agricultural. In another county, 23 boys, included in the lists, were excused for employment in nonagricultural occupations. In another, 18 girls have been excused that their mothers might undertake agricultural work, the girls presumably taking charge of the home meanwhile.

On the whole, the report, fragmentary as it is, gives rather a depressing impression of what is taking place in regard to the school children of the rural districts of England. Many of the opponents of relaxing the standard of attendance believe that the children do not stay long in agriculture, that attracted by the better wages offered in other occupations open to children they take advantage of their freedom from school attendance to engage themselves elsewhere, and more children are taken from school to fill their places. Whether or not this is so, it is a striking fact that over and above all the children under 14 legally released from school attendance by the lowering of standards, the authorities have thought it well to exempt from attendance and set free for employment over 14,000 children of whom more than half are under 13.

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#### EMPLOYMENT MANAGERS' CONFERENCE—PHILADELPHIA.

The third conference<sup>2</sup> of employment managers who have organized for the purpose of affording an opportunity for the interchange of ideas and experiences developed in creating or managing successful employment departments in large establishments met in Philadelphia on April 2 and 3, 1917, under the auspices of the Philadelphia asso-

<sup>1</sup> The permanent secretary of the board of agriculture, in an address to the women of Wiltshire, February 22, 1916, said that in North Wilts farmers had been asking the education authorities to lower the age for releasing children from school to 11 years, and at the same time they passed a resolution saying they could not make use of women on the farms because women were not strong enough for the work. He would like to know what work children of 11 could do which was too heavy for adult women. See *New Statesman*, April 8, 1916, pp. 636 et seq.

<sup>2</sup> The first conference was held at Minneapolis on Jan. 19 and 20, 1916, and was noted in the *MONTHLY REVIEW* for August, 1916, pp. 17 to 21. The full proceedings appeared as Bulletin 196 of the United States Bureau of Labor Statistics. The second conference was held at Boston on May 10, 1916, an account of which appeared in the *MONTHLY REVIEW* for July, 1916, pp. 60 to 70. The full proceedings were published in Bulletin 202 of the United States Bureau of Labor Statistics.

ciation for the discussion of employment problems, the University of Pennsylvania, the board of education, the chamber of commerce, the American Academy of Political and Social Science, the Public Education Association, and the industrial and technical conference.

Representatives of this conference unanimously adopted a resolution providing for the establishment of a national committee of employment managers "to bring about a closer affiliation among existing organizations of employment executives and such other similar organizations as may be formed in the future," its duties being to arrange future annual conferences, "to arrange for such cooperation among local associations as may seem desirable to the committee," and "to invite such other organizations of employment executives as this committee may decide to be eligible to membership in this affiliation to become members and designate one of its members to serve as a member of this national committee." The resolution also provides that the executive committee of each local affiliated association shall be required to select two leading business men who are actively represented in the membership of such local association to serve as members of an advisory committee to the national committee of employment managers.

A feature of the conference was a banquet at which Henry S. Dennison, president and treasurer of the Dennison Manufacturing Co., Framingham, Mass., spoke on what the employment department should be in industry, and Mrs. Jane C. Williams, employment manager, Norwood, Mass., spoke on the personnel and employment work of the Plimpton Press, these addresses being followed by a discussion participated in by Charles H. Howard, president of the Commonwealth Steel Co., St. Louis, and by Frances A. Kellor, Americanization committee, United States Chamber of Commerce. The program of the conference was presented under four general topics and was as follows:

#### The labor turnover in industry.

The progress of employment managers' associations, by Meyer Bloomfield, director, vocation bureau, Boston.

The cost of labor turnover, by Magnus W. Alexander, General Electric Co., West Lynn, Mass.

Methods of reducing labor turnover, by Boyd Fisher, vice president, Detroit Executives' Club.

#### The figuring and analyzing of labor turnover.

Tabulating of labor turnover, by E. H. Fish, employment manager, Norton Co., Worcester, Mass., and chairman, Boston employment managers' committee on tabulating labor turnover.

Figuring cost of labor turnover, by Boyd Fisher, vice president, Detroit Executives' Club.

## The selection of employees and termination of employment.

Organization and scope of the employment department, by N. D. Hubbell, employment manager, General Railway Signal Co., and chairman, Rochester employment managers' committee on this subject.

The work of the Carnegie Institute of Technology in developing tests, by Walter Dill Scott, Ph. D., Carnegie Institute of Technology.

The selection problem of Cheney Bros., by H. L. Gardner, employment manager, South Manchester, Conn.

Analyses of reasons for leaving and their use, by J. T. Gilman, employment supervisor, Wm. Filene's Sons Co., Boston, Mass.

## Following up after hiring.

Work of the employment and service department of the Clothcraft Shops, by Miss Mary Barnett Gilson, superintendent, employment and service department, the Clothcraft Shops, Cleveland, Ohio.

Service work of the Eastern Manufacturing Co., Bangor, Me., by Jean Hoskins, service secretary.

Mutual aid associations: Conclusions from a survey of 500 mutual-aid associations, by W. L. Chandler, Dodge Sales & Manufacturing Co., Mishawaka, Ind.; Mutual-aid associations of Strawbridge & Clothier, by John Jackson, superintendent, Strawbridge & Clothier, and vice president, Philadelphia Association for the Discussion of Employment Problems.

An actual account of what we have done to reduce our labor turnover, by John M. Williams, secretary, Fayette R. Plumb (Inc.), president, Philadelphia Association for the Discussion of Employment Problems.

Individuality in industry, by Robert B. Wolf, manager Spanish River Pulp Paper Mills (Ltd.), Sault Ste. Marie, Canada.<sup>1</sup>

There was a general discussion following some of the papers, and this was participated in by R. C. Clothier, assistant to the vice president, A. M. Collins Manufacturing Co.; Ordway Tead, of Valentine, Tead & Gregg, Boston; Roger W. Babson, Wellesley Hills, Mass.; D. R. Kennedy, Youngstown Sheet & Tube Co., Youngstown, Ohio; Clarence H. Howard, president, Commonwealth Steel Co., St. Louis; Frances A. Kellor, Americanization committee, United States Chamber of Commerce; and others.

At the opening session Meyer Bloomfield, in a brief address, traced the development and progress of employment managers' associations, pointing out that the underlying thought of such associations is the fact that "it takes brains and soul to deal with help, with colleagues, with coworkers," and that the efforts of all those concerned in the employment of help in an establishment should be centralized with a view to effecting cooperation between employers and employees, so that the latter may realize that each worker is respected and regarded as a factor in good management.

Data as to the cost of labor turnover, as presented by Magnus W. Alexander, was based on an investigation of 12 metal manufacturing concerns in six States, conducted in 1912, the group employing an

<sup>1</sup> The manuscript of this address was not received in time to be included in this digest.

aggregate of 37,274 workers on January 1 and 43,971 on December 31. In securing the net increase in the labor force, amounting to 6,697 employees, it is stated that 42,571 people were hired and 35,874 were dropped out of employment for various reasons. Although theoretically only as many people ought to have been fired as were needed permanently to increase the force, practically certain allowances must be made which, based on certain considerations briefly set forth, the speaker suggested may be assumed to include the following:

One per cent die; 4 per cent are sick for sufficiently long periods to necessitate their replacement temporarily or permanently; 8 per cent withdraw from service for unforeseen or unavoidable reasons or are discharged for justifiable causes; 8 per cent are temporarily needed on account of normal fluctuation of production; and 80 per cent constitutes a readily attainable efficiency of an employment department.

Applying the factors above outlined to the problem in hand, it appears to follow that—

while theoretically only 6,697 employees should have been employed to allow for an increase of the working force by that number, the additional engagement of 13,843 persons, or a total engagement of 20,540<sup>1</sup> persons, would be justified to cover withdrawals by death, sickness, or resignation to allow for productive fluctuations and for practical employment results and to cover the permanent increase in the force.

Yet the fact is that 42,571 employees were engaged where the engagement of only 20,540 persons could readily be defended; 22,031 persons were therefore engaged above the apparently necessary requirements.

Difficulty was found in evaluating this economic waste in terms of dollars and cents, the experience of managers varying widely—from \$50 to \$200 per employee. But the factors which contribute mainly to the cost of hiring and training a new employee were suggested as follows:

Clerical work in connection with the hiring process, instruction of new employees by foremen and assistants, increased wear and tear of machinery and tools by new employees, reduced rate of production during early period of employment, and increased amount of spoiled work by new employees.

No account is taken here of the reduced profits due to a reduced production, nor of the investment cost of increased equipment on account of the decreased productivity of machines on which new employees are being broken in.

Applying an estimate of the cost of these factors to the establishments in question, the result shows that—

the apparently unnecessary engagement of 22,031 employees within one year in the 12 factories under investigation involved an economic waste of \$831,030. This amount will be considerably greater and may reach a million dollars if the decrease

<sup>1</sup> This figure is arrived at in the following manner:

Replacement of initial force (21 per cent of 37,274 on 80 per cent basis of hiring efficiency).....	9,785
Replacement of replacement ( $\frac{1}{2}$ of 21 per cent of 9,785 on 80 per cent basis).....	1,285
Permanent increase of force.....	6,697
Additional increase for permanent increase on 80 per cent basis.....	1,674
Replacement of total increase ( $\frac{1}{2}$ of 21 per cent of 6,697+1,674 on 80 per cent basis).....	1,099
Total.....	20,540

of profits due to a reduced production and the increase of expense on account of an enlarged equipment investment are taken into consideration.

Five suggestions are made for preventing this waste:

First. A thorough study of current employment statistics with a careful analysis of the reasons for the discharge of employees is needed in order to furnish a fact basis of local as well as general conditions on which to predicate future action;

Second. High-grade men must be placed in charge of hiring departments and must be given adequate authority;

Third. Proper methods must be devised for taking care of new employees, not only in respect to their technical training and work, but also in reference to their personal characteristics;

Fourth. Effective systems of apprenticeship for boys and girls and of specialized training courses for adult employees must be maintained; and

Fifth. Well-directed efforts should be made so to regulate commercial requirements as to secure a fairly uniform production throughout the year.

Although the true cost of breaking in new men has not been determined definitely, a conservative estimate has placed it at \$40 each. Boyd Fisher, in his paper on methods of reducing labor turnover, so stated and then cited an instance where it is claimed that new and inexperienced help reduces the speed of production so much that a 25 per cent allowance of equipment, building, direct labor, and supervision must be made. The methods for reducing labor turnover, which, however, are not given for universal application, are presented under four divisions—preliminary, fundamental, supplementary, and prevocative. The first contemplates an attempt, explained Mr. Fisher, to learn the true cost of turnover in order to know how much may be spent to eliminate it, and the keeping of adequate records as a means of analyzing the sources and causes of turnover. Fundamental remedies include hiring of the right man for the particular job, payment of an adequate wage, provision of steady work, and refraining from firing too hastily. Under supplementary remedies it is suggested that new men should be started right, that physical efficiency should be promoted and good habits fostered, that all employees should be given a hearing, that work in the plant should be made a sufficient career, and that the future of all workmen should be provided for. Finally, men should be fired only when other methods of reformation clearly fail, in which case all discharges should be submitted to an appeal committee on which employees are represented.

Although perhaps impossible to show by percentages a comparison of labor turnover in different shops, a plan of tabulating such turnover in a single establishment in order to analyze the causes of leaving as well as the different kinds and conditions of people employed, was presented by E. H. Fish, employment manager of the Norton Co., Worcester, Mass. The plan in operation under his direction includes, it was explained, two forms showing those who are hired—new, reemployed, and transferred from other departments—and the

"exits," including those who leave of their own accord, those discharged, those laid off, those transferred, and those leaving for unavoidable causes, such as death, etc. One sheet records the turnover in a single department and the other in the entire plant. On each sheet the new and reemployed are each divided into three classes—experienced, learners, and laborers. Those transferred are divided into four classes—physical reasons, promotion, failed, and departmental fluctuation. Working conditions, location, and other reasons are the three divisions under which are tabulated those who leave of their own accord. Likewise, those discharged, laid off, transferred, and quitting for unavoidable reasons, are subdivided. The speaker outlined the difficulties entering into the matter of classification, the influence which working conditions and living conditions exert upon those employees who quit, some causes for dismissals, and why men are laid off or transferred. Each department form is totaled, percentages calculated, and the results carried to the form which is to show the statement of labor turnover for the entire plant.

Tentative proposals for a real cost system for labor turnover were offered by Boyd Fisher "for criticism," who admitted that the methods proposed "will be expensive" but asserted that "a definite knowledge of costs will show us where we ought to place the greatest emphasis in efforts to reduce turnover, and will guide us accurately in deciding how much to spend on apprentice instruction, welfare work, and improved employment methods, and, especially, give us knowledge of an employee's increasing usefulness to a concern as a basis for making wage increases for long service." After defining what is meant by turnover the outline suggests that cost is influenced by certain variables, including degree of skill of employees hired, the completeness of analysis, the length of time new employees are followed up, and the type and value of the equipment used by new employees. Taking the above variables into account the total cost should be figured on the basis of the cost of hiring, the cost of instruction of employees, the cost of wear and tear, the labor cost of reduced production, the excess plant cost of reduced production, and the cost of spoiled work and of waste. Suggestions as to the basis upon which all these costs should be figured are given.

These two papers prompted an extended discussion led by Ordway Tead, of Valentine, Tead & Gregg, Boston, who suggested several changes in the form presented by Mr. Fish, and also that the outline proposed by Mr. Fisher should include, as a cost of labor turnover, the expense of accidents causing disability of two to three months and also the cost of discharges.

Mr. Dennison, one of the speakers at the banquet, gave his "own vision of the work of an employment manager" and emphasized what he termed "the function of foreman choosing and foreman training,"

suggesting how important it is that care be exercised in this respect since "to the employee the foreman is the company." An effort should be made by the employment manager to restore to the workmen the "joy of craftsmanship" and to build up "the spirit of democracy" which was characterized as "an open and equal opportunity for everyone to reach the highest position he is fitted for," and "responsiveness in the leader \* \* \* to the feelings, thoughts, and spirit of the people he is leading."

Labor turnover in the Plimpton Press, according to Mrs. Jane C. Williams, its employment manager, has been controlled largely by the maintenance of favorable conditions in the plant, the policy of teaching workers several operations so that they may be transferred from one department to another instead of being discharged, a bonus system of wage payment applicable to about 43 per cent of the workers, and general welfare supervision. Through job analysis it has been possible to exercise care in the selection of employees. A joint committee considers all grievances. A savings and mutual benefit association are in operation. The influence of these factors is shown by the fact that the percentage of turnover was reduced from 22 in 1913 to 18 in 1914 and to 13 in 1915.

In his discussion following these papers Mr. Howard dwelt upon the fellowship basis of true relations of employers and employees, emphasizing the belief that in industry men should be treated as men and not as machines. "The welfare of the men is more important than tools and machinery."

N. D. Hubbell not being present, his paper on organization and scope of the employment department was read by another. The paper presented "a survey of what is coming to be recognized as the best in modern employment department practices" and was somewhat comprehensive but "by no means exhaustive." The establishment of an employment department is "a slow, gradual process" requiring "time and ceaseless diplomacy, energy, perseverance, and patience on the part of the employment manager in educating and gaining the confidence of the foremen." Having been organized, the department should build up a list of available applicants; should exercise care in selecting the best talent available for the positions open; should give attention to the matter of introducing new employees into the organization; should follow up the performance of employees; render final decision on differences and recommendations for discharge; investigate reasons for leaving; arrange for transfer of men not making good; render final decision, subject only to the manager, on change of rate, transfer, and promotion; study the earnings of workers; prepare a chart of understudies for all positions of responsibility; keep adequate records; compile periodic reports of turnover; supervise proper instruction of new employees; investigate

cases of absenteeism; and aim to give the plant a good name by courteous treatment of applicants, of employees, and of workmen leaving employment.

The paper was followed by a brief address by Roger W. Babson, who made a plea for the solution of employment problems not along mere statistical and mechanical lines, but by the development among employees of originality, initiative, enterprise, imagination, and ambition. These "are the things that really make money for concerns, make money for individuals, and make industry itself grow."

The work of the Carnegie Institute of Technology in developing tests for vocational guidance and vocational selection was described by Prof. Walter Dill Scott, who pointed out that a study of 30 firms revealed three factors which enter into the selection of salesmen—previous record of the individual, human judgment (judgment of the youth himself or that of the employer), and special tests administered to the applicant.

From my experience in devising and applying tests I am convinced that special tests are to be an important part of every successful attempt to deal with the employee problem in business.

Four methods of evaluating tests conducted for the purpose of selecting salesmen were briefly outlined.

H. L. Gardner described the selection problem of Cheney Brothers, silk manufacturers, where they encourage the recruiting of applicants by the working force, and are "trying to carry to its fullest possible realization the policy of transfer and promotion from within." Foremen are not permitted to hire men. A worker is selected as the result of personal interview, physical examination, interview with his prospective foreman, mental tests, and references. Emphasis was laid upon the importance of medical examinations. As to mental tests it was stated that "the correlation of tests with subsequent accomplishment is extremely high." As a result of the methods used by this firm approximately 76 per cent of the applicants are given work.

In analyzing reasons for leaving employment John T. Gilman, employment supervisor of Wm. Filene's Sons Co., referred to the desirability of centralizing all employment problems in one labor department, and outlined the scope of the work of the arbitration board which in his firm acts as an added check to secure justice for employees on all questions affecting them or their work. A careful record is kept of all those leaving, tabulated under the general heads "resigned" and "dismissed," each head being subdivided. Records are also kept showing the length of service of those leaving, thus revealing the department having a high turnover and short period of service, and showing turnover by departments, figured monthly and cumulatively, thus giving the management a complete employment

balance sheet. Fundamental reasons for leaving, it was stated, include those affecting the relation of the individual to himself, such as home conditions, etc., the relation of the individual to his environment, including working conditions, etc., and the relation of the individual to his executive. These reasons should then be analyzed by departments, by causes, and by length of service.

In introducing her discussion of the work of the employment and service department of the Clothcraft Shops, Miss Gilson, superintendent, described in detail the manner in which they follow up the new employee through the process of explaining the mutual responsibility assumed by the employee and the company, and of introducing him to his occupation and to the other workers—in short, giving him the right kind of a start. It has been their policy, also, to create in the old employees the spirit of confidence in the attitude of the concern toward them, the theory being “that justice and fair play and the right of the individual can in no other way be so securely established as through human sympathy and understanding.” This is accomplished largely through personal contact with workers and their interests, giving attention not only to the development of their dexterity but also to the minds and characters of employees, leading each one to realize the mutuality of interest and that his permanent success can not be achieved apart from the success of the entire body of workers. Thus absenteeism is carefully followed up and the reasons therefor ascertained by home visits; those having complaints are granted a hearing; a library has been established; English is taught to foreign-born workers; a dispensary is available; opportunities for recreation are provided; and care is taken to find out the reasons for quitting and to analyze these reasons.

In telling of the service work of the Eastern Manufacturing Co., Bangor, Me., Mrs. Jean Hoskins, service secretary, called attention to the fact that such work has been developed along the general lines set forth in other papers at the conference and stated that since the service department has been organized, in cooperation with the principle of scientific management established at about the same time, the working hours have been reduced from 10 to 9 per day with a 10 per cent increase in pay and working conditions generally have been improved.

Conclusions from a survey of over 500 employees' benefit associations were presented by W. L. Chandler, Dodge Sales & Manufacturing Co., Mishawaka, Ind., who pointed out that capital has only recently awakened to the value of these organizations in steadying the forces and in reducing some of the unmeasured leaks of business. The paper described the operation of such organizations, plans for stimulating interest, and methods of securing members, and emphasized the value of cooperation by employers and employees in organizing and con-

ducting the associations; they should not be managed entirely by the membership. In this connection, however, care must be taken that employees have no reason to become suspicious of the purposes of the company in its cooperation. The speaker suggested that it is inadvisable to pay benefits for disabilities lasting less than three days, and favored the so-called "step-down" method of paying benefits; that is, \$1 a day for the first 13 weeks, 75 cents for the next 13 weeks, and so on through 52 weeks. Dues in preference to assessments were advocated as a method of collecting revenue. One feature of the organization in the Dodge Manufacturing Co. is a thrift club which seems to have had the advantage of proving to the employees that it is often not inadequacy of wages but carelessness that has prevented them from saving money.

The discussion of mutual aid associations was continued by John Jackson, who described the operation of some of the various associations, each carrying on a different line of work, in the establishment of Strawbridge & Clothier, of which he is superintendent. The relief association is managed entirely by the membership and pays benefits of \$5 per week for not to exceed 15 weeks in any one year, and \$100 upon the death of a member. The firm contributes about 50 per cent of the funds, an assessment upon members furnishing the balance. More than \$250,000 in benefits has been distributed since January, 1880. The pension fund is open to every member after six months of service. The dues are 15 cents per month and the firm contributes to the fund. Pensions are paid on the basis of term of service and salary received during the last 10 years of service. Other benefit associations referred to were athletic, musical, literary, and cooperative lunch rooms, and cooperative buying of home supplies.

Discovering, upon an analysis of one department, that it cost the company more than \$100 to break in a new man, Fayette R. Plumb (Inc.) established an employment department, the work and accomplishments of which in one year were set forth in a paper by John M. Williams, secretary of the company. The following results were given as having been achieved through the organization of this department: (1) A bonus system of wage payment was established; (2) hours were reduced from  $57\frac{1}{2}$  to  $52\frac{1}{2}$  per week; (3) reforms were instituted within a particular department which caused an increase of 18.4 per cent in production on 5 hours less running time per week; (4) interviews were held with men who quit, to find out the reasons therefor, which in many cases were adjusted; (5) transfers of workmen within the factory were made. The wisdom of giving attention to these matters was reflected in a reduction of 25 per cent in the number of men who quit in July, 1916, as compared with April, 1916; and of 48 per cent in January, 1917, as compared with April, 1916.

Since the installation of the employment department we have decreased our working force 10 per cent, reduced our working time almost 9 per cent, and increased our total shop production 10 per cent.

A feature of the second day's proceedings, not on the program, was a brief statement by Mr. Alvin Dodd, supplemented by Mr. Fitch, members of the advisory committee on labor and welfare of workers of the Council of National Defense, giving an outline of what the committee proposed to do in order to guard against "the very serious possibility of disorganization and disruption of industry and the forces now dealing with the most important resources which this country must place at the disposal of the cooperating countries immediately." To this end there have been organized subcommittees on wages and hours, standards, fatigue and physical welfare, sanitation, housing, equalization and conciliation and education. The speaker suggested the cooperation of employment managers and representatives of labor in the work of mobilizing the industrial forces of the country. Mr. Fitch drew attention to the experience of England and the mistakes made by that country in dealing with the question of labor during the war, and urged the importance of avoiding if possible such mistakes in this country.

#### EMPLOYMENT AND CHILD LABOR IN CALIFORNIA.

One of the important functions of the California Bureau of Labor Statistics, according to its seventeenth biennial report recently issued,<sup>1</sup> is to offer a means whereby the unfortunate toiler without money may secure speedy redress without the expense involved in court procedure.

The bureau has come to be looked upon as a poor man's court. \* \* \* It has also served as an effective medium in the adjustment of many of the irritating disputes that arise in the industrial field, to the benefit of both the employer and the employee. By constant vigilance, it has forced the employer to realize that the labor laws of this State can not be evaded with impunity.

In thus seeking to assist the laboring man, the bureau received during the five years ending June 30, 1916, 41,728 complaints of violations of labor laws, of which 12,366 were received and investigated during the last year of the period. The largest proportion of these complaints, 32,289, involved the collection of wages. Of this number, 19,330 were disposed of, the amount of wages collected being \$504,744.63, or an average of \$26.11 each. During the year ending June 30, 1916, 5,672 claims of this kind were collected (55.8 per cent of the total claims filed) the amount being \$179,132.22, or an average of \$31.58.

<sup>1</sup> California. Seventeenth biennial report of the bureau of labor statistics, 1915, 1916. Sacramento, 1916, 386 pp.

The bureau also supervised the payment of wages of employees engaged in seasonal labor, and it is stated that \$250,000 annually for the past four years was secured to employees sent to work in the salmon canneries of Alaska. The average wage collected for each man ranged from \$110 to \$128; formerly the average wage paid each man was \$35 at the close of the season.

Laborers were the largest group filing wage claims, 28 per cent in 1915-16; farm hands came next, being 11 per cent in the same period. Domestic workers composed the largest group among women, the per cent being 21 in 1915-16. Of the industries against which wages claims were filed, construction and general contracting appear to stand out most prominently. In 1915-16 these claims were 20 per cent of the total.

The report emphasizes the work of the four public employment bureaus,<sup>1</sup> which were opened in February, 1916, and the success of which "has gone far beyond all expectations." During the first nine months of their existence these bureaus filled 38,550 positions "thereby saving to these persons at least \$80,000 which they would have had to pay in fees to private employment agencies." These positions were filled, it is stated, at a cost of 62 cents each, or 75.6 cents each if the three State-maintained offices are considered alone. Approximately 83 per cent of those placed were males and 17 per cent were females. For the 5-month period ending June 30, 1916, transportation and public utilities took the largest number of males (31 per cent of those placed) and private homes took the largest number of females (46.6 per cent of those placed). In the three State-maintained offices nearly half of the applicants registered were native born and more than half were single persons. The following table summarizes the operation of the three State-maintained public employment offices for the period from February 1, 1916, to October 31, 1916:

PERCENTAGE OF PERSONS PLACED TO PERSONS REGISTERED, BY SEX, IN THE THREE STATE-MAINTAINED EMPLOYMENT OFFICES, FROM FEBRUARY 1, 1916, TO OCTOBER 31, 1916.

Office.	Males.			Females.			Total.		
	Individuals registered.	Individuals placed.	Per cent.	Individuals registered.	Individuals placed.	Per cent.	Individuals registered.	Individuals placed.	Per cent.
San Francisco.....	17,163	9,017	52.5	5,668	1,785	31.5	22,831	10,802	47.3
Oakland.....	4,096	2,258	55.1	2,198	892	40.6	6,294	3,150	50.0
Sacramento.....	5,974	4,397	73.6	1,069	318	29.7	7,043	4,715	66.9
Total.....	27,233	15,672	57.5	8,935	2,995	33.3	36,168	18,667	51.6

<sup>1</sup> These bureaus are in San Francisco, Sacramento, Oakland, and Los Angeles, the office in the latter city cooperating with the municipal bureau.

It appears from the report that the bureau has maintained strict supervision over private employment agencies. During the fiscal year ending June 30, 1916, a total of 846 complaints against these agencies were filed and in 578 cases fees and expenses amounting to \$1,508.59 were ordered returned. The total refunds, however, have exceeded this amount. Thus, during the year 1915-16, \$112,020.40 was refunded to 52,804 applicants, and expenses amounting to \$773.03 were returned to 374 applicants.

It is safe to say that a very small part of this money would have been returned to these applicants if the bureau did not have the control of the private employment agencies well in hand.

The average fee paid by men to these agencies was \$2.05, and by women, \$2.25, the total amount of such fees paid by 216,624 persons in 1915-16 being \$454,447.42.

In taking up the work of the bureau in connection with child labor, the report notes that during the year ending June 30, 1916, 843 age and schooling certificates were issued, 366 being to children who had graduated from the grammar grades, and 477 to those who had completed the seventh grade and were attending night school. During the same period, 243 graduate permits and 404 temporary permits to work were issued. One hundred and forty-one complaints were filed for violations of the child labor laws, and prosecutions were brought in 7 cases. During the fiscal year ending June 30, 1916, 622 complaints for violations of the 8-hour law for women were filed and prosecutions were undertaken in 24 cases. In all, the bureau conducted 100 prosecutions and secured convictions in 57 instances.

The report contains a section devoted to organized labor, showing rates of wages and hours of labor on January 1, 1916, in some 467 unions in the State, classified by trades.

The statistics of manufactures cover 2,251 establishments employing 74,026 male and 22,779 female wage earners and 14,517 male and 2,871 female salaried employees, making a total of 114,193 persons employed in these establishments on or about December 15, 1916. The total wages paid to these people was \$86,322,539, of which \$61,982,687 was paid to wage earners. Tables giving weekly wage rates show that of male wage earners, 18 years of age and over, 35.5 per cent received over \$15, and of females, 43.7 received under \$9. The number of male wage earners fluctuated from 58,209 in January to a maximum of 73,727 in September, or an increase of 26.6 per cent, while the fluctuation of female wage earners was from 11,473 in January to 22,086 in August, or an increase of 92.5 per cent. Seasonal industries such as canning and dried fruit packing are stated to be the causes of this large fluctuation in employment.

ADMINISTRATION OF CHILD LABOR LAWS OF NEW YORK.<sup>1</sup>

This is the second in a series of studies concerning the administration of child labor laws, issued by the Children's Bureau. The first, issued in 1915, dealt with the same subject in Connecticut.<sup>2</sup>

The law of New York sets up a higher standard than that of Connecticut in regard to the employment of children. In both States the employment of children under 14 in specified occupations is illegal, and in both children between 14 and 16 must secure employment certificates before they can be legally employed. But in New York the kind of evidence which must be furnished in proof of the child's age is specified in the law instead of being left to the discretion of the administering officers, the educational standard for children under 15 since February, 1917, has been completion of the eighth instead of the fifth grade, and every child under 16 applying for a work certificate must have a physical examination to test his fitness for the work he intends to do.

On the other hand, the Connecticut law has some advantages in enforceability. In Connecticut the law is uniform throughout the State, while in New York it has different provisions for cities and villages of different size. In Connecticut one centralized authority administers the law; in New York its enforcement is divided among the following agencies:

The local health departments or health officers, who issue employment certificates and who in small cities and towns are authorized to inspect mercantile establishments; the local boards of education or public school authorities, who issue school records and enforce the compulsory school attendance law; the State department of education; which has general supervision over the enforcement of the compulsory education law throughout the State and may withhold one-half of the State appropriation from any school district which fails to enforce school attendance; and the State industrial commission, which, through the inspectors of the department of labor, of which it is the head, enforces the provisions of the labor law, and supervises the issuance of employment certificates.

Another advantage of the Connecticut system is that under its terms an employment certificate, when issued, is delivered to the child's employer, who must notify the issuing office of both the commencement and the termination of the child's employment, and the child must secure a new certificate for each employer. In New York the certificate, when once issued, is looked upon as belonging to the child and as authorizing any employer to hire him, subject to the general regulations of the law. Evidently, the Connecticut system makes it possible to keep some sort of supervision over the child's industrial experiences, while in New York it would be far more difficult to do so.

<sup>1</sup> United States Department of Labor, Children's Bureau: Administration of Child Labor Laws, Part 2, Employment Certificate System of New York. 164 pp.

<sup>2</sup> See article, Administration of the Child Labor Laws of Connecticut, Monthly Review, July, 1915, pp. 41, 42.

Theoretically, the child who has received his employment certificate is responsible, if working, to the factory inspector, and if not to the truant officer.

But in both cases the officer has to catch the child before he can exercise in any effective way his authority. Unless a factory inspector or an attendance officer happens to come his way the child is free to do as he pleases—work in any occupation, legal or illegal, or loaf on the streets. He carries his license to work in his pocket and, if he finds a job, gives it to his employer to keep until he quits, when he may put it back in his pocket or may carry it to another employer. No public authority is notified when he begins work or when he stops, and no public authority knows where he is or what he is doing.

The report describes at length the process of obtaining a work certificate in New York City and in the leading cities of the second and third classes, the differing requirements as to proof of age, physical fitness and educational advancement which must be satisfied, and the methods used to make sure that all children between 14 and 16 are either in school or at work. The various forms used in the process are given in full.

As shown above the administration of the law rests in the hands of several agencies, and the part played by each of these varies somewhat according to whether the child who wishes to go to work lives in a city of the first class, a smaller city, or a country district or village. The actual requirements of the law vary also with these geographical conditions. Naturally, the strictness with which each agency enforces its part of the law, and the methods it will use for enforcement vary somewhat from place to place, so that altogether there is a marked lack of uniformity about the administration of the law in different parts of the State. This lack of uniformity is, the authors think, the point at which the law is most open to criticism:

The standard set is high; the evidence of age required seems adequate; the physical examination must show not only that the child is in "sound health," but that he is physically able to do the work proposed; and the requirement of the completion of the sixth grade<sup>1</sup> is an unusually high educational standard. \* \* \*

These standards are probably as rigidly enforced as could reasonably be expected in many places, including New York City, which contains more than half the working children of the State, and where the foreign element makes the problem particularly difficult \* \* \*. The trouble is that in one city the administrative machinery breaks down at one point and in another city at another point \* \* \*. In short, the lack of careful supervision by any central office means that the high legal standards set for entering industry are so unevenly enforced that it is impossible to point out any one uniformly strong feature of the system as a whole.

<sup>1</sup> Since February, 1917, completion of the eighth grade has been required for children under 15.

ONE DAY'S REST IN SEVEN FOR HOTEL AND RESTAURANT EMPLOYEES  
IN MASSACHUSETTS.

By direction of the Massachusetts Legislature in 1916 the State board of labor and industries made an investigation of labor conditions prevailing in the hotel and restaurant business of the Commonwealth, with a view to reporting recommendations for legislation designed to improve such conditions, with particular reference to the application to these establishments of the so-called "one day's rest in seven" law. The report of the board was issued under date of January 20, 1917.<sup>1</sup> On January 5, a bill was introduced in the legislature providing that the designation "mercantile establishments," which now enjoy the benefits of a one day's rest in seven, shall not except hotels and restaurants.

The investigation conducted by the board with the cooperation of officials of the hotel men's association and the representatives of the employees, covered 218 establishments in 49 cities and towns, the greatest emphasis being laid upon conditions in hotels which in some respects were found to be worse than in restaurants. One reason given for the bad conditions in hotels is the method of constructing the buildings with the result, as one hotel man expressed it, that "if there is a part of the building undesirable for any other use, the kitchen is placed in that portion of the building." This evil, it is believed, could be corrected by requiring the approval of hotel plans by some central authority, and the board so recommends.

It was found that lodgings for employees in hotels are not altogether desirable—36 per cent being rated as "good," 49 per cent as "fair," and 15 per cent as "poor." The estimated value of rooms occupied by employees ranges from \$2 per week to \$10 per month for each person. From 80 cents per week to \$2 per month in addition to regular wages is the amount generally allowed an employee who rooms outside.

The board found that the matter of meals for employees was not receiving proper attention, although the reports received indicate an equal proportion of places in which "good," "fair," and "poor" meals are furnished. The cost of these meals varies from \$3 to \$6.25 for kitchen help, chambermaids, waitresses, etc., and \$10.50 to \$17.50 for heads of departments. Only \$2.25 per week to \$10 per month is allowed an employee taking her meals outside.

The board gave very little attention to the matter of wages, but states that—

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<sup>1</sup> Massachusetts. Report of the State Board of Labor and Industries relative to the investigation of prevailing conditions in hotels and restaurants. House No. 1538, 17 pp. Bill accompanying the petition of the Massachusetts State Branch of the American Federation of Labor to provide for one day's rest in seven for employees of hotels and restaurants. House No. 51, 1 p. [Boston, 1917.]

it is well to bear in mind that, unlike most other industries, the employees are obliged to deduct from their wages a considerable portion, which is used in various ways in connection with the conduct of the hotel business. For instance, bell boys, porters, and waiters pay for the use of their uniforms a sum varying from 50 cents to \$4 per month. In some places the waitresses are obliged to contribute from their wages a certain percentage to pay for the service of "bus boys." All of these deductions make quite an item when taken from persons whose average wage is very low.

As bearing directly upon the question of one day's rest in seven, considerable space is given in the report to the subject of hours of labor and a statement is included showing the hours of work now required of employees, by occupations, the hotels being grouped by number of employees. The following table, compiled from this statement, shows the maximum hours worked by those in each occupation:

MAXIMUM HOURS WORKED BY EMPLOYEES IN HOTELS EMPLOYING EACH SPECIFIED NUMBER OF WORKERS, CLASSIFIED BY OCCUPATION.

Occupation.	Hotels whose employees number—				
	Under 15.	15 to 25.	25 to 50.	50 to 100. <sup>1</sup>	Over 100.
Kitchen men.....	14½	12	13½	12	12½
Kitchen women.....	10	13	10½	13½	10
Waitresses.....	12	13	12	9	10½
Waiters.....	13	16	12½	15	11
Bartenders.....	10	17	10	9½	11
Scrub women.....				9	8
Bell boys.....	12	14	12	<sup>2</sup> 12	<sup>3</sup> 12
Chambermaids.....	12	9½	12	12½	12
Clerks.....	13	13	12	12	12
Porters.....	11	12½	11	12	12
Laundry help.....	12	12		8	9½
Checkers, operators, stenographers.....			8	<sup>4</sup> 8½	<sup>5</sup> 11
Engineers.....			12	<sup>6</sup> 12	<sup>6</sup> 12
Housemen.....				11	10½
Watchmen.....				11	10

<sup>1</sup> In this group a linen girl, not included in the table, worked a maximum of 19 hours.

<sup>2</sup> "Bus boys," 11 hours.

<sup>3</sup> "Bus boys," 10 hours.

<sup>4</sup> Females; includes telephone operators.

<sup>5</sup> Females.

<sup>6</sup> Includes firemen.

Taking the statement as a whole it appears that approximately 40 per cent worked over 60 hours per week or an average of about 8½ hours per day; and more than 25 per cent worked 54 hours or less per week, or an average of less than 8 hours per day. In general it seems that in the smaller hotels the employees are required to work longer hours than in the larger hotels.

These figures would seem to indicate that some change must be made in the hours of labor of those employed in hotels. It would also seem to justify the demand on the part of hotel workers for "one day's rest in seven," for in nearly all industries where this principle has been adopted, so far as we are advised, it has proven an efficient method of doing business.

The report calls attention to the fact that an extension of the provision for one day's rest in seven to include hotels and restaurants would not place an unbearable burden upon hotel managers, as has

been urged, and cites the fact that without the necessity of a law certain hotels have voluntarily adopted the principle contained in the law. The number of such hotels is given, showing the occupations so favored.

The conclusion is irresistible that "one day's rest in seven" can be granted in this business because it is already in force in certain establishments, and we recommend a change in the law which shall take from the present statute the exemption accorded to hotels and restaurants, and recommend the passage of an act similar to House bill No. 138 of the year 1916, under petition of the Massachusetts State branch of the American Federation of Labor.

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### UNEMPLOYMENT BENEFITS IN ITALY.<sup>1</sup>

#### GOVERNMENT SUBSIDIES DURING THE WAR.

The journal of the Italian department of labor (*Bollettino dell' Ufficio del Lavoro*) publishes, in its issue for February 1, details of disbursements made by the government by way of subsidies to various organizations that provide unemployment benefits to their members. The amounts granted in 1914-15 varied from £1,040 (\$5,061.16) (to the Federation of Book Producers) to £1 (\$4.87) (to a basket-makers' club). The amounts granted in the first half of 1916 showed less disparity, the largest grant, £312 (\$1,518.35), being made again to the federation above named.

Periodical subsidies are granted or lent in pursuance of a vice-regal decree dated April 6, 1916, and are to be continued for the period of the war. Trade-unions, benefit clubs, and cooperative societies which provide unemployment benefit for their members are to receive grants not exceeding £6,000 (\$29,199) in the aggregate. Next, labor exchanges, in respect of their work in the province in which they are situated and in adjacent provinces, are to receive grants not exceeding a total of £1,200 (\$5,839.80). Finally, a sum of £20,000 (\$97,330) is allocated as subsidies (with contingent liability to repayment) to Italians in enemy countries, who, though entitled to receive benefits from their clubs, are unable to get them.

In regard to grants to organizations providing unemployment benefit, a ministerial order, dated May 21, 1916, lays down several stipulations. The sum granted by the Government is to be allocated—

- (1) To societies which had, before January 1, 1916, adopted a scale of unemployment benefit.
- (2) To societies which have since then adopted such a scale, and which in 1914 and 1915 sustained serious financial losses owing to special grants made to unemployed members.

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<sup>1</sup> From the British Board of Trade Labor Gazette, April, 1917, p. 126.

(3) To societies which have not fixed a scale of benefits, but which made grants in 1914 and 1915 to unemployed members.

The government grants allocated to societies in the first category may not, as a rule, exceed either one-third of the total unemployment benefits paid by any society or the quota of half a lira (4½d. [9.6 cents]) for every day of unemployment in respect of which benefit has been paid. The amounts allocated will be reduced (a) for societies whose rules do not exclude claims to benefit for the first week of unemployment; and also (b) for those which pay benefit for more than 90 days of unemployment in a year. Should the benefit paid by any society to an unemployed member exceed 2.5 lire (2s. [48.7 cents]) a day, no government grant will be allocated.

As regards the societies in categories 2 and 3 (see above), the maximum allocations of grants must not, as a rule, exceed one-third of their extra expenditure in 1914-15. A grant will be made when it appears that a society has lost capital or has been obliged to reduce its benefits.

Special commissioners (consisting partly of officials and partly of representatives of benefit societies, etc.) are to be intrusted with the administration of the grants, subject to the control of the competent minister.

Societies applying for grants must submit their accounts to government auditors.

The department of labor, in its official journal dated February 1, 1917, issues directions to societies desirous of applying for grants, and specifies the conditions that must be complied with.

In regard to grants to labor exchanges, a ministerial order of the same date as the one already summarized (May 21, 1916) defines the classes of exchanges to which grants may be made, and lays down various stipulations. The exchanges that may participate in grants include (a) provincial and communal organizations; (b) societies founded jointly by employers and workmen; (c) special departments of trade-unions, whether recognized or not by employers' associations; (d) offices established by benefit societies and other organizations. In fixing the amounts to be allocated, special regard is to be paid to the expenditure of each exchange; its financial needs in proportion to its income; the ratio, during the war, of situations applied for to situations filled; the gratuitous nature of the service; the extent of the district served; and the grants made toward traveling expenses.

Special grants may be made to encourage the establishment of new labor exchanges.

The allocation of grants to labor exchanges is intrusted to the permanent labor commission, which is authorized to delegate some of its functions.

## ESTABLISHMENT OF A GOVERNMENT SERVICE FOR UNEMPLOYMENT INSURANCE AND PUBLIC EMPLOYMENT IN HOLLAND.

Under date of March 24, 1917, this bureau received a communication from the director of the unemployment insurance and public employment service of the Dutch Government, informing the bureau of the establishment of this service by royal decree of September 19, 1916.

The service was organized as a bureau of the ministry of waterways and forests (*ministerie van waterstaat*), the director of the service holding his appointment from the Crown. The functions of the service are defined as embracing (a) unemployment insurance, (b) public employment offices, and (c) other matters connected with the prevention and combating of unemployment and the mitigation of its consequences.

The duties to be performed by the new service under (a) consist in "promoting unemployment insurance by means of subsidies to unemployment funds and otherwise," and in "preparing and carrying out legislation regulating unemployment insurance."

The duties under (b) consist in (1) "promoting by means of subsidies or otherwise the growth of the labor exchange system, including its development along interurban and international lines;" (2) "the supervision of interurban and central general labor exchanges and of those established for special occupations or industries;" and (3) "the preparing and carrying out of legislation regulating public employment offices."

A royal decree promulgated December 2, 1916, contains detailed regulations with respect to the granting of subsidies to unemployment funds and public employment offices. This decree defines as an unemployment fund any fund formed by an association of workmen or salaried employees with contributions from its members for the purpose of insuring them the payment of unemployment benefits. The decree provides that beginning with January 1, 1917, every unemployment fund, the by-laws of which have been approved by the ministry of waterways, shall receive a subsidy equal in amount to the total contributions collected from the members of the fund. One-half of the subsidy is to be paid by the communes in which the members of the fund reside. The share which each individual commune has to pay shall be determined in proportion to the amount of the contributions of the members residing in the commune.

The subsidy is put at the disposal of the management of the association which formed the unemployment fund and with the exception of an amount required for immediate payments must be invested in securities approved by the ministry.

The decree provides that any association investing unemployment subsidies otherwise than in the prescribed manner shall lose claim to

further subsidies. In such a case a subsidy shall only be granted if the fund's own means are not sufficient to pay the benefits provided in its by-laws.

The decree leaves to the management of each fund the decision as to whether an unemployment benefit shall be paid and as to the amount of the benefit and the period during which it shall be paid. The communes in which the members of the fund reside must be informed of this decision. If the communes do not agree with the decision they must notify the management of the fund of their disapproval and in such a case the fund must stop further payment of benefits.

The contributions of members together with the subsidy must be sufficient to cover all benefits provided in the by-laws of the fund and in addition make possible the setting aside of a reserve for benefits in case of extraordinary long periods of unemployment. The decree puts the supervision of the funds principally in the hands of the communal administrations.

Disputes between the director of the government unemployment insurance service or a commune and a subsidized fund are to be decided by the minister of waterways, who before rendering a decision shall consult a special commission of three members.

Each member of an unemployment fund, when out of work, must register in the employment office of his commune and must accept suitable work procured for him by this office. Refusal of such work involves the loss of claim to an unemployment benefit.

The decree further establishes an advisory council of at least 12 members, of whom one-half shall be representatives of the State and of communes and the other half shall be representatives of subsidized funds. This council is charged with the task of keeping the minister informed as to how the provisions of the decree are carried out and shall make proposals to him on this subject.

The provisions of the decree are not mandatory with respect to the participation of communes in unemployment insurance. A commune may refuse to grant a subsidy to an unemployment fund, but in such a case the state also withholds its subsidy and pays a subsidy only for those members of the fund who reside in communes granting a subsidy to the fund.

The decree provides for the establishment of a central employment bureau as a division of the unemployment insurance service and for the division of the country into 30 zones for the purpose of the government employment service. A large commune in which a communal or association employment office is in existence has in each zone been selected as headquarters for the employment service. All other communes of a zone report to the headquarters on the daily supply of and demand for labor. The headquarters in their turn

report daily to the central bureau all demands for labor which can not be supplied within the zone. The central bureau publishes daily a bulletin for the use of zone headquarters, showing all vacancies in the various zones and containing other information relating to employment of labor.

The costs of the central bureau are borne by the state and those of the zone headquarters are defrayed conjointly by the state and the communes. The managers of the zone headquarters are members of the Federation of Dutch Employment Offices and are regularly convened by this federation for the discussion of mutual interests.

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#### LABOR INJUNCTIONS IN MASSACHUSETTS.

The Massachusetts Bureau of Statistics has just issued, as Labor Bulletin No. 117, a report entitled "Labor injunctions in Massachusetts" which has been prepared with a view to presenting a survey of litigation in labor disputes in this Commonwealth during recent years. The 34 important cases decided by the Supreme Court of the Commonwealth, beginning with *Commonwealth v. Hunt* in 1842 and ending with the recent decision, *Bogni v. Perotti*, have been printed in full, with the exception of certain portions of the headnotes and of the text, which are not of material importance in this connection. These cases are arranged chronologically, so that it is possible to observe the historical development of the law.

Other matter coming from the superior court and supreme court (single justice) in equity renders the volume a supplement to earlier bulletins of the bureau (Nos. 70 and 78), related material of interest also being included. The result is a handbook of decisions by one of the leading judicial bodies of the country on a subject of great current interest and importance. Its availability for general understanding is increased by the fact that explanatory matter relative to the equity court, from its beginning in England, down to the present proceedings, has been added, together with typical forms of a number of the principal papers used in carrying a case through the courts of equity. Certain State laws of recent enactment, and bearing on the subject of industrial disputes are also incorporated; while a compact summary of the fundamental principles applicable to the relations of employers and employees affords a ready means of discovering what the compilers regard as settled law in the field covered.

Although many well-known titles appear, familiar to students of the questions discussed from their frequent citation through a long series of years, no case is of greater immediate interest than that of *Bogni v. Perotti*, the most recent decision of the supreme court noted (May, 1916); for it is this case that decided the unconstitution-

ality of the antiinjunction law of Massachusetts, which was of a type the enactment of which has been agitated for a number of years. This case was noted in the MONTHLY REVIEW of August, 1916, and will appear in the forthcoming bulletin of this bureau on court decisions affecting labor, in earlier issues of which many of the cases presented in the work under review have been reproduced.

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#### EXTENSION OF APPLICATION OF CANADIAN INDUSTRIAL DISPUTES INVESTIGATION ACT, 1907.

The following order was issued by the Governor General of Canada, March 23, 1916:

His royal highness the governor general in council is pleased, in virtue of the War Measures Act, 1914, to order that the provisions of the Industrial Disputes Investigation Act, 1907, other than section 63 thereof, shall specifically apply in the case of any dispute between employers and any employees engaged in the construction, production, repairing, manufacture, transportation, or delivery, of ships, vessels, works, buildings, munitions, ordnance, guns, explosives, and materials and supplies of every nature and description whatsoever, intended for the use of His Majesty's military or naval forces or militia, or for the forces of the nations allied with the United Kingdom in the present war, if such dispute threatens to result in a strike or lockout

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#### STANDARDS OF LABOR LEGISLATION SUGGESTED IN RESOLUTIONS OF INTERNATIONAL LABOR CONFERENCE AT LEEDS, JULY, 1916.<sup>1</sup>

A labor conference of delegates representing the trade-union federations of England, Italy, Belgium, and France was held at Leeds, England, July 1, 1916. It was called as the result of a preliminary conference of delegates representing these federations, held in Paris, May 1, 1916, which paved the way for its work by calling upon the French federation (Confédération Générale du Travail) to draft a series of minimum labor standards which it was desired to incorporate in the final peace treaties which would terminate the war. The Leeds delegates were to discuss and take action upon this draft by the French federation. Whatever resolution might be accepted by the Leeds conference, it was proposed should serve as the program of the international congress which would meet at the same time and place as the general peace congress of diplomats; such a proposal was made by the American Federation of Labor in its 1915 convention at San Francisco.

At the Leeds conference no decision was taken as to the proposed labor congress, but after discussion the French draft of minimum standards was modified and adopted. A copy of these resolutions has now become available in this country and is printed below in full. It should be noted that these resolutions are now before the

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<sup>1</sup> See also MONTHLY REVIEW for February, 1917, pp. 202 to 206.

various international unions and federations affiliated with the international organization of labor, that they may give expression to their attitude toward them.

The conference declares that the peace treaty which will terminate the present war and will give to the nations political and economic independence should also insure to the working class of all countries a minimum of guaranties of a moral as well as of material kind concerning the right of coalition, emigration, social insurance, hours of labor, hygiene, and protection of labor, in order to secure them against the attacks of international capitalistic competition.

These guaranties must be based upon the following principles:

#### RIGHT TO WORK: RIGHT OF COALITION.

Every workman, no matter to which nationality he may belong, ought to have the right to work wherever he can find employment.

Every workman, wherever he is employed, should enjoy all the trade-union rights which the native workman enjoys, particularly the right to participate in the administration of his union.

No workman should be expelled on account of his trade-unionist activities.

Appeals to the ordinary courts of justice should be allowed against all expulsion orders.

No alien workman should be paid a lower rate of wages than the normal or prevailing rates of wages, or be made to work under worse conditions than those prevailing in the same locality or district for workers of the same trade or the same specialty.

These conditions of work and rate of wages are those that are fixed in the agreements between the organizations of the employers and the employed. Failing such agreements, the conditions of work and the rate of wages are to be fixed by joint committees of representatives of employers' and workers' organizations.

#### EMIGRATION AND IMMIGRATION.

The migrations of workmen shall be organized and based on national labor exchanges.

There should be in every country a special commission on emigration and immigration, consisting of representatives of the Government and of the organizations of employers and workers of the country.

The recruiting of workmen in a foreign country should only be permitted if the commissions of the interested countries, whose duty it is to examine into the question as to whether the demand for and the extent of such a recruiting really correspond with the needs of an industry or a district, and whether the labor contracts are in full conformity with the above-mentioned conditions of labor and the rate of wages, have favorably reported.

The recruiting of emigrants should be under the control of the labor organizations of the country of emigration.

The execution of the labor contracts should be under the control of the labor organizations of the country of immigration.

Should the need arise to employ colored labor, the recruiting must proceed under the same conditions as apply to European workmen. And the same guaranties must be secured for colored labor.

Moreover, the employers who engage such labor shall arrange at their own expense and under the control of the school authorities the necessary courses of instruction, in order to teach the colored workmen to speak, read, and write the language of the country in which they are employed.

## SOCIAL INSURANCE.

(a) In case of accidents, workmen and their relatives, without distinction of nationality and domicile, shall be legally entitled to the same compensation as the native workmen.

The legal position of workmen who are temporarily employed outside the country in which the establishment employing them is located, or of transport workers engaged intermittently and habitually within the territories of several States, shall depend upon the laws of that country in which the establishment employing them is located.

The authorities of the various States should mutually assist one another in facilitating in every respect the execution of the laws concerning industrial accidents.

All acts, certificates, and documents which are made and published or rendered necessary in one country for the purpose of the enforcement of the accident and compensation laws of another country, should be granted exemption from dues, stamps, and postage charges as the laws of that country provide in which the execution or the delivery takes place.

(b) Countries which have not yet enacted insurance laws regarding sickness, invalidity, old age, and unemployment, should pledge themselves to do so within the shortest period.

After the lapse of that period, all workmen, without distinction of nationality, participate in all countries in the insurance arrangements in the same manner as the native workmen.

All necessary measures should be taken for securing the uninterrupted payment of insurance benefits to the workmen forced to change their domicile, likewise for the control and payment of the benefits in the respective foreign countries.

(c) Pending the introduction of sickness insurance, diseases caused by the exercise of a trade should be regarded as accidents entitled to compensation.

## LIMITATION OF HOURS OF LABOR.

Children under 14 years of age should not be permitted to leave school and engage as wage workers in industrial, commercial, and agricultural labor.

Female persons and juveniles under 18 years of age shall be prohibited from working at night work or in factories of continuous operation.

A weekly rest, i. e., complete cessation of work, of one and a half days shall be compulsory. It shall be fixed for Sundays and Saturday afternoons, unless there exist for special industries exceptional regulations which transfer the rest or cessation of work to other days of the week.

For all workers a day's work must not exceed ten hours.

In mines, factories of continuous operation, and unhealthy industries the maximum workday shall be eight hours.

## HYGIENE AND LABOR PROTECTION.

(a) It is the duty of the various countries to develop their laws concerning hygiene and labor protection.

These laws must extend to all branches of industry. The various countries should conclude a lasting agreement with regard to common efforts in combating industrial poisons, dangerous labor processes, and trade diseases.

(b) The railways of all countries should within the period of two to five years be provided with a uniform system of automatic coupling, applicable to all cars.

## INSPECTION AND STATISTICS.

(a) It shall be the duty of the various countries to create or extend factory inspection for the purpose of having proper enforcement of all laws concerning hours of labor, hygiene, and protection of workmen; particularly those laws which are established by international treaties.

The governments shall make known to each other the laws and regulations concerning these matters which by virtue of the international labor clauses have been introduced or are going to be introduced in their respective countries; likewise the annual reports on the working of those laws and regulations.

The labor organizations shall have active participation in the inspection and control of the application of those laws.

(b) An international commission shall be established for the purpose of supervising the application of the laws concerning social insurance, labor migrations, hours of labor, hygiene, and accident prevention. This commission shall be instructed to report upon all questions and grievances submitted to them on the matters within its purview, and its opinions shall be communicated to all concerned. On the demand of one of the parties, any point of conflict shall be submitted to an international court of arbitration.

It shall likewise be the duty of this commission to help on the preparations for the organization of future conferences which the governments of the various countries may convoke for the purpose of amending and developing labor legislation.

(c) There shall be established an international labor office which shall coordinate and consolidate the various inquiries, studies, statistics, and national reports on the application of the labor laws; it shall make an effort to create uniform methods of statistics, secure comparative reports of international conventions, prepare international inquiries, and study all those questions which refer to the development and application of the laws concerning accident prevention, hygiene, and safety work.

The office established by the International Association of Legal Protection of Labor may be put into use for the carrying out of this program, in which work the international labor secretary will cooperate.

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## GOVERNMENT CONTROL OF FOOD SUPPLIES IN FRANCE.

### BREAD REGULATIONS.

Regulations for the manufacture and sale of bread, which for some time have been considered by the French Government, were finally enacted by the decree of February 9, 1917.<sup>1</sup>

This decree provides that all bread must be manufactured from whole-wheat flour and that loaves may not weigh less than 700 grams (1.543 pounds) nor be longer than 80 centimeters (31½ inches). The size of ring-shaped bread (*pain en couronne*) shall be limited correspondingly on the basis of its average circumference. All bakers and dealers in bread are prohibited from manufacturing or selling any other kind of bread, especially fancy bread made with additions of milk, lactose, sugar, or butter.

The sale of fresh bread is prohibited. Bread may not be sold until at least 12 hours old and may not be subjected to processes of conservation tending to keep it fresh. The sale of bread in both entire and cut loaves must be effected by weight and the price be computed for the weight actually delivered.

Bread designated for the use of the Government and health bread are not subject to the regulations of this decree. Contraventions

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<sup>1</sup> La Republique Francaise (Paris), Feb. 11, 1917.

of the decree are punishable in accordance with the provisions of article 4 of the law of April 25, 1916. Prefectoral or municipal bread regulations in force before the enactment of the present decree which are less restrictive than the latter are abrogated by the decree, while those which contain more stringent regulations than the decree remain in force.

On March 1, 1917, the minister of food supplies made an announcement<sup>1</sup> that, in order to avoid waste of bread, he had decided to regulate the consumption of bread by the introduction of bread cards. He further stated that he had given preliminary instructions to the prefects for the putting in force of such a regulation but that about two months would be required for administrative arrangements for proper supervision of the enforcement of the proposed regulation.

#### PROPOSED MILLING REGULATIONS.

Official experiments with wheat flour, to which 15 per cent of maize flour had been admixed, convinced the Government that good bread of excellent taste can be baked from such flour. Accordingly, the minister of food supplies, in February, 1917, submitted to the Chamber of Deputies a draft of a law<sup>2</sup> which provides that after the promulgation of this law bread offered for sale may be baked from wheat flour containing an admixture of 15 per cent of rye, maize, barley, or bean flour, and that two months after the promulgation of the law the Government may by decree make compulsory this optional admixture. The draft further provides that the kind and percentage of permissible admixtures may also be modified by decree and fixes severe penalties for contraventions.

#### PREMIUMS TO WHEAT GROWERS.

The serious shortage of wheat supplies in France, caused partly by the decrease in area under cultivation, led to the enactment in February, 1917, of a law<sup>3</sup> providing premiums for home-grown wheat. The provisions of this law are the following:

Beginning with the harvest of 1917, and up to the abrogation of the maximum prices for wheat, agriculturists shall receive a premium of 3 francs (58 cents) per 100 kilograms (220½ pounds) of wheat harvested in France. Moreover, growers will receive an additional premium of 20 francs (\$3.86) for each hectare (2.47 acres) cultivated in wheat in excess of the area cultivated in the preceding year. To obtain these premiums growers must within two months after the promulgation of the law file a declaration of the area under cultivation by them during the crop year 1915-16. A decree of the Ministry of

<sup>1</sup> La Republique Francaise (Paris), Mar. 2, 1917.

<sup>2</sup> Idem, Feb. 9 and 12, 1917.

<sup>3</sup> Idem, Feb. 5, 1917.

Agriculture will specify the conditions to be observed by applicants for premiums.

The present law does not modify article 1 of the law of July 29, 1916, which provided that beginning with August 1, 1916, and until one year after general demobilization the maximum price to be paid to growers of wheat shall be 33 francs (\$6.37) per 100 kilograms (220½ pounds).

The premiums will also be available for wheat grown by French land owners established in Switzerland in the border zone circumscribed by the convention of February 23, 1882, and transported into French territory, provided that it seems assured that the flour milled from the wheat has been consumed in France. The same will be applicable to wheat grown by Swiss land owners in the French border zone. The law provides severe penalties for persons convicted of fraud in obtaining or attempting to obtain the above premiums.

#### RATIONING OF SUGAR.

In connection with the proposed rationing of sugar (see MONTHLY REVIEW, April, 1917, p. 532) it is reported<sup>1</sup> under date of February 15, 1917, that the prefect of the Department of the Seine, which includes Paris, has addressed a circular letter to the mayors of the 20 districts composing Paris with instructions relating to the introduction of sugar cards. According to this circular the interested parties will be requested to file declarations with the urban authorities, stating their requirements of sugar. These declarations are to be made in such a manner, that, in addition to enabling the authorities to determine the consumption of sugar, they shall also show the exact number and size of all families living in Paris, so that these data may be used in the future if rationing in other articles than sugar should be deemed necessary.

At the end of February the police prefect of the Department of the Seine issued the following instructions for the determination of the requirements of sugar for collective consumption:<sup>2</sup>

All owners, managers, etc., of mercantile establishments dealing in foodstuffs, hotels, restaurants, clubs, boarding houses, etc., must, on or before March 7, 1917, file schedules showing their requirements of sugar. After these schedules have been examined each establishment, hotel, etc., will be furnished a card showing the quantity of sugar allotted to it per month. This card must be presented whenever requests for the delivery of sugar are made. Allotments of sugar for collective consumption by the departmental sugar committee will always be made for a period of one month and exceptionally, either on request of consumers or on account of shortage of supplies on hand, for periods of 10 or 20 days.

Public and private educational institutions, hospitals, nurseries, penitentiaries, workhouses, welfare institutions, etc., which provide meals for their inmates must

<sup>1</sup> La Republique Francaise (Paris), Feb. 15, 1917.

<sup>2</sup> Idem, Mar. 1, 1917.

file declarations on or before March 6, 1917, showing the number of meals served per day. In making allotments to these institutions, 25 grams (0.88 ounces) of sugar will be allowed per person for three meals.

Cooperative stores and purchasing societies may obtain allotments of sugar by filing certified declarations of their membership. War prisoners whose legal residence is in the Department of the Seine will receive their allotments of sugar through such special institutions for the aid of war prisoners as are authorized by the war ministry. Their allotment may not exceed two-thirds of the general monthly allotment.

The circular warns all parties who receive allotments not to distribute sugar to other consumers than those for which the allotment is intended, as such fraudulent distribution will be punished in accordance with the law of April 20, 1915, and cause withdrawal of the sugar card issued.

By means of a joint decree the prefect and the prefect of police of the Department of the Seine have issued a supplementary order<sup>1</sup> on sugar allotments. This order provides that children and sick persons shall receive supplementary allotments of 250 grams (8.8 ounces) per month. Soldiers on leave or convalescent soldiers are allotted 250 grams for the first week and a like allotment for every subsequent period of 10 days. The order provides also that sugar cards issued by communes outside of the Department of the Seine shall entitle owners to allotments in the Department of the Seine, provided that the temporary period of residence of the owner of the card shall exceed one month and that the card is presented to the urban authorities of the temporary place of residence for certification.

#### LIMITATION OF COURSES IN RESTAURANTS.

In supplementation of his decree of January 26, 1917 (see MONTHLY REVIEW, April, 1917, p. 533), limiting the courses which may be served to patrons in restaurants, the minister of food supplies has addressed to all prefects a circular letter<sup>2</sup> which permits patrons in restaurants to have a plate of oysters or snails in addition to the courses permitted by the above order. The original order allowed patrons the choice between either cheese or a dessert. The circular letter states they may order both. The new regulation became applicable February 15, 1917.

#### MEATLESS DAYS.

After consultation with the cabinet, the minister of food supplies, on April 14, 1917, issued a decree<sup>3</sup> prohibiting the sale of fresh, frozen, salted, and preserved meat on all Tuesdays, beginning with April 25, 1917. For the period, May 15 to October 15, 1917, the decree prohibits the sale of meat on Tuesday and Friday of each

<sup>1</sup> La République Française (Paris), Mar. 14, 1917.

<sup>2</sup> Idem, Feb. 12, 1917.

<sup>3</sup> Idem, Apr. 15, 1917.

week. The decree is applicable not only to meat markets, but also to all public eating places. Beef, veal, mutton, goat, and horse meat, pork, sausages, poultry, rabbits, and game are considered as meat. Meat markets and stalls in public markets for the sale of meat must be kept closed on meatless days. The decree permits the delivery of meat on meatless days to sick persons and hospitals.

From reports of the French press<sup>1</sup> it seems, however, that the above decree is not to become effective. It is announced that the minister of food supplies has decided to adopt the measure suggested to him by representatives of the food industries, which consists in the introduction of meatless evenings in place of meatless days. It is proposed to prohibit on meatless evenings the serving of meat, poultry, rabbits, and game in public eating places and to order the closing of meat markets at 1 p. m. on the corresponding days. The new regulations will also modify the decree restricting the number of courses which may be served in public eating places. It is expected that on meatless evenings no restriction will be placed on the number of meatless courses which may be served at dinner, and restrictions as to luncheons will possibly also be made less severe on the days in question.

The minister of food supplies announces, however, that this less severe measure will be operative only as long as the saving in meat effected by it is sufficient to maintain an adequate supply of live stock, and that the originally planned, more stringent measure will be put in force whenever the maintenance of adequate meat supplies seems endangered.

#### MAXIMUM PRICES FOR MILK, BUTTER, AND CHEESE.

It is reported<sup>2</sup> under date of February 15, 1917, that the minister of food supplies has addressed instructions to all prefects to decree maximum prices for milk, butter, and cheese in their Departments. In accordance with these instructions, the prefect of the Department of the Seine has decreed a maximum price of 50 centimes per liter (9.1 cents per quart) for milk purchased by the consumer in places for the sale of milk and of 60 centimes per liter (11 cents per quart) for milk delivered at residences. These prices were to become effective February 19, 1917, and to be posted conspicuously in all sales places. The maximum wholesale prices decreed for butter vary according to quality between 4.9 and 6 francs per kilogram (43 and 52½ cents per pound) and the retail prices between 5.6 and 6.7 francs per kilogram (49 and 58½ cents per pound). Maximum wholesale prices were also decreed for Camembert and Pont-l'Évêque cheese.

<sup>1</sup> La République Française (Paris), Apr. 23, 1917.

<sup>2</sup> Idem, Feb. 15, 1917.

## TEMPORARY PROHIBITION OF THE MANUFACTURE AND SALE OF CONFECTIONERY AND PASTRIES.

By a decree issued January 21, 1917, the minister of food supplies ordered the closing of confectionery establishments on Tuesday and Wednesday of each week. The increasing shortage of flour and sugar supplies has induced the minister to amend this decree by ordering the temporary but complete suspension of the manufacture of pastry goods.

It is reported<sup>1</sup> under date of April 22 that a decree issued by the minister of food supplies prohibits for the period June 1 to July 31, 1917, the manufacture and sale of all pastries. Pastry shops and pastry departments in bakeries, drug stores, restaurants, department stores, and other mercantile establishments are to remain entirely closed during the above period, while during the period up to June 1, 1917, they shall be kept closed during two consecutive days of each week, fixed by order of the prefect. During the two months in which pastry shops must close, confectioneries must close entirely on two days of each week, and on these days they are not permitted to sell any products requiring the use of flour in their preparation. On days on which pastry shops are closed, hotels, bakeries, tea shops, lunch rooms, cafés, etc., may not sell bread prepared with the use of sugar.

The decree also provides that beginning with May 1, 1917, biscuit factories must discontinue the operation of conveyor ovens for the manufacture of biscuits. On request of the commissary department, such ovens may, however, be operated for the manufacture of war bread. Before May 1, 1917, biscuit manufacturers must file with the urban authorities of their place of residence a statement of the stocks of flour kept on hand by them.

## PROPOSED INTENSIFICATION OF CULTIVATION WITH THE AID OF SCHOOL CHILDREN.

Early in February, 1917, the ministers of agriculture and public instruction addressed an eloquent appeal<sup>2</sup> to the school children of France, requesting them to aid in the cultivation of the soil. This appeal, after explaining to the children that the area under cultivation is steadily decreasing because the agriculturists are now chiefly composed of old men and women, suggests that each school should organize a corps for voluntary agricultural aid, to which land for cultivation would be assigned by the communal authorities.

In response to this appeal the teachers of the high schools (*lycées et collèges*) of Paris called a meeting under the auspices of the "Back to the Land League," and constituted themselves into a branch of

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<sup>1</sup> La République Française (Paris), Apr. 22, 1917.

<sup>2</sup> Idem, Feb. 7 and 11, 1917.

this league with the scope of organizing in each school companies of voluntary agriculturists to engage either in the cultivation of school gardens or to offer their help to farmers short of labor. This action was supplemented by a circular <sup>1</sup> of the prefect of the Department of the Seine addressed to all mayors of the communes in this department, in which he informed them that the school children in the higher grades would be excused from attendance at school one afternoon per week in order that they might work on farms in the Department. He requested the mayors to arrange that the agricultural committee of each commune communicate with the school authorities for allotments of school children and make proper provision for the supervision and instruction of the pupils in agricultural labor. Similar measures were taken by the prefects and school authorities of other departments.

#### EMPLOYMENT OF SOLDIERS OF THE CLASSES OF 1888 AND 1889 IN AGRICULTURE.

In order to relieve the shortage of agricultural labor, the Minister of War in the latter part of January, 1917, issued an order <sup>2</sup> to the commanders of the various army corps to release temporarily from military service all soldiers of the classes of 1888 and 1889, who in civil life were agriculturists, so that they may help in the cultivation of the soil in their home districts. Only those soldiers who are employed in shops manufacturing war materials were exempted from this order. Under date of March 24, 1917, the controller of agricultural labor reported <sup>3</sup> that approximately 60,000 men had in this manner been released and dispatched to their home districts.

#### GOVERNMENT CONTROL OF FOOD SUPPLIES IN GERMANY, JANUARY AND FEBRUARY, 1917.

Food control measures taken in Germany up to the end of October, 1916, and food supply conditions prevailing there up to that date were described in the May, 1917, number of the MONTHLY REVIEW (pp. 703-727). According to an Associated Press report dated January 20, 1917,<sup>4</sup> food conditions have changed greatly for the worse in the last few months.

The correspondent of the Associated Press who had been away from Germany during the latter part of 1916, and returned to Berlin in January, 1917, states he found that many staples of food had altogether disappeared from the markets, while others had experienced such a rise in prices that they were beyond the reach of any but the well-to-do. The daily ration of potatoes had been reduced to 10 ounces, and either a shortage of flour or a disordered distribution of it among

<sup>1</sup> La République Française (Paris), Mar. 3, 1917.

<sup>2</sup> Idem, Jan. 23, 1917.

<sup>3</sup> Idem, Mar. 24, 1917.

<sup>4</sup> The Chicago Daily Tribune, Feb. 3, 1917.

the bakers had resulted in long lines of buyers standing for hours in front of the bakeries.

Maximum prices of the foodstuffs controlled by the Government were still low in January for potatoes and bread and comparatively low for meats. Potatoes cost only 72 cents for the standard bushel of 60 pounds and bread a fraction less than  $3\frac{1}{2}$  cents a pound. But the potato allowance is insufficient for persons who have little but bread and potatoes to eat and has to be eked out with turnips. It had been hoped to allow one egg a person each two weeks in Greater Berlin, but the last one egg allowance was made early in December and another could not be promised until February.

In August, 1916, it was still possible to buy cheese in Berlin. Since the end of August there has been no cheese on the market. It is said that considerable quantities are being imported from Holland, but this imported cheese apparently is sent to the soldiers at the front, except for small quantities allowed to hotels and restaurants.

The supply of foodstuffs available in the open market has also been seriously reduced by the expropriation by the Government of all canned vegetables. In December dealers were permitted to sell a fractional part of their stocks, but only two cans to each bread card. In January permission to sell a further part was expected to be granted again soon, but it was announced that dealers would be compelled to open each can before selling it, so as to force purchasers to consume the contents at once and not hoard them.

The weekly allowance of meat of all kinds in the Greater Berlin municipalities runs from  $5\frac{1}{4}$  to  $8\frac{3}{4}$  ounces. The cheapest cuts of meat cost about 60 cents a pound; the dearest 72 cents.

The lack of fats and oils continues to be one of the most serious problems of the food situation. The weekly allowance of butter and margarine together was a little less than 3 ounces in January. Oil is so expensive that it is out of the reach of the great majority. Goose fat costs \$4.80 a can of  $17\frac{3}{4}$  ounces and is the only fat, except vegetable oils, that can be purchased without a card. This insufficiency of fats in the daily ration is the weakest point in the present diet of the great masses of the German civilian population, for it shows itself daily in an almost continuous feeling of hunger.

The diet of the average household is getting more and more monotonous. Breakfast generally consists of rolls, marmalade (often made of pumpkins) and a decoction of roasted acorns, rye, chicory, and what-not that goes by the name of coffee. There is no real coffee left. Some tea at high prices was still to be had in January, but the poorer people drink a brew of linden blossoms, raspberry leaves, or leaves of other shrubs or trees. For the "second breakfast" there is dry bread.

Dinner generally consists of boiled potatoes with salt, some kind of boiled vegetables, and on perhaps two days of the week a small piece of meat. Fish takes the place of meat on other days unless one can buy a goose at \$1.56 a pound (they cost \$2 a pound just before Christmas), a duck at \$1.44 a pound, a turkey at \$1.32 a pound, or a chicken at \$1.08 to \$1.20 a pound. Comparatively little game comes on the market. Apparently most of the game goes to hotels and restaurants.

Supper is the problem in the average German household. Generally there are no potatoes left over from noon, and if there are there is no fat in which to fry them. The usual German supper before the war consisted of cold meats, sausage, cheese, bread and butter, and beer. There is no meat; no cheese, and no sausage; no butter on four or five days of the week, no more bottle beer; and many saloon keepers refuse to sell beer to be consumed off the premises. The beer, moreover, is all but undrinkable. There remain then only bread and fish, fresh, smoked, dried, or canned. And here the problem of cost is added to that of monotony. In Berlin lake trout sells as high as \$1.20 a pound and small fresh-water bass at 84 cents. Dried smoked fish costs 36 cents a pound, and smoked eel \$1.92 to \$2.40. One smoked herring, from 6 to 8 inches long, costs 20 to 22 cents. Once in every 4 or 5 weeks the city authorities place on the market small tins of sardines, one of which may be bought on presentation of the municipal provision card (*Lebensmittelkarte*). Each family, no matter of how many members, has only one of these cards. The sardines thus sold may be had for about 48 cents for the small tin. In the open market these tins of sardines cost from 67 to 72 cents.

Saccharine dissolved in water has taken the place of sugar for sweetening coffee and tea in private homes as well as restaurants. Milk is ordinarily available in limited quantities only for invalids and the very aged, and small children.

Special correspondence to the Providence Journal dated February 16, 1917,<sup>1</sup> states that the food situation in Germany may not grow worse, but that it scarcely can become better. This is the outstanding feature of Germany's food problem.

Many agricultural experts believe that the Central Empires did quite as well during the last two years as could be expected and that the populations of Germany and Austria-Hungary must reconcile themselves to getting along on no greater allowances than in the past. The problem, as frankly discussed in agricultural circles and as outlined in a recent circular of the Prussian ministry of agriculture, is not one of more land for crops, but one of labor and fertilizer to cultivate advantageously the land already available.

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<sup>1</sup> Providence (R. I.) Journal, Feb. 17, 1917.

Even the normal supply of potash—a fertilizing material indigenous to Germany in large quantities—will not be available the coming season owing to the labor shortage. The many factories producing nitrogen from the air will not be able to produce enough nitrates by far, in view of the ammunition requirements, to replace the nitrates normally imported from Chile for agricultural purposes and the other imported fertilizers. The decidedly short supply of labor, even by working every available prisoner of war and the inhabitants of occupied districts, is not sufficient for the intensive cultivation which Germany plans.

Taking all these factors into consideration, it is highly improbable that there will be any increase in general crop production over 1916 and 1915. Weather conditions may, as in 1915, produce a bumper potato crop and a poor grain crop, or the reverse results, as in 1916, but the general result will probably be about the same.

Von Batoeki, the food controller, stated in a recent address that very little help can be expected from outside sources in the future. Neighboring countries, he said, being under the steadily increasing pressure of the British sea control, would have little or nothing available for export to Germany this year. The food expert of New Cologne, one of the municipalities of Greater Berlin, stated recently, in fact, that the current allowance of meat, fat, bread, and potatoes was inadequate for workingmen engaged in heavy labor and that men so employed required a supplementary allowance, which, however, factories managed usually to supply in order to maintain production.

#### NEW MILLING REGULATIONS.

It is reported<sup>1</sup> under date of March 1, 1917, that in order to make the available supply of grain last until the next harvest and replace in part such foods as potatoes, now exceedingly scarce, the German Government has ordered that grain in the future must be milled to 94 per cent instead of 82 per cent, as at present, and 60 per cent in peace time. The resulting flour, though far coarser, will be somewhat cheaper. The flour supply will be husbanded by forbidding the making of cakes from any other than a substitute or foreign flour.

#### PROPOSED REDUCTION OF BREAD RATION.

A special cable to the Christian Science Monitor, dated March 23, 1917,<sup>2</sup> states that the German bread rations will be reduced one-fourth after April 15, 1917, in view of the grain harvest being smaller than anticipated and the heavy demands made upon it by the extra rations granted to laborers engaged on heavy work, and young people. In compensation the meat rations will be doubled and

<sup>1</sup> Boston Transcript, Mar. 1, 1917.

<sup>2</sup> The Christian Science Monitor (Boston), Mar. 24, 1917.

every one will be guaranteed 5 pounds of potatoes weekly. Meat is also to be sold at considerably lower prices, the deficit being covered by the treasury; hence it is declared the food supply will be better instead of worse.

The present weekly bread ration is 1,900 grams (4.19 pounds) in Greater Berlin and 1,750 grams (3.86 pounds) in the rest of the Empire.

#### PROPOSED CONFISCATION OF FARM PRODUCTS.

A dispatch<sup>1</sup> from Berlin dated March 29, 1917, says that the German food controller made a further statement on the food question to the main Reichstag committee on March 28, giving details of the available supplies and announcing the necessity of the confiscation of all agricultural products, which, he said, would probably result in the abolition of meatless days. These measures represent an important step, for the wholesale confiscation is what the powerful agrarian party has successfully resisted hitherto.

Meanwhile the new economic proposals for the Empire have also been discussed in the upper house of the Bavarian Diet and were criticized as favoring eastern Germany to the detriment of the south. Reduction of barley and cattle prices, it was claimed, would be specially disadvantageous to the south, while the east would profit by the increased price of bread. The minister of the interior replied that the Bavarian Government had opposed the reduction of barley and cattle prices, but unsuccessfully, and made a frank statement of the economic situation. The position concerning fodder was the only favorable factor, the shortage of bread grain in Bavaria being 90,000 tons and the census being equally unfavorable elsewhere; while the potato supply was insufficient to supplement the bread requirements. Hence the restrictions announced were necessary.

#### REORGANIZATION OF THE MANAGEMENT OF THE FOOD SUPPLY IN WURTTENBERG.

Special correspondence<sup>2</sup> from Stuttgart, Wurttemberg, states that at the instance of the minister of the interior of Wurttemberg a thorough reorganization of the management of the food supply within the kingdom has been set afoot, with a view to increasing the willingness of the rural population to release the foodstuffs available. It is considered that previous regulations in this connection have not been observed to the extent desirable in the interest of national economy and resistance, and the new organization will aim at the collection and sale of all the foodstuffs with which the rural population can possibly dispense, and at their careful and just distribution to the different towns and communities.

<sup>1</sup> The Christian Science Monitor (Boston), Mar. 29, 1917.

<sup>2</sup> Idem, Mar. 20, 1917.

The organization is to be built up from below. In every community of agricultural importance a special war committee is to be formed, with the pastor, the schoolmaster, or some responsible woman at its head, and this committee is to be connected with a collecting office for all quantities of foodstuffs in excess of the actual needs of the producers. Unions for the sale of agricultural products and agricultural women's unions are also to be called upon to assist in this work, while at the same time district committees are to be formed, and a central committee established in Stuttgart. The latter will consist of representatives of the Government, the towns and communities, agriculture, the State church, and the educational authorities, and will attend to the general organization of the food supply, to the carrying on of a suitable propaganda, and to the establishment of departments for enlightening the people as to the situation.

#### EMPLOYMENT OF CHILDREN IN AGRICULTURE.<sup>1</sup>

Following upon various experiments carried out on a small scale last summer, a league has been founded in Berlin for the transference en masse of town children to the country for a prolonged stay. Branches of the league are to be organized throughout the Empire, and the president, Dr. Scholz, the chief burgomaster of Charlottenburg, explained in his inaugural speech that the welfare of the children is not the sole, or the most important aim in view, and that it was intended not only to arrange for town children to help on the land but also to promote an understanding between town and country.

Speeches delivered by Dr. von Mettenheim of Frankfort, and District Councillor von Thadden-Trieglaff also indicated that economic and social advantages, in addition to the benefit to be derived by the children, are looked for from the foundation of the league. The former dwelt on the fact that it was intended to make the children useful on the land, and said it was proposed in the first place to send out older children, and to arrange for them to stay several months, school holidays in the towns being lengthened for the purpose, whilst the children's attendance at country schools was also contemplated. The child, said Dr. von Mettenheim, must be the new link between town and country. Workers who congregated in the towns, and were employed in factories for any length of time forgot "the happiness and satisfaction of rural life," and became impregnated for the most part with socialistic ideas. The league must aim not only at rendering the youth of the towns more virile, but also at maintaining Germany's peasant class.

District Councillor von Thadden-Trieglaff was even more frank. The transference of town children to the country was intended, he said, as a partial substitute for the scarcity of labor, and it was hoped

<sup>1</sup> From The Christian Science Monitor (Boston), Apr. 3, 1917.

that later there would be a revival of the liking for the country. No rural family in a position to do so would refuse to receive a town child, and at the same time no urban family in difficulties ought to refuse to allow a child to go. When possible, such families would be required to pay a sum of perhaps 15 marks a month for the maintenance of their children, an amount to which the communal authorities would contribute, but that would alter nothing with regard to the intention of employing these children on the land. In country families all children worked, and this fact alone would lead the newcomers to imitate their companions, and the experience thus gained would result in a complete change of outlook. Children thus brought up would not agree later on that all farmers were exploiters of the people's food. Finally, the aim must be to effect a rapprochement between town and country, and to preserve even in peace time something of the realization that an exodus from the towns was a service rendered to the State and that an exodus from the country was quite the reverse.

The Frankfurter Zeitung, which commented on the proceedings, observed that while there could naturally be no objection to the transference of children to the country, everything depended on the way in which it was done and the object in view, and it was unable to hold that the speakers cited had offered any guarantee that their plan would benefit the children themselves. It doubted whether the advantage of a stay in the country would not be outweighed by the disadvantage of unaccustomed and heavy work, and noted that no protest had been entered against the withdrawal of so many children from good municipal schools, and the sending of them to village schools where the instruction given was frequently inadequate.

#### FOOD SUPPLY CONDITIONS IN MAY, 1917.

A special cable<sup>1</sup> from Copenhagen, dated May 15, 1917, reports that the potato shortage in Germany is making itself felt in spite of assurances at the time the bread ration was reduced last month that enough potatoes were on hand to permit a weekly per capita issue of 5 pounds until the next harvest. The bureau of food control by strenuous efforts has been able to supply a 5-pound ration in the Berlin and Westphalia industrial districts, where the labor crisis at the time of the reduction of the bread ration was particularly acute. Bitter complaints, however, are coming from various other sections.

In many sections of Bavaria, according to reports to the Reichstag the potato ration is only 24 ounces weekly. The Hamburg ration is now, and has been for a week, 3 pounds and the sister city of Altona has been placed for the next week on a 1½-pound allowance.

<sup>1</sup> The Washington Post, May 16, 1917.

It is true that in accordance with the government's promise the bread ration is not reduced where the 5-pound allowance of potatoes is not furnished. Every pound extra of flour applied for this purpose, however, upsets the government's scheme of distribution, which was based on the fact that the stock of grain in the empire is barely adequate, under reduced rations, to carry the population through until August 15, the earliest possible date when flour from the new harvest is expected to be available.

The national military requisition and expropriation of grain, which have just been finished, have, according to Food Commissioner Michaels, not uncovered enough unreported grain to affect previous estimates. Also the prospective date for the harvest has been still further deferred by the continued cold weather. In east and west Prussia, two of the great grain districts of Germany, frosts were reported as late as last week. Under the circumstances the authorities face the alternative of again reducing the bread ration or confronting a hiatus of more or less duration between the time of exhaustion of the present stocks and the incoming of the first 1917 flour.

Apprehension is also being expressed at the inroads which the increased meat ration, granted when the bread allowance was reduced, is making in the meat supply.

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## GOVERNMENT CONTROL OF FOOD SUPPLIES IN GREAT BRITAIN.

### FLOUR AND BREAD ORDERS.

In the March number of the MONTHLY REVIEW (p. 400) brief mention was made of a flour and bread order issued by the British food controller under date of January 11.<sup>1</sup> This order was drafted so as to proceed on the percentage basis to which millers are accustomed to work, and its provisions are the following:

All flour milled from wheat must be straight-run flour, and the miller is required to obtain a certain "prescribed percentage," varying with the different qualities of wheat used and averaging 76. The miller is, however, not allowed to stop short at the prescribed percentage, but must obtain five points beyond this by further milling the wheat, by adding flour ground from rice, barley, maize, oats, or any mixture of these, or in both of these ways. In addition, he has the option to add a further five points similarly obtained. The practical effect of this option is that a sack of 280 pounds of flour may contain, in addition to any compulsory admixture, about 17 pounds of flour ground from rice, barley, maize, or oats.

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<sup>1</sup> Board of Trade Journal (Great Britain), Jan. 25, 1917, p. 263.

The controller has had prepared a table showing how much flour in a sack of 280 pounds must be, and how much may be, milled from rice, barley, maize, or oats. For those millers who wish to work to a percentage on any quantity of the finished product the following rule is approximately accurate and may be worked to: For every 1 per cent by which the actual falls short of the prescribed percentage plus 5, the miller must, and for every 1 per cent by which the actual falls short of the prescribed percentage plus a further 5, the miller may mix with the wheaten flour a quantity of the prescribed adulterant which shall equal  $1\frac{1}{4}$  per cent of the finished mixed flour.

On February 24 the controller issued a still more stringent milling order, the text of which is as follows:

1. Except under the authority of the food controller, no person shall manufacture any wheaten flour other than a straight run flour.

2. Except under the authority of the food controller, no person shall, from March 12, 1917, mill any wheat so that the percentage of the extract of flour obtained from the cleaned wheat ground in his mill during any month or other period is less than the percentage, hereinafter called the prescribed percentage, ascertained on the basis of the percentages set forth in the schedule hereto, or such other percentages as the food controller may from time to time prescribe.

Provided always that the following adjustments shall be made in ascertaining the prescribed percentage:

i. The percentage applicable to any Argentine wheat shall be increased by  $\frac{1}{2}$  per cent in respect of each half pound by which the actual bushel weight of the Argentine wheat milled shall exceed the bushel weight specified as applicable thereto, and shall be decreased by  $\frac{1}{4}$  per cent in respect of each half pound by which the actual bushel weight shall be less than the bushel weight so specified.

ii. In any case where the total product of the mill in question is obtained exclusively from English, Scotch, and Irish wheat, or any of them, the percentage shall be less by one than the percentage otherwise applicable.

3. (a) Except under the authority of the food controller, there shall, from March 12, 1917, be mixed with the wheaten flour not more than 15 per cent and not less than 5 per cent of flour obtained from rice, barley, maize, maize semolina, oats, rye, or beans, or any other cereal for the time being authorized by the food controller. (b) The mixture shall be made either by addition to the wheaten flour after it has been milled or by milling the permitted cereals with wheat, or partly in one way and partly in the other way. In any case rice shall be milled to a 95 per cent extraction, maize semolina to a 70 per cent extraction, maize and barley to a 60 per cent extraction. (c) The mixture shall be made by the miller before selling or otherwise disposing of this flour.

4. Imported flour shall be dealt with only in the manner prescribed by the food controller from time to time.

5. Except under the authority of the food controller, no person shall, after March 26, 1917, sell or offer for sale, or manufacture bread or any other article of food for which wheaten flour is used, unless the wheaten flour used therein is flour which has been manufactured and otherwise dealt with as required by this order.

6. For the purpose of any statute, wheaten flour which has been mixed with flour obtained from rice, barley, maize, maize semolina, oats, rye, or beans in the manner prescribed by this order, or has been otherwise mixed in the manner authorized by the food controller, and does not contain any other ingredient, shall be deemed to be exclusively composed of wheaten flour.

7. If any person acts in contravention of this order, or aids or abets any other person in doing anything in contravention of this order, that person is guilty of a summary offense against the defense of the realm regulations, and if such person is a company, every director and officer of the company is also guilty of a summary offense against those regulations, unless he proves that the contravention took place without his knowledge or consent.

After the issuing of this order the food controller had conferences with representatives of trades affected by its regulations from all parts of the United Kingdom. Regarding the proposed increase in the price of bread the controller made it plain that he felt it incumbent, as part of his responsibilities, to have the final word in the advance of the price of the loaf. The ministry of food controlled the price of wheat and should therefore control the price of bread. The London price would be taken as standard, and other prices be determined pro rata. The food controller intimated that he did not intend to act without consultation and on his request a committee of nine was appointed to go more fully into the points under discussion and others which might arise.<sup>1</sup>

Shortly afterwards the food controller issued an order<sup>2</sup> dealing with the sale and manufacture of bread, which provides that bread may not be sold unless it is at least 12 hours old, that it must be in the shape of a one-piece oven bottom loaf or a tin loaf or a roll, that no currant, sultana, or milk bread may be sold, and that no sugar may be used in making bread. Bakers are prohibited from exchanging new bread for old. All bread shall be sold by weight, and the loaves must weigh either 1 pound or an even number of pounds, and loaves not weighing the prescribed amount may be cut up and sold by weight. Rolls must weigh 2 ounces. Bread may be weighed at any time within 30 hours of the completion of the baking by the food controller's officers, who are authorized to weigh bread exposed in shops or in course of delivery by bakers. The order became effective March 12, 1917.

Special correspondence to the *Christian Science Monitor*<sup>3</sup> reports a statement of the secretary of the National Association of Master Bakers that—

Although several of the difficulties arising in connection with the new bread order have been placed before the food controller, no modification of the order has been made. Since the order provides that, beginning with March 12, no bread may be sold unless it is at least 12 hours old, it means that in most cases bread delivered to householders will be from 18 to 30 hours old, while that delivered on Monday will be 40 to 50 hours old. Also since after the date in question all loaves for sale must weigh at least 1 pound or an even number of pounds, it means that the majority of loaves sold to the public exceed the required weight, as it is not possible to bake loaves to exact weights, allowance having to be made for evaporation during the period up to

<sup>1</sup> The *Christian Science Monitor* (Boston), Mar. 7, 1917.

<sup>2</sup> *Board of Trade Journal* (Great Britain), Mar. 1, 1917, p. 613.

<sup>3</sup> The *Christian Science Monitor* (Boston), Apr. 6, 1917.

30 hours after baking. This leads to an increase in price, if bakers are to retain the small profits they are now making.

As a matter of fact, on March 26 the price of bread in London was raised from 11 pence to 1 shilling for the 4-pound loaf (from 5.6 cents to 6.1 cents per pound), an increase of approximately 100 per cent as compared with prewar days. The rise in this article is not exceptional, for the latest statistics available<sup>1</sup> show that the cost of food in large towns (population over 50,000) has increased 97 per cent since the outbreak of the war.

#### WHEAT PURCHASES BY THE GOVERNMENT.

Great Britain bought the Australian wheat crop last year, but as a steamer can make four voyages to Canada in the time required to make one to Australia the conservation of tonnage makes it advisable to draw on the Dominion of Canada for wheat needed in Great Britain, France, and Italy. The proposal of the British Government to purchase the entire 1917 wheat crop was placed before western Canadian farmers' organizations, and the purchase of the crop at a maximum price of \$1.90 per bushel has been effected.<sup>2</sup>

#### PROHIBITION OF THE EXPORT OF OATS FROM IRELAND.

On January 11 the food controller issued an order prohibiting the export of oats from Ireland except under license. This order was made for the purpose of conserving sufficient seed oats for the next crop.<sup>3</sup>

#### BONUS ON OATS CONTRACTS FOR THE ARMY.

In the Board of Trade Journal of January 25 appears a notice that the army council offers to contract at 41 shillings 3 pence (\$10.04) per quarter of 320 pounds for oats from the harvest of 1917. The food controller has fixed the price of oats for the same harvest at 38 shillings 6 pence (\$9.37) per 336 pounds. The army council's offer is, however, strictly confined to oats from suitable land now in permanent pasture, the intention being to have a large increase in the arable area of the United Kingdom, to save cubic space in ships, to prevent the export of gold, and to produce more straw for forage purposes. Agriculturists accepting the army council's offer must apply suitable artificial manures to a minimum value of 25 shillings (\$6.08) per acre. Subject to the expenditure on artificial manures, the bonus in favor of the army council's offer amounts to 4 shillings 7 pence (\$1.12) per quarter of oats delivered—38 shillings 6 pence (\$9.37) for 336 pounds being equal to 36 shillings 8 pence (\$8.92) for 320 pounds.

<sup>1</sup> Board of Trade Labor Gazette (Great Britain), Mar. 1, 1917, p. 96.

<sup>2</sup> The Boston Evening Transcript, Mar. 11, 1917, and The Christian Science Monitor (Boston), Mar. 21, 1917.

<sup>3</sup> Board of Trade Journal (Great Britain), Jan. 18, 1917, p. 173.

**CONTROL OF IMPORTS OF RICE.<sup>1</sup>**

The following announcement has been issued, under date of January 27, by the secretary of the royal commission on wheat supplies:

The food controller has decided that the royal commission on wheat supplies shall control the importation of rice for sale in the United Kingdom. The trade have been informed that they must make returns for all holdings of rice not arrived and not purchased for the United Kingdom on ex ship or delivered terms which are taken over at to-day's c. i. f. price. Present holders of rice are free to act as agents of the royal commission for resale of their holdings at prices to be fixed from time to time by the commission, and they will be paid a brokerage on such sales. The amount of such brokerage will be fixed at a later date by the commission. All holders of rice to arrive are required to furnish the royal commission on or before February 1, 1917, with full particulars of (a) their holdings of rice, and (b) freight engaged for the transport of rice and rice products to the United Kingdom.

**ORDERS RELATING TO MALT AND BARLEY.<sup>2</sup>**

An order issued by the food controller January 26 requires a return of stocks of malt suitable for use in brewing beer, and of barley, and other information in connection therewith. It applies to all maltsters, dealers in malt, and brewers.

Under date of February 3 the controller issued an order providing that, except under his authority, no maltster or dealer in malt shall agree to sell or to make delivery of, to a brewer, any malt other than that deliverable under contracts made before a certain date; that no brewer shall agree to buy or to take delivery of any malt other than that deliverable under contracts made before that date; and that no brewer shall manufacture any malt from barley agreed to be bought on or after that date.

A further order prohibits the manufacture of malt suitable for brewing beer from barley or other cereals, except under authority of the controller. The order went into force at once, but did not apply to cereals already steeped.

An order dated March 21 provides that, except under authority of the food controller, no person shall export, ship, or consign any malt from Ireland to Great Britain, the Channel Islands, or the Isle of Man, or from Great Britain to Ireland, the Channel Islands, or the Isle of Man.

**MAXIMUM PRICES FOR POTATOES.**

The food controller on February 1 issued an order providing maximum prices for potatoes as follows<sup>3</sup>:

1. Except under authority of the controller no potatoes of 1916 crop may be sold—

<sup>1</sup> Board of Trade Journal (Great Britain), Feb. 1, 1917, p. 337.

<sup>2</sup> Idem, Feb. 1, 1917, p. 338; Feb. 15, 1917, p. 485; Feb. 22, 1917, p. 553; and Mar. 29, 1917, p. 841.

<sup>3</sup> Idem, Feb. 8, 1917, p. 417.

- (a) By or on behalf of the grower at a price exceeding the following:

For delivery in February, 1917, £8 (\$38.93) a ton.  
 For delivery in March or April, 1917, £9 (\$43.80) a ton.  
 For delivery in May or June, 1917, £10 (\$48.67) a ton.

- (b) After February 19, 1917, by or on behalf of any person not the grower at a price exceeding 1½d. (3 cents) a pound.

2. The maximum price chargeable by the grower shall not include costs of transport from his premises or of bags or other packages.

This order was issued to protect the consumer from extortionate prices for potatoes. However, within a few weeks Scotland, which is in a worse position than England in regard to its potato supply, appealed to the controller to be excluded from the operation of the order, and as the date approached upon which it took effect, English retailers became more and more uneasy and affairs in the potato trade became acute. The crop had admittedly been a bad one, stocks were short, and it was argued that the lowering of prices to the consumer would only lead to more trouble by increasing the consumption. Retailers were unanimous in declaring they could not afford to sell at 1½d. (3 cents) per pound, instead of at 2 and 2½d. (4 and 5 cents) as heretofore.

Wholesale merchants were not long in complaining that the farmers were holding their potatoes for better prices later on, and that although the growers' price was £8 per ton (\$38.93), as much as £3 or £4 (\$14.60 or \$19.47) was charged for carting and other incidental expenses.

Wholesalers' prices were not restricted by the order. They were free to make what profit they could. Retailers, therefore, in their turn complained that while they were ordered to sell at a maximum price of 1½ d. (3 cents) per pound, which worked out at £14 (\$68.13) per ton, they were buying of wholesale merchants who refused to sell at less than £14 (\$68.13) or even £15 (\$73). Unless they could buy at £10 10s. (\$51.10), the retailers maintained, they would refuse to sell.

Meantime the food controller intimated that, although he had not lost sight of the situation, it did not follow that any action on his part would be necessary, the margin between growers' and retail prices being ample to allow a reasonable profit to dealers and retailers, who should arrange this themselves. Matters grew more acute, and were brought to a head when the lord mayor of Manchester, faced with a prospect of a potatoless city, sent a telegram to the prime minister representing the possibility of an immediate potato famine in Manchester and the surrounding district, and requesting that the matter be brought before the war cabinet. He proposed that the

order be amended to make the farmer's price free on rail, and that it be made compulsory on growers to release stocks on demand. In reply to this message the prime minister made the following announcement under date of February 17:

The difficulties which have arisen in certain districts in connection with the operation of the potatoes, 1916, main crop (prices) order of February 1, have been considered by the war cabinet. The order was made by the food controller to insure that in the interest of the consumer the price should not be unduly inflated in consequence of the shortage of supplies. The recent prolonged frost has reduced the available stocks and interrupted their regular distribution. It has accordingly been necessary to readjust as fairly as possible the interests of all parties. The departments concerned have therefore at my request met and conferred with representatives of the wholesale and retail trades, and have submitted the following proposals, which have been approved by the war cabinet.

The price which the growers will be entitled to charge to dealers and merchants for potatoes delivered after the present date up to March 31 will be £9 [\$43.80] per ton free on rail or free on board. After that date the corresponding price will be £10 [\$48.67]. The price at which the growers or any other person may sell to the retailer will be £10 10s. [\$51.10] until March 31, and £11 10s. [\$55.96] thereafter, in addition to the cost of carriage. The price which the retailer may charge will be 1½d. [3 cents] per pound up to March 31, and 1¾d. [3.6 cents] per pound thereafter to the end of June.<sup>1</sup>

In conformity with this announcement of the prime minister the food controller issued, under date of February 24, an amending order in which the maximum prices announced by the prime minister are adopted. This order, however, does not affect contracts for the sale of potatoes existing at the date of its issuance.<sup>2</sup>

Special correspondence to the *Christian Science Monitor*<sup>3</sup> states that little business was done in the potato trade on the days immediately following the amending of the order. While supplies in England are short, they are still available, and it is considered that the new arrangement will be fair to farmers who have not already sold their crops and to retailers. Liverpool, however, appears to be threatened with a potato famine. This city draws its supplies partly from Ireland and partly from the potato-growing districts in the neighborhood, and it is stated that farmers are deliberately holding up supplies owing to what they regard as unsatisfactory prices.

In Scotland conditions are serious, the amendment of the order leaving the situation unchanged. The question of price is apparently entirely subordinate to that of supply. Prompt Government action, it is represented, is required to enable a certain proportion of the English or Irish stocks to be diverted to the Scottish market, and the announcement<sup>4</sup> that a supply of 12,000 tons of English-grown potatoes has

<sup>1</sup> The *Christian Science Monitor* (Boston), Mar. 19, 1917, and *Board of Trade Journal* (Great Britain), Feb. 22, 1917, p. 552.

<sup>2</sup> *Board of Trade Journal* (Great Britain), Mar. 1, 1917, p. 613.

<sup>3</sup> The *Christian Science Monitor* (Boston), Mar. 22, 1917.

<sup>4</sup> *Idem*, Apr. 24, 1917.

been secured for Scotland has been received with the greatest satisfaction. The urgency of the case may be gauged by the fact that on the eve of the coming in force of the new order, Glasgow, with weekly requirements of over 2,000 tons of potatoes, was reported to have only 24 hours' stock on hand.

The food controller recently <sup>1</sup> issued an appeal that all persons who can afford to buy substitutes should, for the present, abstain from the use of potatoes and leave such stocks as still remain in the country for the use of the poorer classes, for whom they form a most important article of diet. The stock of potatoes in the country is unusually low and further supplies will be unobtainable for the next three months.

#### MAXIMUM PRICES FOR SEED POTATOES.

An order fixing maximum growers' prices for seed potatoes has been issued. The operative parts of the order, which came in force January 22, are as follows:<sup>2</sup>

1. Except under the authority of the food controller, no seed potatoes of any of the varieties mentioned in the first schedule to the order may be sold by or on behalf of the grower thereof at a price exceeding the price applicable according to such schedule.
2. The price shall be the price for potatoes delivered free on rail or free on board at the option of the buyer, but shall not cover the price of bags or other packages.
3. No grower and no agent of any grower shall sell or offer to sell any seed potatoes grown by such grower, and no person shall buy or offer to buy any such seed potatoes from such grower or his agent at a price exceeding the price applicable thereto.

Other clauses in the order relate to definition, penalty, and scope, and appended are two schedules specifying prices and varieties.

In February this order was amended by one <sup>3</sup> under which the maximum price chargeable for seed potatoes by any person other than the grower shall be, in the case of one-half hundredweight or less of any variety, 3d. (6.1 cents) per pound. In sales of a larger amount the maximum price shall be that given by the schedule as the price chargeable by the grower for the particular variety, plus all sums actually paid for transport by rail or water, together with £2 10s. (\$12.17) per ton if the sale is over one-half hundredweight but less than 10 hundredweight, £1 5s. (\$6.08) if the sale is 10 hundredweight but less than 4 tons, and £1 (\$4.87) if the sale is 4 tons or over. No additional charge may be made for placing the potatoes on rail or wharf. It is expressly laid down that no person shall enter into any fictitious or artificial transaction or impose or attempt to impose any condition relating to any other article in the sale of seed potatoes.

<sup>1</sup> The Christian Science Monitor (Boston), Apr. 26, 1917.

<sup>2</sup> Board of Trade Journal (Great Britain), Jan. 25, 1917, p. 264.

<sup>3</sup> Idem, Mar. 1, 1917, p. 613.

## DISTRIBUTION OF SUGAR SUPPLIES.

In January the royal commission on sugar supplies issued the following memorandum<sup>1</sup>:

1. It has been decided to continue until further notice the present scheme of wholesale distribution based on the distribution of 1915, and for this purpose the first day of January shall be considered to be the commencement of a fresh period, no adjustment being made in this period as the result of any irregularity in the preceding period.

2. In all calculations the basis is the quantity supplied during the whole of 1915 and not during any particular portion of that year.

3. British refiners will continue to issue sugar only to their 1915 customers. The quantities to be issued will be proportionate to those of 1915, but the proportion will vary from time to time, in accordance with the general proportion which all available supplies bear to the total quantity used or distributed in 1915.

4. The sugar commission will continue to distribute its imported sugar, and such quantities of British refined sugar as it may have at its disposal, to its 1915 buyers according to the index number of each. This will give each buyer, as his share of available supplies, the amount proportional to his total use or distribution in 1915, of all sugar other than British refined.

5. *British West Indian sugar.*—The sale of this and other sugar imported under license will continue to be regulated by the West India brokers' committee, which will report all sales to the sugar commission. These will be taken into account when determining the quantities of royal commission sugar which should be allotted to the buyers. There will thus be no "free" sugar in 1917.

6. All wholesale dealers are instructed to distribute to their customers on the same principle; that is to say, to let each of their customers of the year 1915 have his equivalent proportion of the supplies of all descriptions and from all sources which they have at their disposal.

7. Experience has shown during the past six months that for a wholesale dealer who has some thousands of customers a distribution on a basis of fixed percentage of each customer's purchases in 1915 would be the most satisfactory method of procedure.

A joint deputation representing the parliamentary committee of the Cooperative Congress and the War Emergency Workers' National Committee waited upon the food controller in connection with sugar distribution. The secretary of the first-mentioned body submitted reports from cooperative societies showing the inadequate distribution of sugar to consumers. It was pointed out that the average increase in membership amounted to 2,291 per society and that their available supplies of sugar in 1915 amounted to 3 pounds 5 ounces per member (or family of from 4 to 5 persons) per week; in 1916 the quantity was reduced to 1 pound 14 ounces for the same period, an amount considerably below that which the sugar commission during nearly the whole of the time had professed to guarantee. Another point brought out was that in many districts, especially where munition work had been considerably increased, there had been large additions of population, but the commission had made no special arrangements to meet the increased demand, the distribution being continued on the prewar basis of supply. The attention of the

<sup>1</sup> The Christian Science Monitor (Boston), Feb. 5, 1917.

controller was drawn to the insistence of some retail dealers that sugar should be supplied only to persons purchasing other specific provisions.<sup>1</sup>

In February the controller issued several new orders relating to sugar.<sup>2</sup> One of these provides that—

No person shall on or after the 15th of February, 1917, without a permit issued under the authority of the royal commission on the sugar supply, either on his own behalf or on behalf of any other person—

(a) buy sell, or deal in, or

(b) offer or invite an offer, or propose to buy, sell, or deal in, or

(c) enter into negotiations for the sale or purchase of or other dealing in, any sugar outside the United Kingdom, whether or not the sale, purchase, or dealing, is or is to be effected in the United Kingdom.

If any person acts in contravention of this order, or aids or abets any other person, whether or not such other person is in the United Kingdom, in doing anything which if done in the United Kingdom would be a contravention of this order, that person is guilty of a summary offense against the Defense of the Realm Regulations, and if such person is a company every director and officer of the company is also guilty of a summary offense against those regulations unless he proves that the contravention took place without his knowledge or consent.

This order does not prohibit the insurance of sugar.

Two other orders relate to brewing sugar. In the Board of Trade Journal of February 15 appears the following:

The brewers' sugar order, 1917, provides broadly that no brewers' sugar may be delivered from any warehouse except under the authority of the food controller, and that all brewers' sugar now in transit must be delivered into a warehouse. Certain exceptions, however, to this provision are made, especially as regards sugar sold to a brewer or brewers' sugar manufacturer, and to sugar imported for brewing purposes under special licenses issued by the royal commission on the sugar supply. It is further provided that no brewing sugar shall be sold retail at prices exceeding current retail prices for granulated sugar.

The brewers' sugar (returns) order, 1917, requires persons who, on February 8, 1917, own or have power to dispose of stocks of brewers' sugar exceeding 3 tons in weight to make a return on or before February 22 to the food controller on a form to be obtained on application to the Ministry of Food, Grosvenor House, W.

"Brewers' sugar" is defined as sugar not above 89° of polarization.

In connection with these two orders the royal commission on the sugar supply announces that the granting of licenses for the importation of sugars under 89° of polarization is suspended until further notice. This announcement does not apply to sugar already afloat, or to British West Indian grocery crystallized, British West Indian Muscovados, or British West Indian grocery sirup sugar.

A further order was issued March 16,<sup>3</sup> whereby manufacturers of articles for sale are limited during the year 1917 to the use of 40 per cent of the sugar used by them for manufacturing purposes in 1915. During the first six months, one-half of the permitted amount may be used; in each of the following quarters one-fourth of that

<sup>1</sup> The Christian Science Monitor (Boston) Feb. 16, 1917.

<sup>2</sup> Board of Trade Journal (Great Britain), Feb. 15, 1917, p. 484.

<sup>3</sup> Idem, Mar. 22, 1917, p. 770.

amount will be allowed. Any surplus unused may be carried from one period to another. The order applies to the manufacture of all articles except jam, marmalade, and condensed milk.

The food controller issued an order,<sup>1</sup> in effect March 23, putting an end to the practice of making the retail sale of sugar conditional upon other purchases; and it applies equally to other articles of food. The order contains the following clause:

Except under the authority of the food controller no person shall, in connection with a sale or proposed sale of any article of food, impose or attempt to impose any condition relating to the purchase of any other article.

It is reported<sup>2</sup> that the food controller has appointed a committee to consider the system adopted by the royal commission on sugar supplies for the distribution of sugar, and to report what further steps should be taken for the allocation of existing supplies.

#### REGULATION OF THE PRICE OF MILK.

Under date of January 26, the food controller issued an order regulating the price of milk. This order extends only to Great Britain and became effective on the date of promulgation. Its provisions are as follows:<sup>3</sup>

No person shall (subject to the exceptions hereinafter contained) directly or indirectly sell or offer for sale any milk at a price exceeding by more than the amount hereinafter named the corresponding price of the article at the date hereinafter specified (the corresponding price to be settled in case of difference by the food controller); and where the consideration for any sale or offer consists wholly or partly of any conditions made or offered to be made in connection with the transaction, or is otherwise not of a pecuniary character, the value of the consideration or such part thereof as is not of a pecuniary character, shall, for the purposes of this provision, be taken into account in determining the price of the milk.

The amount by which the price may exceed the corresponding price is as follows:

Nature of sale.	Excess.
1. Milk sold or offered for sale to be delivered on the premises of the buyer, not being premises used as a creamery or other factory, or at the railway station of such a buyer, where the conditions of sale include an obligation to deliver in quantities not less than a specified minimum.	An excess at the rate of 6½d. [13.2 cents] per imperial gallon.
2. Milk sold or offered for sale wholesale otherwise than as described in 1 above.	An excess at the rate of 5½d. [11.2 cents] per imperial gallon.
3. Milk sold or offered for sale by retail.	An excess at the rate of 2d. [4.1 cents] per imperial quart.

This order shall not affect: (a) Until April 1, 1917, milk which is sold either under contract, made on or before November 15, 1916, or under a new contract made in continuation of or in substitution for a previous contract so made, where the price under the new contract is not higher than the price under such previous contract; except

<sup>1</sup> The Christian Science Monitor (Boston), Apr. 19, 1917.

<sup>2</sup> Board of Trade Journal (Great Britain), Mar. 29, 1917, p. 811.

<sup>3</sup> The Christian Science Monitor (Boston), Feb. 24, 1917.

where it is shown to the food controller that the contract price is unreasonable, having regard to the circumstances of the case. (b) Condensed milk, dried milk, or milk preparations. (c) Accommodation milk (so far as the price paid for the milk as accommodation milk is concerned), if the price charged does not exceed 1s. 8d. [40.6 cents] per imperial gallon, inclusive of all charges for transport to the railway station at which delivery is taken by the purchaser. (d) Milk sold by retail for consumption on the premises of the vender, if the price does not exceed that charged on November 15, 1916; or (e) milk supplied in special circumstances at a price expressly authorized by the food controller or by some person on his behalf.

Any person acting in contravention of this order is guilty of a summary offense against the Defense of the Realm (Consolidation) Regulations, 1914.

The price of milk order, 1916, and the price of milk order (No. 2), 1916, are hereby revoked as from January 26, 1917, provided that such revocation shall not: (a) Affect the previous operation of those orders or anything duly done or suffered by reason thereof; or (b) affect any right, privilege, obligation, or liability acquired, accrued, or incurred by reason of those orders; or (c) affect any penalty, forfeiture, or punishment incurred in respect of any offense arising under those orders; or (d) affect any proceedings or remedy in respect of any such right, privilege, obligation, liability, penalty, forfeiture, or punishment as aforesaid; and any such proceedings or remedy may be instituted, continued, or enforced, and any such penalty, forfeiture, or punishment may be imposed as if such orders had not been revoked.

According to information which has reached the Ministry of Food, some farmers are under a misapprehension regarding the summer prices of milk as fixed by this order. The controller has explained, therefore, that the maximum price of milk sold wholesale in the coming summer usually will be 6½d. (13.2 cents) per imperial gallon above the price which the farmer obtained in the summer of 1913. This refers to milk delivered on the premises or at the railway station of the buyer, under a contract to supply a minimum quantity. In the case of milk sold under other conditions, the farmer may not charge more than 5½d. (11.2 cents) per gallon above the price of the summer of 1913. It is a summary offense to charge or ask a price higher than the maximum fixed.<sup>1</sup>

In the latter part of March the food controller announced that it was recognized that the maximum prices fixed, may, if the difficulties of dairy farmers increase, have the effect of discouraging production. The president of the board of agriculture and the secretary for Scotland accordingly have conferred with the food controller and have agreed to the following statement:

The prices to be fixed for next winter will be considered by the agricultural departments in good time before the period for making contracts arrives, so as to make the maintenance of milk production certain and commercially profitable in comparison with other branches of the farming industry.

The food controller announced also that he would issue an amendment basing the increase in prices of milk on the summer prices of 1914 instead of those of 1913.<sup>2</sup>

<sup>1</sup> Board of Trade Journal (Great Britain), Mar. 15, 1917, p. 730.

<sup>2</sup> *Idem*, Mar. 29, 1917, p. 811.

REGULATION OF TEA AND COFFEE PRICES.<sup>1</sup>

It was announced under date of March 16 that the prices of tea and coffee have been decided as follows:

*Tea.*—An arrangement has been made with the various tea associations, representing importers, brokers, and distributors, that on and after May 1 tea shall be sold retail at 2s. 2d. and 2s. 4d. (52.7 and 56.8 cents) per pound and upward. To insure a reasonable supply at the lower prices, 40 per cent of the imports from India and Ceylon will be allocated to the trade by the importers for this purpose.

At the date (Feb. 23) of the prime minister's speech dealing with the restriction of imports the current retail price of tea was 2s. 4d. (56.8 cents) per pound and upward.

*Coffee.*—The food controller has arranged with the coffee trade associations that after March 16 supplies of coffee will be available from the market to enable retail distributors to sell a good, sound, pure coffee, whole or ground, at the rate of 1s. 6d. (36.5 cents) per pound.

CONTROL OF FATS, OILS, OILSEEDS, AND THEIR PRODUCTS.<sup>2</sup>

The Ministry of Munitions has assumed control of all fats, oils, oilseeds, and their products, including oil cake, soap, and margarine, and a new branch of the explosives department of the ministry is being organized. Mineral oils will not be dealt with by this branch, nor will essential oils, butter, and lard.

## MEASURES TO RAISE SUPPLIES OF FISH.

Under date of March 16 the Ministry of Food issued an order under which fresh-water fish which has not been caught in England may be sold there between March 15 and June 15, but the fish must be certified by the Fishmonger's Co. to have been imported from abroad or from Scotland or Ireland.

Special correspondence to the *Christian Science Monitor*<sup>3</sup> announces that in March the president of the board of agriculture and fisheries appointed a committee to determine whether any considerable addition to the home food supplies could be provided from the rivers, lakes, and ponds of England and Wales. The committee is requested to have special regard to the practicability of any scheme for bringing fish supplies into consumption, such as the machinery and labor required, facilities for transport, the food value of different kinds of fish, the probability of their proving acceptable to the consumer, the necessity for interference with private rights, and the risk of damage to more valuable fisheries. The committee is further requested to consider and report upon the securing of a greater output of eels.

<sup>1</sup> Board of Trade Journal (Great Britain), Mar. 22, 1917, p. 770.

<sup>2</sup> Idem, Mar. 15, 1917, p. 724.

<sup>3</sup> The *Christian Science Monitor* (Boston), Apr. 21, 1917.

At the same time a committee was appointed to consider practical means for increasing the supplies of sea fish and for encouraging its consumption, whether cured or fresh, in substitution for other foods. The food controller has appointed a representative on this committee so that its advice may be available to him.

The committee has received a grant from the development fund, with authority to expend it, subject to limitations, for the increase of the fishing power of vessels other than steam fishing vessels. In general, expenditure will be confined to assisting fishermen who are owners of their boats to develop their fishing power and to secure greater quantities of fish.

#### GOVERNMENT ENCOURAGES PIG KEEPING BY COTTAGERS.

In January a notice encouraging pig keeping was issued.<sup>1</sup> The notice pointed out that—

if people would either individually or in combination undertake the keeping of pigs in the present crisis, the stock of pigs in Great Britain, and consequently also the country's meat supply, could be greatly increased within a few months. Quantities of valuable pig feed are wasted every day in towns and villages. If arrangements could be made for collecting the waste from butchers, poultry dealers, fishmongers, fruit dealers, greengrocers, dairies, hotels, boarding houses, and private homes, this daily loss would not only be prevented, but turned into the gain of valuable meat.

It was announced that a regulation modifying the restrictions of pig keeping would be issued in the near future.

#### MAXIMUM PRICES FOR GRAIN.

A cablegram from the United States consul general in London,<sup>2</sup> dated April 17, announces that the food controller has fixed the following maximum prices for home-grown wheat, oats, and barley other than kiln-dried barley: Wheat, 78s. (\$18.98) per quarter of 480 pounds; oats, 55s. (\$13.38) per quarter of 312 pounds; and barley, 65s. (\$15.82) per quarter of 400 pounds.

On the same day the controller issued an order by which he takes over all barley other than home-grown barley which has not been kiln-dried. Owners of barley are directed to maintain their grain in good condition and to forward particulars of their stocks to the food controller on or before April 30.

#### MAXIMUM FOOD PRICES IN ENGLISH CITIES.

The North American<sup>3</sup> reports under date of March 9, that the produce exchanges in all English cities have drawn up, with the sanction of the food controller, a list of prices for bacon, butter,

<sup>1</sup> The Christian Science Monitor (Boston), Feb. 2, 1917.

<sup>2</sup> United States Department of Commerce, Commerce Reports, Apr. 20, 1917; and The Christian Science Monitor (Boston), Apr. 17, 1917.

<sup>3</sup> North American (Philadelphia), Mar. 9, 1917.

cheese, and lard, which importers, manufacturers, and curers will not be allowed to exceed. The list will be revised fortnightly by the controller. The first list, with prices per hundredweight, follows:

*Bacon.*—English, 150s. (\$36.50); Irish, 140s. (\$34.07).

*Cheese.*—English, 165s. (\$40.15); Canadian, 162s. (\$39.42); American, 160s. (\$38.93); Dutch, 140s. (\$34.07).

*Butter.*—Australian, 218s. (\$53.04); Argentine, 214s. (\$52.07); Danish, 214s. (52.07).

*Lard.*—American, in pails, 141s. (\$34.31); boxed, 140s. (\$34.07).

#### MEATLESS DAYS IN HOTELS, RESTAURANTS, ETC.<sup>1</sup>

The food controller has ordered that, beginning with April 15, there shall be one meatless day weekly in hotels, restaurants, boarding-houses and clubs. In London the day will be Tuesday; elsewhere in the United Kingdom it will be Wednesday. The controller has ordered further that no potatoes or food containing potatoes shall be served, except on meatless days and on Friday.

The order imposes restrictions on the quantities of meat, sugar, and bread at meals served in hotels, restaurants, boarding houses, and clubs. The scale for meat is 2 ounces for breakfast, 5 for luncheon, and 5 for dinner. Bread is restricted to 2 ounces at each of these meals.

The order is expected to result in a saving of 65 per cent of the meat now consumed, 53 per cent of the bread, and 63 per cent of the sugar. The controller originally intended to order two meatless days, but feared it would lead to an increase in bread consumption.

#### VOLUNTARY RATIONING.

The first attempt at rationing was made on February 5, when the controller issued an appeal to the nation to limit its consumption of bread to 4 pounds, of meat to 2½ pounds, and of sugar to three-quarters of a pound weekly per head.<sup>2</sup>

In a subsequently issued statement<sup>3</sup> it is explained that meat includes bacon, ham, sausages, game, rabbits, poultry, and canned meat. The ration of 2½ pounds per head per week is of uncooked meat, as bought from the butcher, and includes bone and fat.

Housekeepers are expected to reduce their household consumption in respect of members who take meals away from home.

The allowance of flour for bread making includes that used for cakes, puddings, etc., but it is pointed out that there is a choice of rice and similar products for puddings.

<sup>1</sup> Springfield (Mass.) Republican, Apr. 5, 1917.

<sup>2</sup> Milwaukee Sentinel, Feb. 2, 1917.

<sup>3</sup> The Christian Science Monitor (Boston), Mar. 3, 1917.

It is recognized that some housewives will be unable to buy the full allowance of meat and consequently may be compelled to exceed the bread allowance of 4 pounds per head per week. In such cases they are expected to keep their purchases of bread at least 1 pound per head per week below previous consumption.

This rationing is, as yet, purely voluntary. It is expected that a resolute effort on the part of each consumer to reduce his consumption to the figures mentioned will effect a saving of more than 1,000,000 tons per annum of bread, meat, and sugar.

#### PROMOTION OF VEGETABLE GARDENING.

The Ministry of Food is energetically encouraging schemes for increasing the food supply by means of vegetable gardens. Local authorities are urged to form food-production committees, which shall arrange public meetings to call attention to the need for increasing the production of food and to enroll volunteer workers and professional gardeners. It has been proposed that the gardens of empty houses, recently under cultivation, might be used to advantage. In some districts this is being done, and volunteers, supervised and assisted by experts, are working plots of land individually or cooperatively. In several instances large property owners have given land for this purpose.

It is not thought that public recreation grounds in populous areas could be broken up with advantage, but in some cases provision for garden allotments may be made in local parks and open spaces.

The Royal Horticultural Society has a panel of gardening experts ready to give advice and assistance; they will inspect allotments, give demonstrations and lantern lectures, and distribute pamphlets of instructions.<sup>1</sup>

In a circular to local education authorities it is stated that attention should be given to the cultivation of vegetables valuable as staple foods, especially potatoes, while the ordinary courses of instruction in gardening should not be seriously disturbed. Where possible, additional allotments might be taken on without putting too great a strain on teachers or children or disorganizing ordinary school work.<sup>2</sup>

#### EXTENSION OF FOOD CONTROLLER'S POWERS.<sup>3</sup>

The food controller's authority has been extended by an important order in council, made April 20, giving him power to take possession of any factory, workshop, or premises engaged in the preparing of food or adapting food for sale. Any factory to which the regulation is applied must comply with the controller's directions as to the management and uses of the factory, under penalty.

<sup>1</sup> The Christian Science Monitor (Boston), Apr. 6, 1917.

<sup>2</sup> Idem, Feb. 21, 1917.

<sup>3</sup> Idem, Apr. 21, 1917.

## CAUSES OF HIGH COST OF FOOD IN GREAT BRITAIN.

In connection with the present digest of British measures for food control it should be stated that the second and final reports of the Board of Trade departmental committee appointed to investigate the chief causes of the great rise in prices of commodities since the beginning of the war have been issued. The second report, dated November 15, 1916, deals with bread, flour, and wheat prices, and freight charges. The recommendations contained in the report have been presented in advance to the Government and some of them have already been acted upon. These recommendations were the following:

(1) Immediate fixing by the Government of such a maximum price to the producer for marketable home-grown wheat as will protect the public while assuring to the farmer a reasonable profit.

(2) Simultaneous fixing of fair contract prices, at which farmers of the United Kingdom should be asked to grow wheat and oats for the Government in the cereal year 1916-17.

(3) Immediate fixing of maximum prices for home-milled flour and offals for the cereal year 1916-17 corresponding with the cost of wheat, both home-grown and imported.

(4) That the Government should add control of the import of maize to its control of the import of wheat.

(5) That the Government of India should at once take steps to induce native cultivators to place as large an area as possible under cultivation for wheat to be harvested in the cereal year 1916-17, and that, if necessary, the home Government should guarantee a contract price.

(6) That the Government of the United Kingdom should consider the desirability of discussing with the Government of Egypt the suitability for Egypt of a policy similar to that recommended for India, including a guaranty by the Government of the United Kingdom.

(7) That the British mercantile marine should be further controlled by the Government to the end that foods and the raw materials of essential industries shall have precedence of other goods and be carried at fair and reasonable rates.

(8) That the congestion of shipping in British and allied ports be remedied in order to avoid waste of tonnage.

The report states that the average increase in the price of bread in the United Kingdom since the beginning of the war has been 65 per cent as compared with the prices prevailing in July, 1914. Nearly the whole of this increase is attributed to the rise in the price of flour, which in turn is due chiefly to the advanced cost of wheat to the miller. The committee does not share the view, expressed by some trade witnesses, that a considerable share of the rise in prices is due to the action of the Government in buying wheat in large quantities, but holds that action to have been entirely justified. As another cause of the rise in prices the report gives the increased ocean freight rates, due to a general shortage of tonnage. The committee holds that every effort should be made to secure a sufficiency of tonnage for the importation of foodstuffs and raw materials, and that the Govern-

ment should, if necessary, extend to other commodities the control of freight rates already in operation in the case of meat, sugar, and wheat.

The third report, dated December 30, 1916, includes potatoes and sugar. The food controller was appointed before the inquiry was finished, and therefore the committee does not propose any ameliorative measures, but confines its report to the causes of the rise in prices. In the case of potatoes the rise is ascribed to shortage of the crop and lack of labor, and in the case of sugar to the growing scarcity of shipping.<sup>1</sup>

### HIGH COST OF LIVING BONUS IN GERMANY.

[Reprinted from Bulletin of the International Union of Woodworkers, Berlin, February, 1917.]

The war has caused everywhere a great increase of the cost of living. So also in Germany. The woodworkers have been especially hard hit by it since at the beginning of the war they suffered for several months from severe unemployment. In no other trade were the immediate effects of the war so terrible and of so long a duration as in ours. Numerous workshops were closed down from the first day of the war up to well into the year 1915, while the others either reduced the number of workmen or the hours of labor, so that the distress of the woodworkers was great.<sup>2</sup> The small savings of the working-class families were exhausted long before the state of unemployment had improved, and then the increase of the cost of living had more and more begun to make itself felt.

It took about fifteen months till the conditions of our trade had so far improved that the workmen could think of measures against the high cost of living. At first in a somewhat halting manner, then more determinedly, they demanded from the employers an increase of wages to counterbalance the enormously enhanced cost of living. In October, 1915, the executive of the woodworkers' federation succeeded in getting from the executive of the employers' federation the admission that the demand for a bonus or special allowance in respect of the rise of prices was not unjustified and that the existing labor agreements were no bar to it. However, this admission was of a noncommittal character, for with few exceptions the employers refused any real concession as long as they could.

Gradually, however, the state of the market improved; the workmen were in many cases able to press their demands with such effect that they were granted, at least up to a certain point. And as another year rolled by, on the occasion of the time of giving notice to terminate all labor agreements in the German woodworking trade,

<sup>1</sup> The Christian Science Monitor (Boston), Apr. 21, 1917.

<sup>2</sup> The German Woodworkers' Federation had a membership of nearly 200,000 in 1913.

the woodworkers' federation convened a conference on October 2 and 3, 1916, and carried a unanimous resolution that all male and female workers should demand everywhere the immediate payment of a bonus of  $33\frac{1}{3}$  per cent, or a rise of wages of 20 pfennigs (4.76 cents) per hour, likewise that all wages agreed upon before the war should be raised to the level of present-day conditions.

That resolution proved to be the right word in the right time. Wherever among our colleagues in the Empire vacillation and despondency had reigned, there the determined and inspiring language of the resolution gave courage to make a stand for better conditions, and hundreds of male and female workers joined our federation in order to contribute their share to the realization of our demands, and from everywhere, even from the far-away trenches, came joyful approval and expressions of thanks that the German Woodworkers' Federation, despite the calamities of the war, had lost nothing of its courage and determination in defending the interests of all our members even in the most trying times.

The demand for an increase of 20 pfennigs (4.76 cents) per hour and a corresponding raise of the agreed rate of wages became the watchword of all our colleagues in their various meetings throughout the Empire. The meetings were well attended and proved that the number of members in most places was even now still considerable; they filled the same halls in which, in the piping times of peace, they used to arrive at important decisions in industrial conflicts and in settlements of labor agreements. In each of these meetings our colleagues may have remembered in brotherly affection all those whom the hard and cruel war has kept away in distant lands, and while absorbed in the contemplation of these events they became all the more conscious of the great responsibility and sacred duty that devolved upon those who have remained at home to stand united and be faithful to one another in their work for the common welfare of the German Woodworkers' Federation in the present, and in the future to redouble their efforts for the protection of the common interests.

After the demands had been presented to the employers the negotiations began. At first they failed everywhere, but finally they led, with the assistance of the Ministry of the Interior in Berlin, on November 10, 1916, to an agreement between the two parties.

The agreement is as follows:

(1) In view of the imminent termination of all labor agreements the representatives of the employers and the workers of the wood-working industry have, in the interest of peace in the trade, come to an understanding that neither party should terminate the above-mentioned agreements and that both parties accept the following conditions.

(2) The rate of wages agreed upon before the war should be raised in the following manner:

Antewar wages.	Raised to—	Bonus per hour.	Present agreed wage.
<i>Pfennigs. Cents.</i>	<i>Pfgs. Cts.</i>	<i>Pfgs. Cts.</i>	<i>Pfgs. Cts.</i>
To 45 (10.71) .....	45 (10.71)	20 (4.76)	65 (15.47)
46 to 50 (10.95 to 11.90) .....	50 (11.90)	18 (4.28)	68 (16.18)
51 to 55 (12.14 to 13.09) .....	55 (13.09)	16 (3.81)	71 (16.90)
56 to 60 (13.33 to 14.28) .....	60 (14.28)	15 (3.57)	75 (17.85)
61 to 65 (14.52 to 15.47) .....	65 (15.47)	15 (3.57)	80 (19.04)
66 (15.71 cents) and over ...	70 (16.66)	15 (3.57)	85 (20.23)

Towns which have not yet come to any understanding about an agreed rate of wages should, at the next renewal of agreements, be brought into one of the wage classes according to local conditions.

(3) On all prevailing wages, i. e., on those which are paid at present, a bonus of 15 pfennigs (3.57 cents) per hour is to be paid from November 15, 1916, and the whole agreed bonus from February 15, 1917, according to the details given in paragraph 2.

(4) The prevailing wages of female workers are raised by 10 pfennigs (2.38 cents) per hour, from November 15, 1916. All wages agreed before the war are also raised by the same amount.

(5) Juvenile workers under 18 years of age receive the same increase as the female workers, i. e., 10 pfennigs (2.38 cents) per hour from November 15, 1916.

(6) In towns where by virtue of local agreements between the two parties high cost of living bonuses are paid, the new agreement may be carried out in such a manner that with regard to payments to male workers, 10 pfennigs (2.38 cents) per hour may be put to the account of the new bonus, and with regard to female and juvenile workers, 5 pfennigs (1.19 cents) per hour.

(7) The above-mentioned bonuses on the rate of wages per hour are correspondingly applied to the agreed piecework wages. The same applies to wages for out-of-door work in such a manner that the minimum bonus for out-of-door work with overnight should amount to 4 marks (95.2 cents) per day, Sundays included.

(8) Wherever higher bonuses have been agreed upon, they remain in force.

(9) As supplement to the existing labor agreements the parties arrived at an understanding that soldiers injured in war should, after being healed, have a claim to be reinstated in their old places in the workshops and factories. Their wages for piecework should be the same as agreed upon or fixed for the other pieceworkers. Wagemakers who on account of their injuries are not fully efficient should be paid according to their work, but it is not admissible to

pay them a lower wage only because they receive a Government pension or compensation. If their efficiency rises, their wage should be raised accordingly. Wage differences should be settled by arbitration committees.

By virtue of that understanding the agreed rates of wages as well as the bonuses are divided into six local classes, within which all present wages per hour should be raised by 20, 18, 16, 15 pfennigs (4.76, 4.28, 3.81, 3.57 cents), respectively. The bonus for both the female and juvenile workers amounts to 10 pfennigs (2.38 cents) per hour in addition to the wages paid hitherto.

The division of all agreement towns into six classes constitutes for the colleagues in many towns a step in advance which exceeds even the advantages of the bonus. Up to time of the new understanding the agreed rate of wages per hour amounted only to 35 pfennigs (8.33 cents); now they may get 65 pfennigs (15.47 cents) per hour, i. e., a rise of 30 pfennigs (7.14 cents) per hour. It has been our conscious effort to raise the lower agreed rate of wages by a larger percentage than the higher rate; we thought the present war conditions to be propitious for such an effort. For a long time the agreed rates of wages in various towns oscillated between 34 and 67 pfennigs (8.09 and 15.95 cents) per hour; this difference of 33 pfennigs (7.85 cents) has, through the formation of six wage classes and the fixing of agreed wages from 65 to 85 pfennigs (15.47 to 20.23 cents), been reduced to 20 pfennigs (4.76 cents).

The agreed rates of wages may be considered, on the whole, as minimum wages which are to be paid to workmen of the lowest permissible degree of efficiency. From this it follows as a matter of fact that the paid wages are in reality higher. Moreover, the high cost of living bonus of from 15 to 20 pfennigs (3.57 to 4.76 cents) is paid to all workers, i. e., also to the workers whose rate of wages already amounted to 1 mark, (23.8 cents) or more per hour. In the larger towns, and also in various smaller towns, there are not many workers now who get less than 1 mark (23.8 cents) per hour. For the pieceworkers the bonus means an increase of wages of 25 to 33½ per cent in the average.

The employers' federation put up great opposition to an increase of wages for female workers. Before the war the employment of female labor was an exception; now, however, on account of the shortage of male labor, the number of female workers has considerably increased. For this reason the woodworkers' federation had to put pressure on the employers to include the female workers in the new settlement. Our efforts have been successful.

As a further important step forward may be regarded the increase of remuneration for work done outside the workshop. Out-of-door

work outside the town with overnight used to be remunerated with an additional payment of 2.50 marks (59.5 cents) per diem, while now the minimum has been fixed on 4 marks (95.2 cents).

The understanding with regard to the reinstatement of the war-injured workers and the safeguarding of their remuneration will prove a valuable measure for the afterwar period.

In all towns of the Empire, particularly among the employers who stand outside the federation, the carrying out of the understanding has met with some difficulties. Still, the woodworkers' federation has in the most cases succeeded in overcoming the opposition of the employers. Our efforts are being continued with all vigor and we have no doubt any more that the improvement agreed upon will soon take effect in all towns and workshops.

To be sure, the wage increases which we have thus secured do but partially counterbalance the prevailing high cost of living, which unfortunately shows no sign of abating. It has, however, been expressly agreed that in the event of a further rise of prices a further demand for a higher bonus shall not be debarred by the present understanding and the agreements connected therewith which have been prolonged to February 15, 1918.

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#### RETAIL PRICES OF ANTHRACITE COAL—INTERIM REPORT OF FEDERAL TRADE COMMISSION, MAY 4, 1917.

By direction of the United States Senate as expressed in Resolution No. 217, Sixty-fourth Congress (Senator Hitchcock), the Federal Trade Commission has been engaged in an investigation of certain phases of the anthracite coal industry.

While that investigation was going forward a "buying panic" developed in the autumn of 1916, and enormous increases in retail prices resulted. Continuing its general investigation, the Federal Trade Commission turned immediate attention to this condition. The commission, being about to make its report, finds that at this present moment, the symptoms of the former unwarranted panic are recurring, and that there is now imminent a repetition of the conditions obtaining last winter.

These conditions were intolerable, and the commission now, therefore, without waiting the transmission of its complete report on past conditions, is moved to call to the attention of the Senate the danger threatening the consumers of anthracite coal and the steps thus far taken, based upon the knowledge of the commission and within the limitations of its power, to avert that situation.

During the past week daily conferences have been held with anthracite operators, with the officials of the United Mine Workers of

America, with leading jobbers, and with retailers from various parts of the country.

The commission is able to say that there now exists no good reason for a panic in the anthracite market, nor for any increase in the present selling price to consumers. On the contrary, the retail prices generally obtaining to-day are unwarranted.

The wage increase agreed upon on April 26, 1917, will involve an increased cost of production of between 24 and 30 cents a ton. The price at which leading operators have announced that they will sell will not exceed this increase. This price is upon anthracite on cars at the mouth of the mine. There is no justification for a larger increase to be passed on to the consumer and these mine prices will not justify present retail prices in many instances.

The new wage scale with the United Mine Workers is a beneficial and steadying factor in the industry. The commission has received assurances both from responsible anthracite operators and from the miners' representatives that this will be a year of unusually large production. The mine prices announced for May reflect approximately the wage increase of last week. The commission is assured that there is no reason why this price should not continue for the season and be subject to the usual summer discounts, namely, 40 cents per ton in May, 30 cents in June and 20 cents in July, and 10 cents in August.

The commission believes that the custom normally followed by the majority of retailers of passing the benefit of these discounts on to the consumer, should be followed by the whole trade.

If the public is again so deceived as to indulge in a scramble for coal such as occurred last winter, the favorable situation above reported may be nullified. A demand for four months' coal in the single month of May will be most deplorable. If, on the other hand, purchases are made as usual, there will be no disturbance and small chance for speculators to fleece the public. The best thing that can happen now is for everyone to buy as has been his custom in former years. Such normal buying spreads evenly through the summer, and will insure a steady flow of the production of the mines through the channels of distribution, to build up usual supplies in the hands of consumers, and more especially to build up the normal stock piles of wholesalers and retailers at points far removed from the anthracite region. Many of these points must build up their winter supply during the summer when water transportation is available. Transportation will thereby be relieved of undue burdens and the coal will be steadily distributed during the summer against the needs of the winter.

During the coal panic of the winter of 1916-17, one of the greatest factors in the distressing and intolerable condition, was the unwarranted and indefensible practice of using coal cars for warehouses.

Coal was held in cars by speculators while shortage of cars was alleged as a cause of fuel shortage. The commission calls your attention also to other activities of speculators in anthracite coal who perform no useful service in the distribution of the coal, but who insert themselves as a disturbing and clogging factor upon the industry and whose unearned profits are often much greater than those enjoyed by either miner or operator or honest dealer. These profits, in many instances more than 100 per cent, were paid by the consumer, together with enormous bills for car demurrage.

Within the scope of its powers, this commission will continue to exert every influence to avert the threatened recurrence of the conditions obtaining in the winter of 1916-17. To this end the commission proposes to secure complete current information, keeping close to the conditions of production, distribution, price at the mouth of the mine, price to the jobbers, price to retailers, and price paid by the public.

The commission will expose any unscrupulous wholesaler, jobber, or retailer who seeks to mislead the public into a belief that exorbitant prices are justifiable or that there is any necessity to join in a frenzied bidding to secure immediate delivery for car-future needs.

The commission will compile this information at frequent intervals and will ask the cooperation of the patriotic newspapers of the country to the end that the public may be kept constantly informed of what, in justice and reason, it should be expected to pay for anthracite and as to the volume of the production and stocks on hand existing at such times. The commission has assurances from the anthracite operators that in case of local shortages being called to their attention by the commission the operators will relieve such local stringency immediately.

The agencies which handle and distribute coal after it leaves the mine and before it comes into the hands of the consumer have also been heard to say to the commission, through numerous representatives, that they desire and will expect only a fair and reasonable profit for the useful labor and service which they perform.

The fair retail price at any place is the price at the mouth of the mine plus freight, plus the reasonable dealer's profit and cost of local delivery. The May price at the mine of ordinary white ash anthracite, allowing for the 40 cent discount, is approximately as follows:

	Gross ton (2,240 pounds).	Net ton (2,000 pounds).
Egg.....	\$4. 05	\$3. 61
Stove.....	4. 30	3. 84
Chestnut.....	4. 40	3. 93

So, then, anthracite coal consumers of the United States may feel assured, first, that there is an adequate supply of coal; second, that

that supply will be taken out and prepared for use in a large and constant flow during the summer months; third, that in so far as the power of constant scrutiny and publicity are effective, the Federal Trade Commission will function; fourth, that prices at the mine will be reasonable and such as would not justify the average prices now being paid by consumers.

As to the price of coal to the consumer for the coming season, this leaves two problems for further action, either by the Congress of the United States or by some authority to be designated by Congress. First, the elimination of the element of speculation and the charging of an exorbitant price or the withholding from use of this necessity of life, and second, the imperative need of keeping the coal moving from the point of its production to its final destination and of preventing coal cars from being held out of use for the purpose of speculative storage.

The Federal Trade Commission will have the honor to present to you at an early time a further and detailed report and recommendation upon the anthracite coal industry.

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#### RETAIL PRICES OF FOOD IN THE UNITED STATES.

According to statistics regularly collected by the Bureau of Labor Statistics, the retail price of the principal articles of food on April 16 showed an advance of 9 per cent over the price on March 15. This is the greatest advance in food prices in any one month since the outbreak of the European war.

The greatest increases were in flour, bacon, and potatoes, which advanced 18, 15, and 14 per cent, respectively. All articles except coffee advanced during the month.

The following table shows the average and relative retail prices of 27 articles of food on March 15 and April 16, 1917:

AVERAGE MONEY RETAIL PRICES AND RELATIVE RETAIL PRICES OF FOOD ON MAR. 15 AND APR. 16, 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.	
		Mar. 15, 1917.	Apr. 16, 1917.	Mar. 15, 1917.	Apr. 16, 1917.
Sirloin steak.....	Pound.....	\$0.295	\$0.317	108	116
Round steak.....	do.....	.267	.289	109	118
Rib roast.....	do.....	.233	.252	110	119
Chuck roast.....	do.....	.193	.212	112	123
Plate boiling beef.....	do.....	.146	.161	114	126
Pork chops.....	do.....	.279	.306	123	135
Bacon.....	do.....	.333	.382	116	133
Ham.....	do.....	.338	.365	115	124
Lard.....	do.....	.238	.264	136	151
Hens.....	do.....	.276	.290	117	123
Salmon, canned.....	do.....	.222	.236	110	117
Eggs, strictly fresh.....	Dozen.....	.349	.386	93	103
Butter, creamery.....	Pound.....	.461	.508	117	129
Cheese.....	do.....	.323	.330	125	128
Milk.....	Quart.....	.100	.102	110	112
Bread.....	16-oz. loaf <sup>1</sup> .....	.072	.075	110	115
Flour.....	1-bbl. bag.....	1.401	1.649	130	153
Corn meal.....	Pound.....	.041	.047	122	137
Rice.....	do.....	.091	.085	100	104
Potatoes.....	Peck.....	.778	.887	192	219
Onions.....	Pound.....	.125	.134	255	273
Beans, navy.....	do.....	.154	.167	140	152
Prunes.....	do.....	.141	.145	105	108
Raisins, seeded.....	do.....	.141	.142	109	110
Sugar.....	do.....	.087	.096	109	120
Coffee.....	do.....	.299	.299	100	100
Tea.....	do.....	.546	.551	100	101
<b>All articles combined.....</b>				<b>117</b>	<b>127</b>

<sup>1</sup> 16 ounces (weight of dough).

From April 15, 1916, to April 16, 1917, food prices advanced 32 per cent. Potatoes were 146 per cent higher on April 16, 1917, than April 15, 1916, and onions were 179 per cent higher. Beans advanced 79 per cent and flour 72 per cent.

For the four-year period from April 15, 1913, to April 16, 1917, all articles for which prices are shown advanced from 291 per cent for potatoes and 107 per cent for flour to 15 per cent for milk. The price of all articles combined advanced 48 per cent in this period.

The table which follows shows the average and relative prices of 27 articles of food on April 15 of each year from 1913 to 1917, inclusive:

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

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

Article.	Unit.	Average money price, Apr. 15—					Relative price, Apr. 15—				
		1913	1914	1915	1916	1917 <sup>1</sup>	1913	1914	1915	1916	1917 <sup>1</sup>
Sirloin steak.....	Pound....	\$0.254	\$0.254	\$0.251	\$0.270	\$0.317	93	93	92	99	116
Round steak.....	do.....	.223	.230	.223	.240	.289	91	94	91	98	118
Rib roast.....	do.....	.199	.201	.197	.210	.252	94	95	93	99	119
Chuck roast.....	do.....	.170	.160	.160	.212	.212	.....	99	93	100	123
Plate boiling beef.....	do.....	.....	.124	.122	.128	.161	.....	97	95	100	126
Pork chops.....	do.....	.216	.216	.197	.225	.306	95	95	87	99	135
Bacon.....	do.....	.267	.267	.264	.281	.382	93	93	92	98	133
Ham.....	do.....	.265	.268	.253	.312	.365	90	91	86	106	124
Lard.....	do.....	.158	.156	.151	.187	.264	90	89	86	107	151
Hens.....	do.....	.222	.231	.215	.236	.290	94	98	91	100	123
Salmon, canned.....	do.....	.....	.....	.198	.200	.236	.....	.....	98	99	117
Eggs, strictly fresh.....	Dozen.....	.251	.255	.259	.274	.386	67	68	69	73	103
Butter, creamery.....	Pound.....	.406	.327	.359	.414	.508	103	83	91	105	129
Cheese.....	do.....	.....	.....	.232	.248	.330	.....	.....	90	96	128
Milk.....	Quart.....	.088	.089	.088	.088	.102	97	98	97	97	112
Bread.....	16-oz. loaf <sup>2</sup> .....	.055	.055	.063	.062	.075	.....	85	97	95	115
Flour.....	½-bbl. bag.....	.798	.798	1.100	.959	1.649	74	74	102	89	153
Corn meal.....	Pound.....	.030	.031	.033	.033	.047	87	91	97	96	137
Rice.....	do.....	.....	.....	.091	.091	.095	.....	.....	100	100	104
Potatoes.....	Peck.....	.227	.275	.223	.360	.887	56	68	55	89	219
Onions.....	Pound.....	.....	.....	.036	.048	.134	.....	.....	74	98	273
Beans, navy.....	do.....	.....	.....	.077	.094	.167	.....	.....	70	85	152
Prunes.....	do.....	.....	.....	.137	.133	.145	.....	.....	102	99	108
Raisins, seeded.....	do.....	.....	.....	.125	.126	.142	.....	.....	97	98	110
Sugar.....	do.....	.054	.050	.066	.079	.096	67	62	83	99	120
Coffee.....	do.....	.....	.....	.299	.299	.299	.....	.....	100	100	100
Tea.....	do.....	.....	.....	.546	.546	.551	.....	.....	100	100	101
<b>All articles combined.....</b>	.....	.....	.....	.....	.....	.....	<b>86</b>	<b>85</b>	<b>87</b>	<b>96</b>	<b>127</b>

<sup>1</sup> In 1917, prices were taken for Monday, April 16.

<sup>2</sup> 16 ounces (weight of dough).

RETAIL PRICES OF BREAD IN THE DISTRICT OF COLUMBIA.

On the second and third days of May four out of five of the largest bakeries in Washington, D. C., advanced the retail price of bread. This was done at or about the same time by the principal bakeries in many, if not all, of the larger cities of the East. Upon its face the increase in the retail price of bread in the District of Columbia was very radical. Five-cent loaves were increased to 6 cents, and 6-cent loaves to 10 cents. In the case of the latter, however, the weight or size of the loaf was changed.

In the following table the price and size (scaling weight) of loaves prior to the advance are given and the price of a 16-ounce, or pound, loaf (scaling weight) computed from these actual weights and prices. Similarly the weight or size of the loaf after the increase in price is given and this is reduced to a 16-ounce loaf equivalent; the later price is given and this again reduced to an equivalent price for a pound loaf. As an example of the way in which this table should be read, take brand "No. 4." The retail price April 16 was 6 cents, the scaling weight of the loaf was 13½ ounces, which is equivalent to 7.1 cents for a pound loaf. On May 3 the price was increased to 10 cents, but the scaling weight was increased to 17½ ounces; which is equiva-

lent to 9.1 cents for a pound loaf. In other words, while the price per loaf was increased 4 cents, i. e., from 6 to 10 cents, the price per pound of bread was increased 2 cents.

RETAIL PRICES AND SCALING WEIGHT OF BREAD, APRIL 16 AND MAY 3, 1917.

Brand.	Apr. 16, 1917.			May 3, 1917.		
	Retail price.	Scaling weight.	Price per 16-ounce loaf.	Retail price.	Scaling weight.	Price per 16-ounce loaf.
		<i>Ounces.</i>			<i>Ounces.</i>	
No. 1.....	\$0.06	12½	\$0.077	\$0.10	18	\$0.089
No. 2.....	.06	12½	.077	.10	18	.089
No. 3.....	.06	13½	.071	.10	17½	.091
No. 4.....	.06	13½	.071	.10	17½	.091
No. 5.....	.06	13½	.071	.10	17½	.091
No. 6.....	.10	24	.067			
No. 7.....	.06	13½	.070	.06	13½	.070
No. 8.....	.06	13½	.070	.06	13½	.070
No. 9.....	.12	27½	.070	.12	27½	.070
No. 10.....	.05	11½	.070	.06	11½	.083
No. 11.....	.05	11½	.070	.06	11½	.083
No. 12.....	.05	11½	.070	.06	11½	.083
No. 13.....	.05	11½	.070	.06	11½	.083
No. 14 (single).....				.10	20	.080
No. 14 (twin).....				.10	19	.084
Average price.....			.071			.083
Relative price.....			.100			.117

The average price of a 16-ounce loaf (scaling weight) increased 1.2 cents, or 17 per cent, from April 16 to May 3. The scaling weight, which is the weight of the dough before baking, must be taken as the only safe basis for computing prices, because of the changes in baking.

Brands of bread which scale at 17½ or 18 ounces weigh about 16 ounces when baked. Of course there may be considerable variation in the baked weight of loaves of the same brand in one baking, which are scaled the same. These loaves may vary in weight even before leaving the bakery. Loaves scaled by machinery are not actually weighed, but are measured by cubic contents, and several loaves are measured and cut at once. The two end loaves may weigh lighter than the middle loaves.

One baker, in testing his machine, weighed 100 loaves scaled at 16 ounces. Forty per cent of these loaves were accurate; the other 60 per cent varied more or less from the 16 ounces, the range in variation being 1⅓ ounces. As much variation may take place after the loaf is baked, due to conditions under which it is kept, length of time before it is sold, and the state of the atmosphere.

Upon the announcement of the increase in price of bread, the Bureau of Labor Statistics undertook an investigation of bread prices in the District of Columbia. This investigation covered not only the retail price of bread in Washington on April 16 and May 3, but also the price of wheat at Minneapolis, the wholesale price of flour at Minneapolis, and the retail price of flour in the District.

The following table gives for April 16 and May 3 the wholesale price of No. 1 northern wheat at Minneapolis, the wholesale price of patent flour, in sacks, at Minneapolis, the retail price of flour computed to the barrel basis from one-eighth barrel quotations from representative dealers in Washington, the wholesale and retail prices of flour in Washington on the pound basis, the wholesale price of 9.58 ounces of flour in one 16-ounce loaf of bread assuming 327 loaves to the barrel, the retail price of 1 pound of bread in the dough, and the retail price of 327 pounds of bread dough in 1 barrel of flour, or the price the consumer pays for the flour in 327 16-ounce loaves.

ACTUAL AND RELATIVE PRICES OF WHEAT, FLOUR, AND BREAD ON APRIL 16 AND MAY 3, 1917.

Date.	Wholesale price of wheat per bushel.	Wholesale price of flour per barrel (in sacks).	Retail price of flour per barrel.	Wholesale price of flour per pound.	Retail price of flour per pound.	Wholesale price of 9.58 ounces of flour in 1 pound of bread dough. <sup>1</sup>	Retail price of 1 pound of bread dough.	Retail price of 327 pounds of bread dough in 1 barrel of flour.
Apr. 16.....	\$2.44½-\$2.46½	\$11.00-\$11.20	\$12.96	\$0.057	\$0.066	\$0.037	\$0.071	\$23.22
May 3.....	2.77 - 2.83	13.20- 13.40	15.28	.068	.078	.044	.083	27.14
Relative price on May 3 with Apr. 16=100.	114	120	118	.....	.....	.....	117	.....

<sup>1</sup> Assuming 327 pounds of dough from 1 barrel of flour.

The quotations on wheat and flour in Minneapolis were taken from the Minneapolis Daily Market Record. These quotations show that the price of No. 1 northern wheat at Minneapolis increased from \$2.45½ per bushel on April 16 to \$2.80 on May 3, an advance of 14 per cent. The average wholesale price of flour at Minneapolis on April 16 was \$11.10 per barrel. On May 3 it was \$13.30 per barrel, an advance of 20 per cent. Reduced to a pound basis, the increase in the wholesale price was from 5.7 cents per pound on April 16 to 6.8 cents per pound on May 3. The retail price of flour in Washington advanced from \$12.96 per barrel on April 16 to \$15.28 on May 3, or 18 per cent. Reduced to a pound basis, the increase was from 6.6 cents on April 16 to 7.8 cents on May 3.

Expressed in percentage, therefore, and taking the prices on May 3 as against the prices on April 16, wheat advanced 14 per cent, the wholesale price of flour advanced 20 per cent, the retail price of flour advanced 18 per cent, and the retail price of bread advanced 17 per cent.

One significant feature of the report is that 327 pound loaves of bread can be made from a barrel of flour; hence the retail price of flour per barrel on April 16 in the District of Columbia being \$12.96 gives a retail value to the 327 pounds of bread dough in a barrel of

flour, \$23.22. On May 3 the retail price of a barrel of flour had advanced to \$15.28 and the possible 327 pounds of bread dough in one barrel of flour had advanced to \$27.14. In other words, the difference between the retail price of a barrel of flour in Washington on April 16 and the retail price of the bread from a barrel of flour was \$10.26; on May 3 this difference was \$11.86 per barrel.

#### SUPPLY OF FOOD IN THE DISTRICT OF COLUMBIA.<sup>1</sup>

The committee, consisting of the superintendent of weights, measures, and markets, the superintendent of insurance, and the health officer, appointed on February 26, 1917, by the Commissioners of the District of Columbia to investigate and report on the supply of food in the District, filed its report in April, 1917. After an investigation, in which the committee was assisted by the various governmental and municipal agencies and by wholesale and retail grocers, commission merchants, and other distributors of food, the following conclusion was reached:

After all the causes which may reasonably tend to increase prices are considered, there appears no just ground for such high prices of many products as are demanded of the consumer at this time.

The distributors of food products, getting the excessive prices which have prevailed throughout many portions of the country, appear to have been levying tribute upon distribution, the burden of which has been borne by the consumers, far in excess of a fair remuneration for the service rendered. In considering the general question of reduction of cost it is clear that the effort to reduce must be directed against the excessive charges made for distribution and toward the elimination of waste after production. With the city population increasing over three times as fast as the increase of country population, the net profit of the farmer can not be reduced. If anything, his profit must be increased until the movement of the population from the country to the city is checked.

While it appeared at the time of the investigation that stocks as compared with previous years were low and some difficulty was experienced by dealers in procuring certain kinds of foods at prices that would permit them to sell within the reach of their customers, the committee is of the opinion that the press reports of food shortage were misleading, since it obtained no evidence of inability to get a sufficient quantity of food at the prices demanded. It found that prices asked for many staple foods were unusually high, and that the poor have been compelled to resort to strict economy, purchasing the cheapest possible articles in smaller quantities than heretofore.

Another reason given for the abnormally low supply of certain foods is defective transportation facilities resulting in delayed deliv-

<sup>1</sup> District of Columbia. Board of Commissioners. Committee on supply of food. Report, 1917. [Washington, 1917.] 16 typewritten pages.

eries. Speculation in food products has contributed to the high prices, declares the committee.

On February 26 potatoes were selling in Washington at \$8 per barrel; onions were selling for \$14 per 100 pounds; eggs were selling for 43 cents a dozen. Three days later on March 1, after this committee and certain departments of the Federal Government had begun to make an investigation of the situation, these articles had dropped to the following prices: Potatoes, per barrel, \$6.50; onions, per 100 pounds, \$11.50; eggs, per dozen, 30 cents. There had, of course, been no increase in the total potato and onion supply of the country between these dates. It is also a fact which should be considered that the shipments to the belligerent countries of these commodities have not affected prices because there have been practically no shipments of either of them. There was no addition to the American stock, and no reduction in the American demand, yet prices dropped.

While the committee did not go into the question of the effect of the influx of gold into the country in increasing the currency and therefore decreasing the purchasing value of a dollar, yet it states that with the advance of prices of foodstuffs in the District wages and salaries have not advanced proportionately as appears to be the case in certain industrial cities, with the result that Washington feels more acutely than other points the present high prices of foods.

Other contributing factors suggested by the committee are the increase in the cost both of producing foodstuffs and of distributing them, to which must be added the expense "of unnecessary demands for the delivery of goods and the loss to which the retailer is subjected through bad credit accounts." High prices may also be caused by prodigality in expenditures by the consumer; the marketing of goods in packages, which appears to be unnecessary where foods are to be cooked before eating; and large expenditures by manufacturers to advertise their goods. The committee, however, makes it clear that prices do not in themselves indicate whether there is or is not a shortage of food, and presents statistics from the Department of Agriculture which show that there was an actual shortage in the wheat and potato crops in 1916 but an increase in the production of oats, rye, rice, and meat, with corn at about the five-year average.

Based upon its findings the committee makes the following recommendations:

There is urgent need in this country for the organization of a comprehensive marketing machinery which will put the producing and consuming communities in trading relations with each other, and make it possible to send perishable products directly from the point of production to the point of use; and for the inauguration of a system in the distribution of food products which will cause them to move to the points of use in response to their respective demands for use, so as to prevent congested markets on the one hand and inadequate supply on the other, with a result of waste which always occurs in congested markets. It is recommended that steps be taken through Government agencies looking toward these ends.

It is recommended that necessary steps be taken for an accurate determination of the nature and amount of foodstuffs ordinarily consumed in the District of Columbia.

It seems that this District should afford such a market for foodstuffs as would attract at least those produced in nearby localities and encourage production there. We believe that a municipal wholesale market established and operated by the District Government would tend to induce farmers living remote from the city to send their products to it because of the assurance that they would be handled by responsible Government officials and sold at the prevailing market price. No attempt should be made to establish such a market as a monopoly but simply as an agency, because of its very character, tending to encourage the shipment of foodstuffs to this city. The reduction of food prices is henceforth to be primarily a city problem. The additions to the price paid the farmer or producer for food products after they reach the city and before they reach the consumer, are not the affair of the farmer or the producer, and are something he should not be expected to remedy. The city itself must see to the care, storage, and distribution of its food.

The committee also recommends the utilization of kitchen refuse for feeding stock.

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### COST OF LIVING IN MASSACHUSETTS.

The report of the commission on the cost of living in Massachusetts<sup>1</sup> includes a statement of five phases of its investigation—a report on anthracite coal, a report on bread, a report on relation of transportation to prices, a report on department stores, and a final report embracing the rest of its findings. In brief, the commission concluded that the great underlying causes of the recent rise in prices are beyond the control of any one State, and found that the influences operating to bring about the existing condition in this connection are the war, a shortage of nearly all crops in 1916, abnormal buying by merchants and manufacturers, the general prosperity of the people resulting in freer buying, inflation of the currency, habits of waste, and the increasing cost of government. To overcome these influences the commission makes several suggestions which may be enumerated:

1. The adoption of a budget system for the State in order that modern methods of handling private business may be applied to handling public business.
2. The State supervision of local finances, by which local governments may have the services of experts trained in the science of governmental efficiency.
3. Organized methods for marketing farm products, reclaiming waste land, encouraging the intensive cultivation of undeveloped areas in and near cities, putting instruction in the arts of agriculture and horticulture within the reach of all who are willing to profit by it, and such other programs as look toward food-producing efficiency.
4. Popularizing the use of fish.
5. Substituting milk and skimmed milk for meats and eggs.

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<sup>1</sup> Massachusetts. Report of the commission on the cost of living. February, 1917. [Boston, 1917.] 14 pp.

6. Making improvements in the processes of distribution. It is recommended that the legislature revise the laws relating to cooperative societies.

In summarizing the situation as to anthracite coal, the commission expresses the opinion that this trade is dominated "by nine large companies each of which is closely allied or at least in sympathetic operation with the railroad company on whose line it is located," and recommends that some Federal authority be given the power (1) to separate effectively the anthracite coal business from control, direct or indirect, by the railroads; (2) to secure the prompt return of empty coal cars; (3) to direct the railroads, in case of emergency, to give the right of way to coal over other traffic not involving the immediate necessities of life; (4) to prevent discrimination in the distribution of coal to different markets; (5) to regulate the prices at which anthracite coal is sold by the mining companies or their agents. The commission also suggests that coal dealers should be required to sell coal in 25-pound lots at their yards to consumers substantially at the ton rate.

The commission found that the State law prescribing a standard loaf of bread has been evaded by the bakers, citing a number of instances of the sale of short-weight loaves. To protect the housewife in the case of unwrapped bread it is suggested that a law be enacted requiring bakers to place a label on each loaf giving his name and the weight of the loaf, and that he should be prohibited from selling bread which during the following 24 hours shall weigh less than the weight stated on the label.

The commission calls special attention to a costly phase of retail business in Boston "that contributes needlessly to the high cost of living," namely, that many people buy from department stores a great part of their merchandise at prices which are enhanced by three practices—the delivery of purchases, the giving of credit, and the return of goods sold on approval. It is stated that if these practices did not exist the wares could be sold for one-tenth less and yet give the merchant the same profit he now gets. This system, declares the report, "is grossly unfair to those who are willing to be thrifty if they have the chance," and it might be changed, for "it is quite feasible to make a separate charge for delivery. It is easy to make a discount for cash payment. Even a trifling charge for taking back an article once sold would greatly discourage the practice." The difficulty seems to be inability of merchants to agree upon a plan.

The commission concludes that the opportunities for State legislative remedies to meet the situation are not many, and that action along the line of education is the promising field. "It is not, however, a field that the State itself can enter with great promise of practical results. It seems to us, rather, to come within the domain of philanthropy."

## RETAIL PRICES OF FOOD IN FOREIGN COUNTRIES.

## AUSTRALIA.

The Monthly Summary of Australian Statistics,<sup>1</sup> prepared by the Commonwealth statistician, furnishes data on cost of living. These show weekly rentals and the purchasing power of money for six capital cities and retail price index numbers for cities, States, and the Commonwealth.

In the following table of retail price index numbers, each number for a State is the weighted average of five towns therein and each number for the Commonwealth is the weighted average of the 30 towns.

RETAIL PRICE INDEX NUMBERS (WEIGHTED AVERAGES) OF ARTICLES OF FOOD FOR EACH STATE OF AUSTRALIA AND FOR THE COMMONWEALTH, JULY, 1914, AND VARIOUS DATES TO JANUARY, 1917.

[The weighted average for six capital towns in 1911 is used as the base, or 1,000.]

State.	July, 1914.	1915			1916				January, 1917.	Per cent of increase in January, 1917, over July, 1914.
		October.	November.	December.	January.	October.	November.	December.		
New South Wales <sup>1</sup> ..	1,165	1,565	1,516	1,530	1,535	1,485	1,504	1,510	1,498	28.6
Victoria <sup>1</sup> .....	1,105	1,538	1,494	1,452	1,444	1,404	1,415	1,402	1,395	26.2
Queensland <sup>1</sup> .....	1,082	1,525	1,561	1,572	1,570	1,373	1,364	1,364	1,355	25.2
South Australia <sup>1</sup> ....	1,247	1,549	1,539	1,501	1,511	1,489	1,498	1,477	1,477	18.4
Western Australia <sup>1</sup> ..	1,412	1,575	1,544	1,506	1,533	1,592	1,591	1,569	1,564	10.8
Tasmania <sup>1</sup> .....	1,201	1,580	1,558	1,526	1,515	1,475	1,465	1,481	1,528	27.2
The Commonwealth <sup>2</sup> .....	1,164	1,551	1,519	1,502	1,504	1,454	1,465	1,459	1,453	24.8

<sup>1</sup> Weighted average for 5 towns.

<sup>2</sup> Weighted average for 30 towns.

## AUSTRIA.

The prices of food as published by the official journal (Warenpreisberichte) as reproduced in Great Britain<sup>2</sup> are the only data obtainable for Austria. With the exception of milk, butter, oleomargarine, and eggs, the prices reported are the maximum prices fixed by law.

In two articles only are changes noted from December, 1916, to January, 1917, but these are of sufficient importance to increase the price of all foods reported 1.7 per cent for that period. From July, 1914, to January, 1917, the prices of all foods reported show an increase of 171.7 per cent.

<sup>1</sup> Commonwealth of Australia. Monthly Summary of Australian Statistics. Bulletin No. 61, January, 1917, pp. 60, 61.

<sup>2</sup> Great Britain. Board of Trade Labor Gazette, April, 1917, p. 130.

The following table shows the increase in the price of twelve articles of food and the decrease in the price of one:

PER CENT OF INCREASE IN PRICES OF VARIOUS ARTICLES OF FOOD, IN AUSTRIA, IN JANUARY, 1917, AS COMPARED WITH DECEMBER, 1916, AND JULY, 1914,

Article.	Per cent of increase, January, 1917, as compared with—	
	December, 1916.	July, 1914.
Beef.....	No change.	335.6
Veal.....	No change.	173.3
Pork.....	No change.	232.2
Bacon.....	No change.	400.0
Lard.....	No change.	405.3
Milk.....	No change.	80.7
Butter.....	3.4	233.3
Oleomargarine.....	No change.	430.0
Flour, wheat.....	No change.	179.1
Bread, rye.....	No change.	68.8
Eggs.....	25.0	471.4
Potatoes.....	No change.	( <sup>1</sup> )
Sugar.....	No change.	31.9
Total (weighted).....	1.7	171.7

<sup>1</sup> Decrease of 25 per cent

#### CANADA.

The March, 1917, number of the Labor Gazette issued by the Canadian Department of Labor<sup>1</sup> gives retail prices of 30 articles of food in 60 localities having a population of 10,000 or more, as reported to that office at the middle of February. Prices are furnished by dealers doing a considerable trade with workingmen. The following tables show the average cost of a weekly budget, for a family of five, of 30 staple articles of food, by Provinces, and of food, rent, fuel, etc., for all Provinces, in 1910, 1913 to 1916, and January and February, 1917. The averages are based on reports from 60 localities and the estimated importance of the various commodities.

AVERAGE COST PER WEEK OF A FAMILY BUDGET OF STAPLE FOODS, IN CANADA, BY PROVINCES, CALCULATED ON THE AVERAGE PRICES REPORTED FOR THE CITIES IN EACH PROVINCE, 1910, 1913 TO 1916, JANUARY AND FEBRUARY, 1917.

Province.	1910	1913	1914	1915	1916	January, 1917.	February, 1917.
Nova Scotia.....	\$6.82	\$7.29	\$7.48	\$7.83	\$8.71	\$10.17	\$10.43
Prince Edward Island.....	5.81	6.34	6.69	6.62	7.57	8.63	8.75
New Brunswick.....	6.55	7.04	7.44	7.67	8.70	9.92	10.15
Quebec.....	6.33	6.87	7.16	7.39	8.48	10.03	10.52
Ontario.....	6.50	7.20	7.48	7.68	8.84	10.35	10.62
Manitoba.....	7.46	7.87	8.15	8.07	8.68	9.80	10.04
Saskatchewan.....	7.86	8.25	8.33	8.30	8.86	10.44	10.33
Alberta.....	8.00	8.33	8.27	8.21	8.79	10.53	10.69
British Columbia.....	8.32	9.13	7.61	8.81	9.25	10.64	10.18
ALL PROVINCES.							
Foods.....	6.95	7.34	7.73	7.87	8.79	10.27	10.46
Rent.....	4.05	4.75	4.65	4.12	4.04	4.05	4.04
Fuel and lighting.....	1.76	1.91	1.90	1.83	1.92	2.13	2.24
Starch, laundry.....	.03	.03	.03	.03	.03	.04	.04
Total, all Provinces.....	12.79	14.03	14.31	13.85	14.78	16.49	16.78

<sup>1</sup> Canada. The Labor Gazette, March, 1917, pp. 222-228.

CHILE.

The fluctuation of prices of articles of prime necessity has been the subject of periodic investigation by the labor office of Chile for some years. The following tables show, respectively, the retail prices per pound of 10 articles of prime necessity in three principal cities for the year 1913, and the relative prices of the same articles in the same cities for the years 1911 to 1915, taking the year 1913 as the base, or 100.<sup>1</sup>

AVERAGE RETAIL PRICES PER POUND OF 10 ARTICLES OF PRIME NECESSITY, 1913, IN 3 LARGE CITIES IN CHILE.

City.	Average retail price per pound of—									
	Rice.	Sugar.	Coffee.	Beef.	Flour.	Corn (maize).	Bread.	Potatoes.	Beans.	Wheat.
Valparaiso.....	\$0.126	\$0.121	\$0.457	\$0.275	\$0.058	\$0.050	\$0.091	\$0.038	\$0.058	\$0.061
Santiago.....	.121	.126	.482	.262	.051	.041	.071	.035	.060	.051
Concepcion.....	.103	.136	.470	.224	.055	.030	.066	.030	.070	.030

RELATIVE RETAIL PRICES OF TEN ARTICLES OF PRIME NECESSITY IN THREE LARGE CITIES OF CHILE, 1911 TO 1915.

[1913=100.]

City and year.	Rice.	Sugar.	Coffee.	Beef.	Flour.	Corn (maize).	Bread.	Potatoes.	Beans.	Wheat.
Valparaiso:										
1911.....	92	106	88	72	105	80	90	95	120	75
1912.....	86	86	101	78	102	113	94	134	94	108
1913.....	100	100	100	100	100	100	100	100	100	100
1914.....	86	79	100	84	120	96	83	104	137	94
1915.....	160	132	119	98	220	126	145	108	160	178
Santiago:										
1911.....	60	90	70	.....	100	58	.....	.....	.....	34
1912.....	74	96	96	83	91	100	80	91	126	62
1913.....	100	100	100	100	100	100	100	100	100	100
1914.....	88	96	94	92	123	74	121	104	163	66
1915.....	153	142	120	85	248	104	179	119	158	187
Concepcion:										
1911.....	96	100	80	88	112	122	125	111	107	127
1912.....	112	96	114	111	103	127	165	127	90	122
1913.....	100	100	100	100	100	100	100	100	100	100
1914.....	117	97	90	125	133	138	87	116	97	127
1915.....	211	135	123	98	248	233	277	111	178	255

FRANCE.<sup>2</sup>

The General Statistical Office of France has required the mayor of each city of over 10,000 population (excepting Paris) to report the prices of 13 articles of household consumption for the first quarters of 1911 and 1913, the third quarter of 1914, the first and third quarters of 1915, and the first, second, and third quarters of 1916.

<sup>1</sup> Boletín de la Oficina del Trabajo. Santiago de Chile. No. 10, 1915, p. 134.

<sup>2</sup> France. Bulletin de la Statistique Generale de la France, October, 1916, pp. 37 and 42.

These prices, applied to the quantities used during a year by a household of four persons living in Paris,<sup>1</sup> form the basis upon which a series of index figures has been calculated for each of the quarters named.

In the table thus prepared only such cities as furnished data for each of the eight investigations are included.

The following index numbers show the variation in prices of the 13 commodities, as calculated for the whole of France, for the third quarter of 1914 and the subsequent periods of investigation. These indexes are the arithmetical averages obtained by multiplying the assumed consumption of each article by its average price and dividing the sum of the products thus obtained by 13.

1914, third quarter.....	1,004	1916, first quarter.....	1,336
1915, first quarter.....	1,105	1916, second quarter.....	1,379
1915, third quarter.....	1,235	1916, third quarter.....	1,420

The increase in the cost of living for all France since the third quarter of 1914, as demonstrated by the foregoing table, is approximately 41 per cent.

A special table calculated for the city of Paris for various months from July, 1914, to October, 1916, shows an increase of 38 per cent in the cost of living, based upon a hypothetical consumption.

#### GERMANY.

The most recent data available for Germany is that of October, 1916, already published in the MONTHLY REVIEW, Volume IV, No. 2, page 247.

#### GREAT BRITAIN.<sup>2</sup>

The increase in prices of food during the month of March was noticeable in oleomargarine, bread, cheese, and fish; prices of bacon, flour, tea, and meat advanced from 2 to 4 per cent, while sugar, milk, butter, and potato prices remained practically unchanged. Eggs showed a considerable drop in prices. As compared with April, 1916, food prices as a whole increased about 32 per cent.

Prices of July, 1914, are taken as the base for calculating the rate of increase in the prices of 16 articles of food shown in the following table. The data for February 1 are given as being more nearly comparable with those reported from other countries.

<sup>1</sup> Bread, 1,543 pounds; meat, 441 pounds; ham, 44 pounds; butter, 44 pounds; eggs, 20 dozen; milk, 317 quarts; cheese, 44 pounds; potatoes, 9.2 bushels; beans, 66 pounds; sugar, 44 pounds; oil, table, 22 pounds; kerosene, 8 gallons; alcohol, for fuel, 10.5 quarts.

<sup>2</sup> Great Britain. Board of Trade Labor Gazette, February, 1917, p. 51, and April, 1917, pp. 129, 130.

## PER CENT OF INCREASE IN PRICES OF VARIOUS ARTICLES OF FOOD IN GREAT BRITAIN, FEB. 1 AND MAR. 31, 1917, AS COMPARED WITH JULY, 1914.

Article.	Per cent of increase from July, 1914, to—					
	Feb. 1, 1917.			Mar. 31, 1917.		
	Towns of over 50,000 population.	Small towns and vil-lages.	United King-dom.	Towns of over 50,000 popula-tion.	Small towns and vil-lages.	United King-dom.
Beef, British:						
Ribs.....	72	69	71	80	77	78
Thin flank.....	104	84	94	120	97	108
Beef, chilled or frozen:						
Ribs.....	99	89	94	107	99	103
Thin flank.....	121	105	113	145	120	132
Mutton, British:						
Legs.....	66	63	65	73	71	72
Breast.....	118	82	100	133	94	113
Mutton, frozen:						
Legs.....	97	90	93	111	102	106
Breast.....	141	128	134	167	147	157
Bacon.....	63	57	60	81	74	78
Fish.....	152	110	131	153	110	132
Flour.....	86	95	91	96	104	100
Bread.....	80	70	75	99	87	93
Tea.....	54	51	52	65	60	63
Sugar, granulated.....	173	168	170	174	169	172
Milk.....	61	57	59	62	58	60
Butter:						
Fresh.....	74	76	75	78	81	80
Salt.....	72	73	72	73	79	76
Cheese.....	87	87	87	117	117	117
Oleomargarine.....	29	29	29	50	48	49
Eggs, fresh.....	143	129	136	78	66	72
Potatoes.....	145	118	131	132	103	117
Total (weighted).....	93	85	89	99	90	94

In arriving at the general increase the various articles are weighted according to the proportionate expenditures on them in prewar family budgets, no allowance being made for the dietary changes due to economies. If these changes were taken into consideration the general per cent of increase since July, 1914, would be much less. Household necessities other than food are estimated to have increased approximately 65 per cent in the same period.

## ITALY.

The semimonthly bulletin of the Italian Labor Office<sup>1</sup> publishes each month the retail prices of seven articles of food collated from reports furnished by municipal authorities, cooperative associations, or labor unions, in 43 principal cities. In the issues of March 16 and April 1, 1917, the average retail prices and corresponding index prices are shown for each month from July, 1914, to January, 1917. The prices for November and December, 1916, and January, 1917, are reproduced in the following table:

<sup>1</sup> Italy. Bollettino dell'Ufficio del Lavoro, Mar. 16, 1917, p. 46, and Apr. 1, 1917, p. 56.

ACTUAL AND RELATIVE PRICES OF FOODSTUFFS, BASED ON AVERAGE PRICES IN 43 CITIES OF ITALY, NOVEMBER AND DECEMBER, 1916, AND JANUARY, 1917.

*Actual prices.*

Article.	Unit.	1916		1917
		November.	December.	January.
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Bread, wheat, ordinary . . . . .	Lb.	4.04	4.41	4.26
Flour, wheat, ordinary . . . . .	do.	4.29	4.38	4.45
Macaroni, spaghetti, etc. . . . .	do.	6.55	6.83	6.89
Beef, third grade . . . . .	do.	21.26	21.09	21.70
Lard . . . . .	do.	25.73	29.66	31.69
Oil, olive, ordinary . . . . .	Qt.	44.40	47.50	49.15
Milk . . . . .	do.	6.72	7.27	7.33

*Relative prices.*

[Average prices for 1912=100.]

Bread, wheat, ordinary . . . . .	109.9	111.7	115.0
Flour, wheat, ordinary . . . . .	111.0	113.3	115.1
Macaroni, spaghetti, etc. . . . .	134.7	140.0	141.6
Beef, third grade . . . . .	150.7	140.1	144.1
Lard . . . . .	141.1	163.0	185.1
Oil, olive, ordinary . . . . .	121.4	130.0	134.5
Milk . . . . .	107.2	116.0	116.9
General index . . . . .	125.0	130.6	136.0

NETHERLANDS.<sup>1</sup>

The bulletin of the bureau of statistics contains statistical tables showing the trend of wholesale prices of grain, oils, coffee, sugar, kerosene, tin, etc., and a table of relative prices of 20 articles, in some of which more than one grade is given, so that the series is composed of 29 items, and also a table showing the relative price of coke in eight cities.

Retail prices are based on reports furnished by various cooperative societies. The average prices for the year 1893 are used as the base in calculating the relative prices.

The following table shows the relative prices thus obtained for the years 1913 to 1916 and for December, 1916, and January, 1917.

<sup>1</sup> Netherlands. Maandschrift van het Centraal Bureau voor de Statistiek, February, 1917, pp. 193, 194.

## RELATIVE PRICES IN THE NETHERLANDS, 1913 TO 1916, AND DECEMBER, 1916, AND JANUARY, 1917.

[Average prices for 1893=100.]

Article.	Year—				Decem- ber, 1916.	January, 1917.
	1913	1914	1915	1916		
Beans:						
Brown.....	154	157	175	232	293	275
White.....	166	176	200	259	345	348
Peas:						
Chick.....	150	161	178	194	239	242
Yellow.....	125	139	157	177	225	225
Green (dry).....	157	143	160	230	290	287
Barley, grits, pearl.....	113	116	142	165	168	174
Buckwheat, grits.....	104	117	171	200	229	229
Oats, grits.....	103	103	137	150	147	147
Cheese:						
Spiced, Leyden.....	140	139	160	180	194	194
Full cream.....	124	125	137	125	118	126
Coffee.....	94	88	91	100	103	103
Oleomargarine.....	127	99	102	110	113	114
Flour:						
Rye.....	85	81	115	130	141	141
Wheat.....	124	129	159	159	171	188
Buckwheat.....	105	110	152	195	243	262
Butter:						
Table.....	94	97	130	149	155	161
Cooking.....	135	142	207	228	241	242
Oil, rape.....	136	137	192	214	234	240
Rice.....	116	116	128	137	141	128
Soda.....	83	83	117	267	300	283
Starch.....	103	107	130	157	183	187
Sirup.....	100	100	125	161	168	175
Sugar:						
Granulated.....	89	91	105	115	116	116
Brown, moist.....	85	89	98	102	102	103
Tea.....	112	113	116	119	119	119
Vermicelli.....	121	128	203	207	210	210
Soap:						
White, Bristol.....	100	100	119	126	134	134
Green, soft.....	87	87	121	158	187	154
Salt.....	80	80	90	90	90	100
Average.....	114	116	142	167	186	186

The price of fuel varied in the different localities. The yearly arithmetical averages of the relative prices for the eight cities are reported as follows (1913=100): 1914, 95.58; 1915, 123.73; 1916, 152.10; and for the months of December, 1916, 168.43, and January, 1917, 177.37.

## SCANDINAVIAN COUNTRIES.

## Capital cities.

Retail prices averaged from monthly quotations reported by dealers in the capital cities of the Scandinavian countries are fairly comparable, as the habits of consumption and manner of life are very similar in the three countries. The commodities reported for Norway and Sweden are quite similar in quality, while those for Denmark are less comparable, particularly as regards meat. Quotations of milk, butter, oleomargarine, eggs, potatoes, flour, coffee, sugar, and kerosene are quite comparable. Sugar prices in Christiania are noted as abnormally high. In Copenhagen sugar purchased by card is considerably lower than when purchased without card. The highest prices for coal prevail in Copenhagen.

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ACTUAL AND RELATIVE PRICES OF 22 COMMODITIES OF HOUSEHOLD CONSUMPTION IN THE CAPITAL CITIES OF THE SCANDINAVIAN COUNTRIES, JULY, 1914, JULY, 1916, JANUARY AND FEBRUARY, 1917.

[Source: Sociala Meddelanden utgivna av K. Socialstyrelsen, Stockholm, 1917. No. 2, pp. 208, 209.]

Actual average prices.

Article.	Unit.	Stockholm.				Christiania.				Copenhagen.			
		July, 1914.	July, 1916.	January, 1917.	February, 1917.	July, 1914.	July, 1916.	January, 1917.	February, 1917.	July, 1914.	July, 1916.	January, 1917.	February, 1917.
Milk, whole.....	Qt.	Cts. 4.3	Cts. 5.3	Cts. 6.1	Cts. 6.1	Cts. 4.8	Cts. 6.6	Cts. 6.6	Cts. 6.8	Cts. 4.8	Cts. 6.1	Cts. 7.6	Cts. 7.6
Butter, creamery....	Lb..	29.9	36.5	39.5	41.1	31.1	40.1	47.4	47.4	28.6	36.6	46.8	47.3
Oleomargarine, vegetable.....	Lb..	16.9	24.3	38.7	.....	17.0	20.9	25.4	25.6	15.2	19.9	20.9	20.9
Eggs, strictly fresh....	Doz.	24.1	35.5	60.5	61.3	28.9	52.9	93.6	90.0	24.1	42.6	68.3	66.9
Potatoes, old.....	Bu..	66.1	60.4	102.0	141.7	98.2	100.1	73.7	86.9	47.2	113.3	92.6	92.6
Peas, yellow.....	Lb..	3.2	6.3	7.5	10.0	4.9	11.5	13.0	13.4	4.9	10.1	10.1	10.8
Flour:													
Wheat.....	Lb..	3.9	4.5	5.1	5.0	3.9	5.3	7.4	7.7	3.2	4.5	5.1	5.6
Rye.....	Lb..	2.9	3.3	4.4	4.3	2.4	4.7	6.4	6.7	.....	.....	.....	.....
Oatmeal.....	Lb..	4.1	6.0	8.0	10.6	4.4	6.6	7.8	8.5	4.7	8.9	9.2	9.2
Bread:													
Rye.....	Lb..	4.9	7.4	7.9	7.9	2.9	4.7	6.0	6.3	3.1	3.2	3.2	3.2
Wheaten, with milk.....	Lb..	66.0	10.3	12.2	12.2	.....	6.7	8.0	8.5	40.0	48.0	6.8	8.1
Beef—													
Steak.....	Lb..	15.2	31.7	31.1	28.6	16.0	39.8	36.3	35.5	17.0	37.9	33.4	33.4
Soup.....	Lb..	12.4	23.9	24.1	23.0	15.3	36.2	32.6	31.4	13.4	33.6	23.3	23.7
Veal:													
Steak, fat.....	Lb..	17.6	29.4	32.8	30.4	17.1	39.5	43.8	38.3	17.0	35.7	29.2	28.6
Steak, tender....	Lb..	12.3	18.7	23.5	20.8	10.1	27.5	27.1	22.4	13.4	31.8	25.3	24.3
Pork:													
Fresh.....	Lb..	18.1	28.6	34.8	34.3	17.6	34.9	43.6	43.5	13.4	14.6	14.6	14.6
Salt.....	Lb..	18.2	31.1	35.1	34.3	19.4	37.4	44.1	43.5	.....	20.7	20.7	20.7
Coffee, Santos.....	Lb..	20.2	24.7	43.2	58.3	26.0	27.8	32.9	32.6	25.5	30.0	33.7	34.3
Sugar, loaf.....	Lb..	7.8	8.3	8.3	8.3	6.9	13.1	13.1	13.4	5.2	6.3	6.3	6.3
Kerosene.....	Gal.	18.3	27.4	29.4	29.4	18.3	29.4	29.4	29.4	18.3	21.3	21.3	21.3
Coal.....	Bu..	22.6	49.6	53.8	61.4	17.8	62.3	56.7	56.7	16.1	64.2	65.6	65.6
Coke, gas.....	Bu..	12.6	26.9	27.7	31.2	15.6	33.5	33.5	33.5	11.8	26.0	26.0	33.1

1 Maximum price by law.  
 2 Ground to 75 per cent; maximum price from Jan. 15, 1917.  
 3 Price per pound, rye bread baked in 8.8 pound loaves.  
 4 Beef, fore part, highest price.  
 5 Beef, fore part, lowest price.  
 6 Veal, fore part, highest price.  
 7 Veal, fore part, lowest price.  
 8 Pork, fresh, shoulder; maximum price fixed from July, 1916.  
 9 Breast, maximum price.  
 10 Maximum price. If purchased without sugar card price is 18 ore (4.8 cents) higher per pound.

ACTUAL AND RELATIVE PRICES OF 22 COMMODITIES OF HOUSEHOLD CONSUMPTION  
IN THE CAPITAL CITIES OF THE SCANDINAVIAN COUNTRIES, JULY, 1914, JULY, 1916,  
JANUARY AND FEBRUARY, 1917—Concluded.

*Relative prices.*

[July, 1914=100.]

Article.	Stockholm.				Christiania.				Copenhagen.			
	July, 1914.	July, 1916.	January, 1917.	February, 1917.	July, 1914.	July, 1916.	January, 1917.	February, 1917.	July, 1914.	July, 1916.	January, 1917.	February, 1917.
Milk, whole .....	100	124	141	141	100	137	137	142	100	126	158	158
Butter, creamery .....	100	122	132	137	100	129	152	152	100	128	164	166
Oleomargarine, vegetable...	100	144	229	.....	100	123	149	151	100	131	138	138
Eggs, strictly fresh .....	100	147	251	254	100	183	323	311	100	177	283	277
Potatoes .....	100	91	154	214	100	102	75	88	100	240	196	196
Peas, yellow .....	100	200	238	315	100	238	268	275	100	208	208	223
Flour:												
Wheat .....	100	116	131	128	100	138	191	197	100	142	162	177
Rye .....	100	113	150	146	100	195	265	275	.....	.....	.....	.....
Oatmeal .....	100	144	194	256	100	150	178	194	100	187	195	195
Bread:												
Rye .....	100	153	163	163	100	163	204	217	100	147	147	147
Wheaten, with milk .....	100	129	152	152	.....	.....	.....	.....	100	120	140	168
Beef:												
Steak .....	100	209	205	188	100	248	227	221	.....	.....	.....	.....
Soup .....	100	193	194	185	100	237	213	205	100	235	154	156
Veal:												
Steak, fat .....	100	167	186	172	100	230	255	223	100	210	171	168
Steak, tender .....	100	160	191	169	100	272	269	222	100	238	189	182
Pork:												
Fresh .....	100	158	192	189	100	198	248	247	100	109	109	109
Salt .....	100	171	193	188	100	193	227	224	.....	.....	.....	.....
Coffee, Santos .....	100	122	214	289	100	107	127	125	100	118	132	134
Sugar, loaf .....	100	106	106	106	100	189	189	193	100	121	121	121
Kerosene .....	100	150	161	161	100	161	161	161	100	117	117	117
Coal .....	100	220	238	272	100	351	319	319	100	400	409	409
Coke, gas .....	100	214	220	248	100	215	215	215	100	220	220	280
Average for all commodities .....	100	152	185	200	100	185	204	202	100	181	182	186

**Norway.**

The official bulletin of the Norwegian Labor Office<sup>1</sup> shows that the general level of prices of 24 articles, comprising 43 grades and 9 classes of household commodities, has advanced since July, 1914 (100) to 182 in October, 1916, 187 in November, and 194 in December. In all but 7 of the 43 quotations the relative prices advanced during the period October to December, 1916.

The bases of the computation consist of reports received from 17 cities. The following table shows the average prices during the month of July, 1914, and the relative prices based thereon for the last quarter of 1916:

<sup>1</sup> Norway. Sociale Meddelelser, utgit av Departementet for Sociale Saker, 1916, No. 6, pp. 178 and 180.

970 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

AVERAGE PRICES OF 24 ARTICLES OF HOUSEHOLD CONSUMPTION IN NORWAY, JULY, 1914, AND THEIR RELATIVE PRICES IN OCTOBER, NOVEMBER, AND DECEMBER, 1916.

Relative prices—Continued.

[July, 1914=100.]

Article.	Unit.	Average price, July, 1914.	Relative price for the month of—		
			October, 1916.	November, 1916.	December, 1916.
Beef:					
Fresh roast.....	Lb....	\$0.173	204	208	215
Soup.....	Lb....	.152	207	213	219
Mutton:					
Fresh, hind quarter.....	Lb....	.181	184	188	195
Fresh, fore quarter.....	Lb....	.168	191	194	201
Salt.....	Lb....	.136	224	235	246
Veal:					
Back, roast.....	Lb....	.175	215	217	219
Forequarter.....	Lb....	.154	228	235	227
Thin.....	Lb....	.112	193	188	215
Average for the group.....			206	210	217
Pork:					
Fresh.....	Lb....	.170	206	216	228
Salt, native.....	Lb....	.177	211	212	223
Salt, American.....	Lb....	.187	154	167	175
Average for the group.....			190	198	209
Cod:					
Fresh.....	Lb....	.052	217	218	208
Salt.....	Lb....	.048	149	153	186
Average for the group.....			183	186	197
Milk:					
Fresh.....	Qt....	.042	146	146	145
Skimmed.....	Qt....	.021	141	144	145
Butter:					
Dairy.....	Lb....	.297	151	151	155
Farm.....	Lb....	.270	150	155	158
Oleomargarine:					
Best.....	Lb....	.174	131	136	138
Inferior.....	Lb....	.131	143	150	155
Cheese:					
Goat's milk.....	Lb....	.199	168	173	174
Cow's milk.....	Lb....	.070	215	219	229
Fresh.....	Lb....	.097	238	243	255
Eggs, fresh.....	Doz.	.264	202	230	288
Average for the group.....			169	175	185
Wheat, flour.....	Lb....	.038	159	177	186
Rye, flour.....	Lb....	.024	226	242	253
Potato meal.....	Lb....	.057	201	201	202
Bread, family.....	Lb....	.029	143	151	157
Beans, brown.....	Lb....	.043	274	275	276
Barley, pearl.....	Lb....	.032	189	203	213
Rice, grits.....	Lb....	.058	138	141	142
Oatmeal:					
Domestic.....	Lb....	.042	157	160	168
American.....	Lb....	.038	158	168	175
Potatoes.....	Pk....	.065	115	116	124
Average for the group.....			176	183	190
Coffee:					
Java.....	Lb....	.342	114	117	121
Guatemala.....	Lb....	.306	113	117	117
Santos.....	Lb....	.267	117	117	118
Average for the group.....			115	117	119
Sugar:					
Refined.....	Lb....	.070	180	183	182
Granulated.....	Lb....	.067	202	202	197
Unrefined.....	Lb....	.064	184	184	182
Average for the group.....			189	190	187

<sup>1</sup> Based on the average price of household bread and army bread. The latter sells for approximately 50 per cent of the price of the former.

AVERAGE PRICES OF 24 ARTICLES OF HOUSEHOLD CONSUMPTION IN NORWAY, JULY, 1914, AND THEIR RELATIVE PRICES IN OCTOBER, NOVEMBER, AND DECEMBER, 1916—Concluded.

Article.	Unit.	Average price, July, 1914.	Relative price for the month of—		
			October, 1916.	November, 1916.	December, 1916.
<b>Kerosene:</b>					
Water white.....	Gal...	\$0.093	163	163	163
Standard white.....	Gal...	.087	164	165	164
Average for the group.....			164	164	164
Coal.....	Ton...	3.250	324	322	322
Coke.....	Bu....	.161	247	247	249
Average for the group.....			286	285	286
All commodities (arithmetical average).....			182	187	194

On the basis of the average cost of living of a family having incomes in 1914 ranging from 1,200 to 1,750 kroner (\$321.60 to \$469) the following table gives the calculated actual and relative annual expenditures for household necessities based on the prices prevailing in certain specified months:

ACTUAL AND RELATIVE ANNUAL COST OF A FAMILY BUDGET IN NORWAY, BASED ON PRICES PREVAILING IN JULY, 1914, AND OCTOBER, NOVEMBER, AND DECEMBER, 1916.

Article.	Actual annual cost of household necessities based on prices prevailing in—				Relative annual cost of household necessities (July, 1914=100) based on prices prevailing in—		
	July, 1914.	October, 1916.	November, 1916.	December, 1916.	October, 1916.	November, 1916.	December, 1916.
Beef, veal, and mutton.....	\$27.42	\$55.66	\$57.03	\$58.95	203	208	215
Pork.....	6.43	12.15	12.66	13.30	189	197	207
Fish.....	12.24	23.01	23.26	24.35	188	190	199
Dairy products and eggs.....	68.74	103.11	106.55	111.36	150	155	162
Bread.....	32.36	46.28	48.86	50.81	143	151	157
Grains and meal.....	22.14	34.09	35.64	37.41	154	161	159
Coffee.....	9.98	11.48	11.68	11.88	115	117	119
Sugar.....	9.13	17.06	17.15	16.88	187	188	185
Other food products.....	7.98	12.85	13.24	13.72	161	166	172
Total, food.....	196.41	315.69	326.07	338.66	161	166	172
Fuel.....	12.65	35.42	35.29	35.55	280	279	281
Light.....	9.39	15.41	15.40	15.40	164	164	164
Clothing.....	51.83	82.41	84.89	87.36	159	164	169
Rent.....	64.12	69.25	69.63	69.63	108	109	109
Taxes.....	5.42	5.58	5.58	5.58	103	103	103
Furniture, laundry, drinks, tobacco, etc.....	42.94	71.28	73.43	75.58	166	171	176
Insurance, union dues, travel, etc.....	26.82	26.82	26.82	26.82	100	100	100
Total.....	213.17	306.17	311.04	315.92	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Grand total.....	409.58	621.86	637.11	654.58	151.8	155.6	159.8

<sup>1</sup> Not reported.

## Sweden.

The following table shows retail prices of commodities in Sweden for various dates, from January, 1914, to January, 1917.

AVERAGE RETAIL PRICES OF COMMODITIES IN SWEDEN IN JANUARY, 1914, 1916, DECEMBER, 1916, AND JANUARY, 1917, AND PER CENT OF INCREASE, JANUARY, 1917, OVER JANUARY, 1914 AND 1916.

[Source: Sociala Meddelanden utgivna av K. Socialstyrelsen, Stockholm, 1917, No. 2.]

Article.	Unit.	Average price during—				Per cent of increase.	
		January, 1914.	January, 1916.	December, 1916.	January, 1917.	January, 1917, over January, 1914.	January, 1917, over January, 1916.
Milk, whole.....	Qt....	Cents. 3.6	Cents. 4.3	Cents. 5.1	Cents. 5.3	50.0	23.5
Butter:							
Table, best.....	Lb....	29.1	37.0	39.5	39.5	36.0	6.9
Cooking, country.....	Lb....	26.1	32.8	39.4	39.4	50.7	20.0
Oleomargarine, vegetable.....	Lb....	16.8	22.4	35.4	35.7	113.0	59.8
Eggs, fresh.....	Doz....	33.8	40.7	55.6	54.5	61.4	34.0
Potatoes, old.....	Pk....	12.8	13.7	20.3	21.3	66.7	55.2
Peas, yellow.....	Lb....	3.6	6.8	7.1	7.1	93.5	3.6
Beans, brown.....	Lb....	5.6	12.4	16.3	18.6	232.6	50.0
Flour, wheat, Swedish, best.....	Lb....	3.8	4.6	14.4	14.9	29.9	5.3
Meal, rye, Swedish, best.....	Lb....	2.6	3.6	3.9	4.3	66.7	16.7
Oatmeal, steamed.....	Lb....	4.4	6.0	6.8	7.4	69.4	24.5
Rice, Swedish, best.....	Lb....	4.9	5.7	7.1	7.9	62.5	38.3
Bread:							
Rye, hard, loaf.....	Lb....	5.0	6.3	6.8	7.3	46.3	15.4
Rye, soft.....	Lb....	4.6	5.8	6.3	7.3	57.9	25.0
Rye, sour.....	Lb....	3.8	4.5	4.9	5.7	51.6	27.0
Wheat, loaf, with water, cheapest.....	Lb....	5.3	6.3	7.1	8.1	52.3	28.8
Wheat, loaf, with milk, cheapest.....	Lb....	7.3	7.9	8.4	10.1	38.3	27.7
Beef, fresh:							
Roasting.....	Lb....	14.7	18.2	26.9	27.0	83.5	48.0
Soup.....	Lb....	12.2	15.7	23.7	23.8	96.0	51.9
Veal, roasting:							
Fattened.....	Lb....	16.0	20.4	28.1	28.3	76.5	38.7
Young.....	Lb....	8.9	12.2	17.3	17.5	97.3	44.0
Mutton:							
Fresh roasting.....	Lb....	15.9	21.3	28.4	28.4	78.6	33.7
Salt, Swedish.....	Lb....	14.2	19.6	27.6	27.5	93.2	40.4
Pork:							
Fresh, sides.....	Lb....	16.0	26.7	31.6	31.6	97.0	18.2
Salt, Swedish.....	Lb....	16.9	27.7	34.4	33.8	100.0	21.9
Herring, salt, prime.....	Lb....	5.5	9.5	13.5	13.4	144.4	41.0
Coffee, green, prime, Santos.....	Lb....	19.6	20.1	37.4	39.5	101.9	97.0
Sugar, loaf.....	Lb....	7.8	8.3	8.4	8.4	7.8	1.5
Kerosene, water white.....	Gal....	32.2	40.2	48.2	48.2	50.0	20.0
Coal:							
Anthracite, walnut.....	Ton <sup>2</sup> ..	\$9.58	\$17.29	\$22.61	\$17.98	87.6	3.9
English.....	Ton <sup>2</sup> ..	\$5.54	\$11.48	\$14.51	\$14.68	164.9	28.0
Coke:							
Gas-house.....	Ton <sup>2</sup> ..	\$3.79	\$6.39	\$7.66	\$7.59	100.0	18.6
English.....	Ton <sup>2</sup> ..	\$4.45	\$7.41	\$8.97	\$9.19	106.6	23.9

<sup>1</sup> 75 per cent of wheat utilized.

<sup>2</sup> 2,000 pounds.

## SWITZERLAND.

The only data obtainable as to course of retail prices in Switzerland appeared in the French labor bulletin of December, 1916,<sup>1</sup> in which is made a comparison of the prices of several articles of food as reported in June, 1914, and June, 1916, with those reported for

<sup>1</sup> France. Bulletin du Ministère du Travail, December, 1916, pp. 543, 544.

September, 1916. The calculation thus presented was made by the "League for reducing the cost of living" and is based on prices furnished by the Cooperative Consumers' Association. In calculating the rate of increase, the cost of living of a family composed of 2 adults and 3 children under 10 years of age has been adopted as a base.

The following table shows the increased cost on September, 1916, of a fixed amount of various articles of food as compared with the same amount in June, 1914, and June, 1916:

PER CENT OF INCREASE IN THE COST OF VARIOUS ARTICLES OF FOOD IN SWITZERLAND, IN SEPTEMBER, 1916, AS COMPARED WITH JUNE, 1914, AND JUNE, 1916.

Article.	Per cent of increase in cost, September, 1916, over—	
	June, 1914.	June, 1916.
Dairy products.....	18.8	0.4
Fats and oils.....	72.2	5.3
Cereals.....	56.0	None.
Peas, beans, lentils.....	69.8	( <sup>1</sup> )
Meats.....	50.5	5.8
Eggs.....	100.0	11.1
Potatoes.....	57.1	37.5
Sugar and honey.....	86.2	.7
Others.....	23.3	5.8
All foods.....	44.5	2.8

<sup>1</sup> Decrease 1.9 per cent.

### WORKMEN'S COMPENSATION LEGISLATION OF 1917—DELAWARE AND UTAH.

The Legislature of Delaware at its recent session enacted a workmen's compensation law, to be effective January 1, 1918. The statute is elective in form, and election is presumed in the absence of notice given by either party to the other prior to the occurrence of injury or death, the forms and methods of giving notice being prescribed by the statute; provision is also made for waiver of rejections.

The act exempts farm labor, domestic service, and public employees, also persons casually employed and outworkers, and applies only to "personal injury or death by accident arising out of and in course of the employment." There is no restriction on the basis of hazards or otherwise, but employers of less than five persons are not covered by the act. If the beneficiaries are alien nonresidents, only widows and children are considered; the benefits are the same in amount as for residents, except that within one year after the death of the injured employee the employer may commute payments to a lump sum equal to two-thirds of the total amounts of future installments.

Employers are required to insure or give proof of financial ability to pay their own losses. In the latter case a deposit or other security

may be required. Evidence must be filed with the board as to compliance with the foregoing requirements as to security, and a penalty for failure to comply is provided. During the term of such non-compliance the employer is liable in damages for any injury that may occur, without the defenses of contributory negligence, assumption of risks, or fellow service. These defenses are also abrogated in the case of an employer rejecting the act, whether or not the employee also rejects. Substitute schemes may be maintained if approved by the accident board. Waivers of the requirements prescribed by the act are forbidden. The provisions of insurance policies must comply with the requirements of the act as to privity of knowledge between the employer and his insurer, and also as to the rights of the injured workman in the policy.

A waiting time of 14 days is established, during which the employer is required, if requested by the employee or ordered by the board, to furnish medical and surgical aid, including hospital service, not exceeding \$25 in value. Funeral expenses not to exceed \$100 are to be paid in fatal cases. Benefits are based on wages, 50 per cent of the weekly rate being payable, a maximum benefit of \$10 and a minimum of \$4 per week being established, but if the wages are less than \$4 full wages are to be paid. After 270 weeks of total disability 20 per cent of the wages is fixed as the rate of payment for life if the disability is permanent, with a maximum of \$6 and a minimum of \$2 per week, unless that exceeds the amount of wages paid, in which case actual wages are to be paid.

Partial disability is compensated by the payment of 50 per cent of the wage loss for not more than 270 weeks, a schedule being enacted for designated injuries. Death benefits vary from 25 per cent to a widow, widower, or single orphan to 60 per cent as a maximum, benefits to cease on the death or remarriage of a widow or widower or the widower becoming capable of self-support; the rights of children terminate on reaching the age of 16. Provision is made also for dependent parents and brothers and sisters under 16 years of age where no nearer dependents exist.

Periodical payments may be commuted by the board to a lump sum; the employer may also at any time deposit with an approved trust company a sum equal to determinable future installments, the same with interest to be paid to the beneficiaries on orders from the board.

The act is to be administered by an industrial accident board appointed by the governor, consisting of three persons appointed for terms of six years, the first appointments being for two, four, and six years, respectively. The board is also to inquire into the causes and results of industrial accidents, study methods of safeguarding against accidents, and the subject of fair compensation for injuries, and make

reports and recommendations to each session of the general assembly. Revision of awards and appeals to courts are provided for, and the board is to approve the fees of attorneys and physicians for services, and may suspend payments to injured persons refusing suitable employment when offered.

The scope of the Utah statute is quite similar to that of the Delaware law noted above, i. e., it is of general application without regard to hazard, but excludes agricultural and domestic service and casual employees. It differs, however, in including every person in the service of the State and its municipalities, including the police and fire departments of cities and towns, but excluding elective officials and those receiving more than \$2,400 per annum salary. Employers having less than four employees are not covered by the act, but have the right to come thereunder by complying with its provisions. A special provision is also made with regard to railroads engaged in intrastate and also in interstate commerce, the law applying only to such intrastate work as is clearly distinguishable, and then only when there has been a voluntary acceptance of the act by the employer and employees working only in the State. Except as above noted, the act is compulsory in its application. Occupational diseases are excluded, only personal injuries by accident arising out of and in the course of employment being compensated.

Benefits are payable for injuries causing disability for a period exceeding 10 days or death, the rate being 55 per cent of the average weekly wages. For partial disabilities 55 per cent of the wage loss is payable; a maximum payment of \$12 per week is fixed for these benefits, not to exceed six years. A schedule of awards for specific injuries is enacted, the benefits amounting to 55 per cent of the average weekly wages for specified periods. For temporary total disability the same rates, period, and maximum apply; \$7 is fixed as the minimum, the total not to exceed \$4,500. Where total disability is permanent, 55 per cent of the wages is payable for 5 years, and 40 per cent thereafter until death, maximum and minimum rates being fixed at \$15 and \$5 per week, respectively.

Death benefits are limited to \$4,500 maximum and \$2,000 minimum where there are persons wholly dependent, the weekly payments being fixed within the same limits as to amount as for total disability, the term being limited to six years. Apportionments are to be made by the administrative commission. Payments to beneficiaries cease on their death or marriage, those to children terminating at the age of 18 for females and 16 for males unless mentally or physically incapacitated from earning. Where there are no dependents, the State insurance fund is to be paid the sum of \$750 unless the employer was insured in that fund. Funeral expenses are payable in case of fatal

injuries in an amount not exceeding \$150; medical, hospital, etc., services may also be supplied to an extent which the employer, insurance carrier, or State insurance fund may deem proper, in an amount not exceeding \$200. The industrial commission has power to adopt rules and regulations regarding such services, and for the payment therefor.

The administration of this act is committed to an industrial commission of broad general powers, superseding other State authorities charged with duties as to inspection, labor statistics, arbitration of labor disputes, etc. The commission consists of three members appointed by the governor, two of the first body to be appointed for a term of two years and one for four years, subsequent appointments to be for terms of four years. A State insurance fund is to be maintained, and all employers must insure in this fund, in a stock or other insurance company, or furnish satisfactory proof of financial ability to make direct payments of their compensation liabilities. A deposit may be required in the last case, and persons of this class are required to pay a tax corresponding to the tax paid by insurance companies on their premiums. The commission is authorized to classify employments, fix premium rates according to the hazards of the various classes, and is required to maintain a surplus fund. Accounts are to be kept for the various risk classes. Companies writing compensation insurance are subject to the rules laid down by the commission, and insolvency of the employer does not relieve them from liability on their policies.

Employers failing to comply with the provisions of the act may be proceeded against in an action for damages without the common-law defenses; or their employees may submit their claims to the State commission, which shall decide the case, benefits awarded to be paid within 10 days or be recoverable in an action by the State, with an added penalty of 50 per cent.

The provisions of the act are to be exclusive except in cases of the employer's willful misconduct. Commutation of payments into lump sums is provided for. If any portion of the act is declared unconstitutional, such decision shall not affect the validity as a whole.

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#### METAL-MINE ACCIDENTS IN THE UNITED STATES DURING 1915.

The Bureau of Mines <sup>1</sup> has recently published the data it has compiled relative to accidents in metal mines in the United States during the calendar year 1915. In the compilation of these figures the size of the mines was not considered and the figures cover reports from prospectors, development companies, and producing mines.

<sup>1</sup> Bureau of Mines, Department of the Interior. Technical paper 168. Metal-mine accidents in the United States during the calendar year 1915. 114 pp.

The tabulated statistics represent 4,322 operators who actually worked their mines during the year. As far as could be ascertained, all of the large companies made out detailed reports, so that measured on the basis of production, the statistics are representative of the industry.

The tables are arranged so as to represent five divisions of the mining industry as follows: Copper mines, 548 operators; gold, silver, and miscellaneous metal mines, 3,120 operators; iron mines, 191 operators; lead and zinc mines (Mississippi Valley), 241 operators; and nonmetallic mineral mines (not including coal mines), 222 operators.

Many of the States now have compensation laws, and in order to conform with their classifications the bureau's classification of serious and slight injuries for 1915 is on a 14-day (2-week) basis instead of 20 days, as in previous years. The new classification of injuries includes three types, as follows: (1) Fatal; (2) serious (time lost, more than 14 days), (*a*) permanent disability, total, and partial; (*b*) others; (3) slight (time lost, 1 to 14 days, inclusive).

Permanent total disability means loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis or other condition permanently incapacitating a workman from doing any work at a gainful occupation. Permanent partial disability means loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

As a mine can be operated only about 300 days in a year, if Sundays, holidays, and a few days for repairs be excluded, a comparison of the accident and fatality rates at metal mines in the various States has been made on that basis and is shown in the following table. A 300-day year is used, as it corresponds closely with actual conditions at metal mines, the average number of working days per year being 281 over a five-year period. The average number of days actually worked at the mines in the various States during the year 1915 ranged from 172 in Kansas to 335 in Utah, the average for the United States being 280 days. A true comparison can not be made without reducing the number of days to a common denominator. In order to obtain the number of 300-day workers, it is necessary to know the total number of shifts (days) of labor performed during the year. A still better comparison could be made if data showing the actual number of hours' labor performed were available.

The first column under "Number of fatalities" gives the rate as obtained from the actual number of men reported as working, and the second column gives the rate when the number of employees is reduced to the equivalent of 300-day workers.

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FATALITY AND INJURY RATES BASED UPON ACTUAL TIME MEN WERE EMPLOYED, AND CORRESPONDING RATES BASED UPON A UNIFORM YEAR OF 300 WORKING DAYS, METAL MINES, UNITED STATES, 1915.

State.	Average days worked, 1915.	Men employed.		Number of fatalities per 1,000 employed.		Number of serious injuries per 1,000 employed.		Number of slight injuries per 1,000 employed.	
		Actual number.	Equivalent in 300-day workers (calculated).	As reported.	On 300-day basis.	As reported.	On 300-day basis.	As reported.	On 300-day basis.
Alabama	269	4,956	4,438	2.42	2.51	85.75	89.06	217.11	225.48
Alaska	211	8,125	5,713	2.71	3.85	11.94	16.98	51.08	72.64
Arizona	295	14,057	13,839	2.92	2.96	88.00	89.39	268.69	272.92
Arkansas	238	685	544	1.46	1.84	13.14	16.54	29.20	36.76
California	304	10,414	10,545	4.71	4.65	60.50	59.74	220.66	217.92
Colorado	303	6,369	6,435	7.69	7.61	35.33	34.97	156.07	154.47
Connecticut	246	108	88	.....	.....	18.52	22.47	.....	.....
Florida	254	1,737	1,473	1.73	2.04	6.91	8.15	94.42	111.34
Georgia	213	295	209	3.39	4.78	10.17	14.35	81.36	114.83
Idaho	267	5,190	4,623	4.82	5.41	41.43	46.51	145.66	163.53
Illinois	299	384	383	7.81	7.83	26.04	26.11	106.77	107.05
Iowa	220	214	157	9.35	12.74	14.02	19.11	299.07	407.64
Kansas	172	435	249	4.60	8.03	29.89	52.21	91.95	160.64
Kentucky	242	174	140	.....	.....	.....	.....	51.72	63.83
Maine	189	105	66	.....	.....	19.05	30.30	9.52	15.15
Maryland	212	223	158	.....	.....	.....	.....	17.94	25.32
Massachusetts	237	86	68	.....	.....	11.63	14.71	116.28	147.06
Michigan	289	27,512	26,474	3.60	3.74	74.44	77.36	209.84	218.06
Minnesota	273	14,572	13,264	2.47	2.71	58.06	63.78	147.06	161.57
Missouri	262	9,570	8,354	4.60	5.27	23.71	27.17	189.24	216.76
Montana	296	13,846	13,679	4.48	4.53	36.76	37.21	215.01	217.63
Nevada	302	5,713	5,753	3.15	3.13	53.04	52.67	124.45	123.59
New Hampshire	247	41	34	.....	.....	.....	.....	.....	.....
New Jersey	309	1,745	1,798	5.16	5.01	53.30	51.72	142.12	137.93
New Mexico	275	2,732	2,504	1.46	1.60	32.58	35.54	127.01	138.58
New York	270	2,558	2,301	3.13	3.48	39.87	44.33	146.60	162.97
North Carolina	237	627	495	.....	.....	33.49	42.42	181.82	230.30
Ohio	251	265	222	7.55	9.01	37.74	45.05	71.70	85.59
Oklahoma	240	855	683	4.68	5.86	33.92	42.46	114.62	143.48
Oregon	209	1,070	745	1.87	2.68	9.35	13.42	32.71	46.98
Pennsylvania	249	384	318	2.60	3.14	13.02	15.72	7.81	9.43
South Carolina	240	487	390	.....	.....	4.11	5.13	8.21	10.26
South Dakota	325	1,796	1,945	3.34	3.08	66.26	61.18	257.24	237.53
Tennessee	251	2,821	2,363	2.84	3.39	35.09	41.90	182.56	217.94
Texas	306	294	300	3.40	3.33	13.61	13.33	149.66	146.67
Utah	335	5,449	6,086	4.22	3.78	43.49	38.94	250.87	224.61
Vermont	281	98	92	10.20	10.87	51.02	54.35	40.82	43.48
Virginia	220	1,976	1,450	.51	.69	9.11	12.41	75.40	102.76
Washington	158	715	377	5.59	10.61	19.58	37.14	16.78	31.83
Wisconsin	280	2,651	2,476	3.02	3.23	62.62	67.04	165.60	177.30
Wyoming	230	386	296	5.18	6.76	10.36	13.51	10.36	13.51
Other States	354	398	470	.....	.....	17.59	14.89	243.72	206.38
Total	280	152,118	141,997	3.64	3.89	51.61	55.29	180.41	193.27

Comparison of fatality rates in 1915 in the various branches of the mineral industry in the United States, on both the actual-time basis and on the 300-day basis, is given in the accompanying table:

FATALITY RATES IN DIFFERENT BRANCHES OF MINERAL INDUSTRIES IN 1915, COMPARED ON A 300-DAY BASIS.

Length of shift not considered.]

Branch of mineral industry.	Actual days active.	Men employed.		Days of labor performed.	Killed.	Number killed per 1,000 employed.	
		Actual number.	Equivalent in 300-day workers (calculated).			On actual-time basis.	On 300-day basis.
Metal mines.....	280	152,118	141,997	42,599,015	553	3.64	3.89
Ore-dressing plants.....	309	18,564	19,107	5,732,184	30	1.62	1.57
Smelting plants.....	347	31,327	36,262	10,878,486	38	1.21	1.05
Coal mines.....	209	734,008	511,598	153,479,495	2,269	3.09	4.44
Coke ovens:							
Beehive.....	262	17,699	15,436	4,630,661	10	.57	.65
By-product.....	359	13,361	15,979	4,793,815	28	2.10	1.75
Quarries.....	246	100,740	82,447	24,734,224	148	1.47	1.80
Total.....	231	1,067,817	822,826	246,847,880	3,076	2.88	3.74

#### FATAL ACCIDENTS DUE TO FALLS IN NEW YORK STATE.

In a special bulletin issued in March, 1917, under the direction of the New York Industrial Commission, by the State department of labor, setting forth the frequency, causes, and prevention of fatal accidents due to falls in building work,<sup>1</sup> the statement is made that although approximately four times as many people are employed in the factories of New York State as are employed in building and construction work, yet, during the four years ending September 30, 1914, more fatal accidents occurred in building and construction work than in factories. In the former there were 1,641 fatal accidents and in the latter there were 1,285, including 204 fatalities resulting from three large factory fires. Of the 1,641, 545, or 33.2 per cent, were due to falls, and approximately 37 per cent of these were falls from girders, joists, roofs, etc.

The pamphlet traces the course of legislation intended to promote safety in building operations, quoting from the general labor law to show that its provisions are aimed at the kinds of hazards found in construction work and suggesting that the number of accidents recorded would indicate that the provisions have largely failed in their purpose. Evidence is offered to show that the requirements of law "have been very commonly disregarded." Since 1913, it is stated, an investigation of 505 buildings under construction in New York City made during the 9 months ending June 30, 1916, disclosed

<sup>1</sup> New York. Department of Labor. Special bulletin issued under the direction of the industrial commission, No. 80, March, 1917. Fatal accidents due to falls in building work, their frequency, causes, and prevention. Prepared by the Bureau of Statistics and Information. [Albany, 1917.] 26 pp.

that 309 had unguarded hoistways and elevator shafts, 236 had unguarded scaffolds, and 157 were not underfloored as required by law.

One reason given for lack of enforcement of these provisions of the labor law is divided or double jurisdiction as between local and State authorities and the fact that so far as State authority is concerned there has been no systematic performance of duty to enforce. Another reason suggested is the failure of the policy of dependence upon complaints by employees to bring violations of law to light. Efforts to prevent falls in building work, according to the report, may be forwarded by careful study of, and adequate provision for, law enforcement and an examination of the present provisions of law to see if they are adequate even if observed.

The fact that with but few modifications these provisions date back almost, if not quite, 20 years, raises a fair presumption that amendments of supplemental regulations ought now to be added, especially in view of the great strides in knowledge and technique of safety work in the last few years.

Examples of such possible supplemental regulations make up the remainder of the report.

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#### SAFETY BULLETIN SERVICE OF THE NATIONAL SAFETY COUNCIL.<sup>1</sup>

An interesting feature of organized industrial accident prevention work is the bulletin service of the National Safety Council. More than 3,100 employers subscribe to the service, which is mutual in character, and the bulletins reach nearly 4,000,000 employees each week. Beginning three or four years ago the first attempt was to distribute among the members of the council such copies of the publications of the members as were available. The increasing membership and demand for these bulletins pointed the way to the need for brief and illustrated posters touching upon all phases of the accident problem. At present more than 5,000,000 bulletins are distributed a year by the council, this number not including thousands of copies issued as reorders for special service.

A popular feature of the work consists in the taking of photographs of actual conditions and surroundings of accidents and near accidents, unsafe practices, and hazardous locations and working these into graphic stories of human interest. A thousand students of safety are actively on the lookout for good poster material of this character.

Almost with the issuance of the first bulletin came the query: "What particular industrial hazard should receive first attention? Be specific. What can be done to prevent accidents?" The council answered with a dozen carefully prepared bulletins showing accident statistics and giving careful classifications as to causes.

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<sup>1</sup> This account is condensed from a statement furnished the bureau by Mr. W. H. Cameron, general manager of the National Safety Council.

Protection against eye injuries was the first specific subject to be treated in the new popular manner of bulletin board presentation. This bulletin met with instant appreciation and the topic was enlarged upon and given intensive study. Forty bulletins on this important subject are now carried in stock and others are in preparation.

Improper clothing in the shops was another early subject to be covered. Dangers were pointed out and suggestions offered for increased safety. Flowing neckties, loose jumpers, and similar unsafe practices were presented forcibly to the "men on the job."

Street hazards were touched upon, and automobile suggestions and regulations were given a place in the list. Danger zones near schools and factories were advocated, and proved a field for volunteer work for hundreds of active minds. School children were taught the rudiments of safety work, and to-day in many cities it is recognized as an important factor in school work. Special bulletins and pamphlets are written, and exercises and programs are prepared for use in the public schools of the country.

The publication of a colored bulletin showing a blood-poisoned hand in all its ghastliness was one of the early efforts to call the attention of the workman to habits of care and watchfulness, and with it went the positive instruction to "go to the doctor with every injury." Of course, first aid had been preached for years in a haphazard way, but the initiative was largely left to the workman, rather than any positive warning and order from the management.

Specific types of guards for machinery were a natural outgrowth of the generalities covered in the earlier publications of the council. This series of bulletins embraces a very wide variety of subjects.

One series of bulletins naturally suggested another, but before the work had progressed very far the application of business principles to their utilization suggested a very important addition to the service of the council, namely, to answer the constant query, "How is the employer to assure himself that his workmen are profiting by the accident-prevention work installed by him in the shape of machine guards, ventilating devices, washing facilities, etc.?" The answer was attempted by compiling, analyzing, and digesting the experience of several hundred employers and the formulation of a new series of bulletins which showed methods of organizing shop safety committees, suggested programs for safety meetings, outlined field-day exercises, etc.

While much time and effort has centered on shop practices and material safeguards, scarcely less attention has been given to health measures. Care of the organs of the body has been the subject of many bulletins, and cleanliness has been emphasized. Deep breathing, care of the teeth, and the fundamentals of hygiene each has been the subject of educational placards.

The grouping of subjects into more elaborate practice or specification form is now well under way, and the periodical of the National Safety Council, known as "Safe Practices," offers the latest information regarding accident prevention. This periodical offers text, compilation, original drawings, and photographs of the best safety standards on selected subjects for the guidance of executives, foremen, and safety committee men. The latest number—and one that is fairly representative—embraces 16 pages of text and illustration on "Belt shifters," "Ladders," "Stairs and stairways," "Cranes and crane practices," "Boiler rooms," etc., have been issued, and a dozen other subjects are in course of formulation.

Fire prevention has received careful consideration and has brought home to the man in the shop a realization of the tremendous waste in life and property through carelessness and heedlessness in workaday life. "Fire and accident prevention" day, jointly celebrated by the National Association of Fire Prevention and the National Safety Council, is observed in all the States of the Union.

CLASSIFICATION OF HEALTH AND SAFETY BULLETINS ISSUED BY THE NATIONAL SAFETY COUNCIL, AND THE NUMBER OF BULLETINS UNDER EACH.

	Number.		Number.
Accident statistics.....	16	Compressed air.....	3
Acid handling.....	6	Contests for bulletin material.....	3
Admonitions.....	30	Contest for poster suggestions.....	1
Alcohol.....	8	Contest for reducing accidents.....	1
Automobiles.....	11	Cooperation.....	3
Bearings, self-oiling.....	1	Coupling.....	7
Belts and belting.....	9	Cranes.....	10
Boilers.....	1	Drill presses.....	1
Books for the accident preventionist.....	4	Drinking fountain.....	1
Bulletin boards.....	5	Drum winder.....	1
Burns.....	9	Electricity.....	6
Burns, acid.....	2	Electric railroads.....	2
Car blockers.....	1	Electric vehicle.....	1
Carboy hat.....	1	Elevators.....	3
Carboy inclinor.....	2	Emblem, universal danger.....	2
Cartoons.....	19	Employment.....	1
Causes of accidents.....	6	Eye protection.....	30
Chains.....	4	Falls (materials, e.c.).....	6
Chemical industries.....	2	Falls (personal).....	12
Children, safety work with.....	13	Fire protection.....	9
Chip guards.....	4	Flies.....	1
Chisel bar.....	1	Foremen.....	5
Clothing.....	8	Foundries.....	2
Clothing, loose.....	7	Gasoline.....	4
Coke oven.....	1	Gears.....	2
Colored bulletins.....	31	Gloves.....	4
Committees, safety.....	4	Grinding wheels.....	2
		Grinding wheels, swing.....	1

	Number.		Number.
Hammers.....	2	Public utilities.....	2
Hand leathers.....	4	Punch presses.....	3
Handling materials, lifting.....	2	Railroad crossings.....	3
Handling materials, loading and unloading.....	7	Railroad trespassing.....	4
Handling materials, piling.....	10	Railroads.....	10
Hands, mutilated.....	10	Riveting.....	2
Health service.....	15	Ropes.....	1
Helmet, acid-proof.....	1	Rule books.....	1
Hoisting.....	5	Running boards.....	1
Hooks.....	2	Sanitation.....	1
Horse play.....	3	Saws.....	2
"Housekeeping".....	18	Scaffolds.....	5
Infantile paralysis.....	1	Set screws.....	1
Infections.....	15	Shears.....	4
Inspection.....	7	Shoes.....	6
Iron and steel industries.....	2	Signs.....	6
Ladders.....	5	Slogans.....	16
Laundry.....	1	Spitting.....	1
Lodgemen.....	2	Stairs and stairways.....	3
Logging.....	2	Strains.....	2
Machinery, adjusting machines at work.....	2	Street traffic.....	5
Machinery, cleaning, oiling, and repairing.....	4	Suggestion boxes.....	1
Machinery, guards.....	3	Suggestions, safety.....	2
Machinery, operating.....	3	Switches, electric.....	2
Magazine, employees'.....	1	Switching, railroad.....	2
Mines and mining.....	2	Teeth.....	3
Moving-picture films.....	1	Textile industries.....	2
Nails.....	6	Thrift.....	1
National Safety Council.....	1	Tools.....	7
Near accidents.....	1	Torches, gasoline.....	1
Office safety.....	2	Towels.....	2
Oilers.....	1	Trucks, hand.....	2
Organization, safety.....	17	Trucks, motor.....	1
Paper and pulp industries.....	2	Ventilation.....	1
Pay envelopes.....	2	Welfare work.....	1
Prizes and premiums.....	2	Wheelbarrows.....	2
		Window washers.....	1
		Wood-boring machine.....	1
		Wrenches.....	1

#### ANTHRACITE COAL AGREEMENT INCREASES WAGES.

In an effort to bring to a higher standard of wage the low paid men in the anthracite field an agreement was entered into on April 25, 1917, between the anthracite coal operators and the miners by which the latter are to receive increases in wages ranging from 10 to 35 per cent, representing approximately 20 per cent increase in the labor cost to the producers. The new rates are permanent, not a bonus, and will remain in effect until April 1, 1918, expiring at the same time as the bituminous contract negotiated a few days before.

Following the signing of the agreement, President John P. White, of the United Mine Workers of America, said: "I feel confident that the agreement reached will alleviate the skyrocketing cost of food and clothing products sufficiently to tide the mine workers of the anthracite district over an unprecedented crisis."

The text of the agreement is as follows:

Whereas, on May 5, 1916, an agreement was entered into by the parties hereto covering wages and working conditions in the anthracite field of Pennsylvania for the four-year period beginning April 1, 1916, and ending March 31, 1920; and

Whereas, by reason of conditions that have arisen as a result of the war, the parties hereto have deemed it advisable and necessary to increase the wage compensation provided in said agreement as hereinafter more specifically set forth: Therefore this agreement witnesseth—

First. That, for the period May 1, 1917, to March 31, 1918, the compensation paid employees in the anthracite field shall be increased as follows:

(a) Contract machine and hand miners shall be paid an advance of 10 per cent on their gross earnings.

(b) Consideration miners shall be paid an advance of 10 per cent on their earnings, based on the rates now in effect.

(c) Contract miners' laborers and consideration miners' laborers shall be paid an advance of 10 per cent on their earnings based on the rates now in effect. Day machine miners' laborers receiving not less than \$2.72 per day shall be paid an advance of 10 per cent of earnings.

(d) Company men now receiving \$1.54 or more per day shall be paid an advance of 36 cents per day for each day worked.

(e) All employees paid by the day and now receiving less than \$1.54 per day shall be paid an advance of 30 cents per day for each day worked.

(f) Monthly men coming under the agreement of May 5, 1916, shall be paid an advance of 36 cents per day for each day worked.

(g) The advance of 36 cents per day and 30 cents per day above provided are to be applied to a day, whether eight hours or more, as established under the agreement of May 5, 1916, and proportionate part of a day to be paid a proportionate part of the advances herein provided.

Second. It is distinctly understood and agreed between the parties hereto that because of the situation that has arisen as a result of the war and the needs of the Nation in the matter of fuel supply there shall be no unnecessary shutdowns and that the employees will give that full cooperation necessary to maintain the production of the mines at their fullest capacity.

Third. It is further agreed that, except as hereinbefore provided, all of the covenants and conditions of the agreement of May 5, 1916, shall remain in full force and effect up to and including March 31, 1920.

In witness whereof the parties hereto have caused this agreement to be properly executed this 25th day of April, 1917.

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#### BITUMINOUS COAL AGREEMENT INCREASES WAGES.

The wages of miners in the central bituminous field, comprising the States of Ohio, Indiana, Illinois, and western Pennsylvania, have been advanced approximately 20 per cent as the result of the following agreement signed on April 16 by representatives of the operators

and miners, which applies to the coal-wage contract until the end of March, 1918:

First. That pick and machine mining be advanced 10 cents per ton in the States and districts comprising the central competitive field, and that the screen-coal mining prices in the block-coal field of Indiana be advanced in proportion to the mine-run prices herein agreed to.

Second. That all day labor now receiving \$2.98 and \$3 per day be advanced to \$3.60 per day.

Third. That monthly men and all other classes of labor employed in and around the mine be advanced 60 cents per day, except as follows:

Trappers shall receive \$1.90 per day and all boys now receiving \$1.50 per day or less shall be advanced to \$1.90 per day.

No advance shall be paid on dead work or yardage.

This advance shall become effective April 16, 1917, and continue until March 31, 1918.

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#### MATERNAL MORTALITY—A FIELD FOR CONSERVATION.

It is a rather curious fact that while for years there has been a strong and growing interest in all that pertains to infantile mortality, the question of maternal mortality in childbirth has been almost untouched. Recently an English report on the subject was issued,<sup>1</sup> and now, avowedly inspired by that, comes a study of the matter in the United States, issued by the Children's Bureau.<sup>2</sup> This study consists of three parts: A general discussion of the subject, an analysis of methods and statistical data used in the report, and general tables concerning various aspects of the subject both in the United States and some foreign countries.

The general discussion brings out clearly the unsatisfactory state of our knowledge and practice respecting deaths in childbirth. The so-called "registration area," within which the registration of deaths is fairly complete, included in 1913 only 65.1 per cent of the population of the United States. If deaths in childbirth occurred in the same ratio outside the registration area as within it, then in 1913, which may fairly be taken as a representative year, 15,376 women lost their lives from this cause. There is reason to suppose that this is an understatement of the case, since it is not an uncommon matter for deaths really due to pregnancy or childbirth to be reported under some indefinite term which obscures the real cause, and since a large proportion of the colored, among whom the death toll from this cause is much heavier than among the whites, live outside the registration area. Fifteen thousand a year seems a very conservative estimate of the lives annually lost in childbirth or from causes directly connected with it.

<sup>1</sup> See MONTHLY REVIEW, January, 1917, pp. 75-84, Maternal Mortality in Connection with Childbearing.

<sup>2</sup> Maternal Mortality From All Conditions Connected with Childbirth, by Grace L. Meigs, M. D., Children's Bureau, U. S. Department of Labor, Bureau Publication No. 19, 1917. 66 pp.

These deaths are divided into two classes, those due to puerperal septicemia and those due to all other diseases and accidents of pregnancy and confinement. Deaths of the first class are almost wholly preventable, while deaths of the second class may be very much reduced in number by proper antenatal care and skilled attendance at confinement. In spite of this deaths from childbirth do not seem to be decreasing. More women die in the United States from the diseases of pregnancy and confinement than from any other one cause, excepting only tuberculosis. Since 1890 the death rate from tuberculosis has decreased by 41 per cent, from pneumonia by 29 per cent, from typhoid fever by 61 per cent, and from diphtheria by 81 per cent, but the death rate from diseases connected with childbirth which, in 1890, stood at 15.3, in 1913 was 15.8. In other words, the advance of applied medical science, which has cut the death rate from typhoid and diphtheria by well over one-half, has done absolutely nothing to reduce the proportionate number of deaths from childbirth.

This failure to cut down the number of deaths, many of which are entirely preventable, is due, it is explained, to a number of causes. There is a general ignorance of the seriousness of the matter, owing to which there has been no widespread movement to secure proper care and attendance for women at the time when it is so much needed. The fees paid for confinement cases are usually so small that a practitioner can hardly give any but the most superficial care, except at a direct loss to himself. There is a scarcity of hospitals in which complicated cases can receive the full care they need, and, in the remoter rural districts, there is often an utter lack of professional attendance of any kind. When a trained nurse is not employed, a doctor has no control over the care the patient receives, and the better class of doctors are naturally reluctant to assume responsibility for a case in which they can not make sure the sufferer receives the treatment they know is necessary. Finally, there is on the part of the patient and her family a failure to comprehend that childbearing is a matter of serious peril, demanding skilled attention during pregnancy, as well as at the time of confinement. It is looked upon as a natural function in the course of which some deaths must occur, and the patient gets along as best she can with one or two visits from a doctor or the aid of a midwife at the crisis, or sometimes with no help except what her own family or a neighbor can render.

One striking fact brought by the report is the difference between the death rates of white and colored women from these diseases. For the four years, 1910 to 1913, inclusive, for which the death rates are comparable, the figures for the two races within the registration area were as follows:

DEATH RATES IN DEATH-REGISTRATION AREA OF THE UNITED STATES FROM DISEASES CAUSED BY PREGNANCY AND CONFINEMENT, BY COLOR OF DECEDENT, 1910-1913.

Year.	Rate per 100,000 of population.					
	Total.		Puerperal septi- cemia.		All other.	
	White.	Colored.	White.	Colored.	White.	Colored.
1910.....	15.3	25.6	7.0	13.1	8.3	12.5
1911.....	15.5	26.8	7.1	13.5	8.4	13.3
1912.....	14.5	26.0	6.2	12.6	8.3	13.4
1913.....	15.2	26.1	6.9	11.5	8.3	14.6

The total death rate of the colored from diseases of pregnancy and confinement is about two-thirds greater than that of the white, and their rate from puerperal septicemia is almost twice as great. The interesting point, however, is that while the rate of the white from this last cause was nearly the same at the beginning and end of the four years covered, the rate of the colored showed a decline of nearly one-eighth (12.2 per cent). No explanation of this can be deduced from the figures. It may be a mere accidental variation, which will not be maintained through any great length of years, or it may represent the effect of any one of several causes. A peculiar feature of the case is that this decline is coincident with a rise in the total death rate from diseases connected with childbearing.

The main points impressed upon the reader of this study are that our knowledge of this whole subject is woefully incomplete; that there is a large yearly sacrifice of maternal life, of which a part, and probably much the larger part, is wholly unnecessary; that preventive medical science seems to have overlooked this field almost altogether; and that throughout the community as a whole there is a curious ignorance of the situation, if not an entire indifference to it. It would seem that the movement for the conservation of natural resources might well take some account of the lives needlessly lost in childbirth, especially as these are necessarily deaths among women who have not nearly outlived their time of active service. The first necessity for any intelligent movement to improve this situation is fuller knowledge of what the facts really are, and preliminary to obtaining this is the need of arousing public interest in the matter. It is in this direction that the report under consideration will find its field of greatest usefulness.

## CHILD MORTALITY IN ENGLAND AND WALES.

[Reprinted from the British Board of Trade Labor Gazette, April, 1917.]

A report<sup>1</sup> on child mortality in England and Wales for the period 1911-1914 has recently been issued as a supplement to the Forty-fifth annual report of the local government board for 1915-16.

This volume contains an analysis of the incidence and causation of deaths occurring in England and Wales during infancy and in the next four years of life, with special reference to the deaths at these ages in the 245 chief provincial towns and in the 29 metropolitan boroughs.

The statistics show that the death rate in England and Wales in 1911-1914 for children under 5 years was 164 per 1,000 births, the corresponding rate for London, great towns, smaller towns, and rural districts being 164, 188, 167, and 125, respectively. In four of the metropolitan boroughs, in 27 large towns, and in 27 smaller towns the rate exceeded 200 per 1,000. The rate, moreover, showed a wide range, being three times as high in some areas as in others. In the metropolitan boroughs it varied from 112 in Hampstead to 241 in Shoreditch, and while, in Bournemouth, Southend-on-Sea, Hastings, Eastbourne, and Bath the rate ranged between 109 and 114, in Burnley, Wigan, and Middlesbrough it was over 250.

Thus it is evident that the centers of excessive child mortality are generally those in which the chief industries of the country are carried on. A great reduction in the rate has, however, already been secured in some of the chief industrial centers, and the figures show great variations in towns having the same or closely allied industries.

The causes which contribute toward an excessive child mortality are dealt with in a special section of the report. They include poverty, carelessness or neglect of mothers, often induced by alcoholism or by overwork, lack of medical care and nursing, overcrowding, defective sanitation, and the industrial employment of married women. Among these, overcrowding is shown to have an important determining influence. As a rule, child mortality is heavier in the larger than in the smaller towns, but there is no necessary connection between the size of a town and the amount of loss of child life. The true test of overcrowding is the population per room. In this connection the report gives tables showing the 40 great towns and the 40 smaller towns which have the highest and the lowest child mortality, and their relative conditions as to overcrowding. With some exceptions these figures show that in the towns, both large and small, in which the child mortality was low, the proportion of overcrowded tenements was low. Further, in the towns, both large and small, having a high child mortality there is usually a high proportion

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<sup>1</sup> Cd. 8496. Price 1s.

of overcrowded tenements. The statistics, however, do not show an exact correlation between the degree of overcrowding in these towns and the child mortality rate, and, further, such large towns as Preston, Manchester, Rhondda, and Nottingham, and smaller towns as Stalybridge, Ashton-under-Lyne, Chorley, and Hyde show an excessive child mortality rate without a high proportion of overcrowding.

The lack of exact relation referred to above between overcrowding and excessive child mortality is due largely to differences in the associated sanitary conditions. Overcrowding, combined with lack of cleanliness and ventilation, implies chronic exposure to a stuffy, dusty atmosphere with excessive changes of temperature; it also implies that food is stored under unsatisfactory conditions, while in tenement dwellings the storage of house refuse as well as of food in and close to the living room adds to the possibilities of mischief. Poverty is, of course, responsible for some of these conditions, but, as pointed out in the report, if the conditions were improved the evils of poverty would be reduced.

As regards the connection between the industrial employment of married women and an excessive child mortality, the general conclusion arrived at is that the effects of this factor are concealed very frequently by the preponderant action of other adverse sanitary and social influences. The statistics show that although child mortality is very excessive in many textile towns, such as Burnley, Wigan, Ashton-under-Lyne, and Farnworth, in which there is a high proportion of occupied married women, it is as excessive in some towns in which married women are seldom employed industrially, such as Ince-in-Makerfield, Middlesbrough, St. Helens, and Barnsley.

It would appear that even in the most backward of the towns and boroughs much saving of child life has already been secured. It is estimated that if the average experience of the years 1901-1910 had continued, the number of deaths at ages 0-5 in the four years 1911-1914 would have been nearly 719,000, or 144,000 more than the 575,000 deaths which actually occurred.

But there is evidently still a large mass of preventable mortality. The report states that in every area a very high proportion of the total present mortality can be obviated, and it is suggested that the reduction of this evil to one-half of its present size within the next few years is well within the range of administrative action.

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#### CAUSES OF DEATH, BY OCCUPATION.

Based upon 94,269 deaths of male and 102,467 deaths of female industrial policy holders, 15 years of age and over, as recorded in 1911, 1912, and 1913, by the Metropolitan Life Insurance Company,

tuberculosis caused the death of 20.5 per cent of the former and 14.4 per cent of the latter, while organic diseases of the heart were responsible for 12 per cent of the deaths of males and 14.8 per cent of the deaths of females. The average age of men dying from tuberculosis was 37.1 years and of women, 34.1 years. Of males the lowest average age at death, 31.1 years, was among those who died from typhoid fever, and of females the lowest average age at death, 29 years, was among those who died at childbirth. By occupation, the lowest average age at death was 36.5 years among bookkeepers and office assistants and the highest average age was 58.5 years among farmers and farm laborers.

These facts are brought out in tabular form in Bulletin 207 entitled "Causes of death, by occupation," a study made by Louis I. Dublin and recently issued by this bureau.

Tuberculosis was responsible for the largest number of deaths among clerks, bookkeepers and office assistants (35 per cent); compositors and printers (34.1 per cent); gas fitters and steam fitters (31.6 per cent); longshoremen and stevedores (29.2 per cent); teamsters, drivers and chauffeurs (28.2 per cent); saloonkeepers and bartenders (26 per cent); machinists (25 per cent); cigar makers and tobacco workers (24.1 per cent); textile mill workers (22 per cent); iron molders (21.9 per cent); painters, paper hangers, and varnishers (21.9 per cent); masons and bricklayers (19 per cent); bakers (18.8 per cent); laborers (16.4 per cent); blacksmiths (14 per cent). Accidental violence was responsible for the largest number of deaths among railway enginemen and trainmen (42.3 per cent); railway track and yard workers (20.8 per cent); and coal miners (20.4 per cent); while the largest number of farmers and farm laborers (16.4 per cent) died from organic diseases of the heart, due to the facts that the prevalence of these diseases increases with age and that the average age at death of those in this group is higher than any other group.

Similarly, among women the largest number of housewives and housekeepers (15.2 per cent) died from organic diseases of the heart for the same reasons stated above, while tuberculosis took the largest proportion of clerks, bookkeepers and office assistants (42.4 per cent); clerks and saleswomen (38.7 per cent); textile mill workers (35.5 per cent); dressmakers and garment workers (27.8 per cent); and domestic servants (15.9 per cent). The average age at death was 26.1 years among clerks, bookkeepers, and office assistants, and 53.3 years among housewives and housekeepers.

The statistics given in the bulletin indicate that respiratory diseases are prominent where the industrial worker is exposed to colds, drafts, and dampness (as among masons and bricklayers) or to violent changes of temperature (as among teamsters, drivers, and chauffeurs).

Organic diseases of the heart have a high proportional frequency in cases where the work is heavy and the cardiac powers are overtaxed (e. g., among iron molders). Suicide is frequent where depressing influences are present (as among bakers and cigar makers). Typhoid fever is high where questionable water supplies are used (as among enginemen and trainmen, farmers, iron molders, and laborers).

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#### UNITED STATES BOYS' WORKING RESERVE.

The United States Department of Labor has organized the United States Boys' Working Reserve, to enroll the patriotic activities of American youth and direct them toward the most urgent labor needs of industry. The purpose is to meet the labor shortage in certain industries, notably farming, by squads of boys, properly supervised and well cared for, who will work during their vacation periods or longer at a fair and predetermined wage.

There were within the United States, at the taking of the census of 1910, 4,564,179 boys between the age of 16 years and the draft age of 21, and more than two millions of these were not engaged in any productive industry.

This age group constitutes the greatest potential source of labor in the United States; a force as yet untapped, not organized, untrained, hardly even surveyed. The boys of America offer in themselves, if properly trained and adequately led in bodies well articulated and wisely directed, a power of service and defense without equal.

The Boys' Working Reserve is the result of a joint agreement between the United States Department of Agriculture and the United States Department of Labor, made early in April, which assigned to the Department of Agriculture the duty of making a census of our farms and ascertaining how many additional acres each farmer will plant this year as a patriotic service; how much labor each farmer will need, and when it will be required; what wages the farmer will pay; and how much labor can be secured in the immediate neighborhood of the farm. The information when obtained is to be given to the Department of Labor, which assumes the duty of ascertaining where labor may be found to make up any deficiencies in the supply of farm labor.

The Secretary of Labor, Hon. William B. Wilson, believes that boys of suitable age might be called upon to aid in this service, estimated to require probably 357,000 workers during the present season. Mr. William Edwin Hall of New York City, prominently connected with young men's organizations, has been commissioned national director of the Boys' Working Reserve, and has begun the work of organizing the boys.

The plan of organization is very simple. The national director, whose office is in Washington, reports to the Secretary of Labor. Associated with him is a national committee, composed of the governors of the States or representatives appointed by them, and an advisory council of experts on finance, sanitation, health, transportation, and other subjects. In each State a director is being selected, who is in charge of the details of mobilization of boys within his respective State. The State directors report to district directors, of whom there are 16, the districts being arranged as follows:

District.	Headquarters.
1. Maine, New Hampshire, Vermont, Rhode Island, and Massachusetts.....	Boston.
2. New York and Connecticut.....	New York.
3. New Jersey and Pennsylvania.....	Philadelphia.
4. Delaware, Maryland, and Virginia.....	Baltimore.
5. North Carolina, South Carolina, Georgia, and Florida.....	Atlanta.
6. Louisiana, Alabama, Mississippi, and Tennessee.....	New Orleans.
7. Missouri, Arkansas, and Oklahoma.....	St. Louis.
8. Kansas, Nebraska, and South Dakota.....	Kansas City or Omaha.
9. Ohio, Kentucky, and West Virginia.....	Cincinnati.
10. Illinois, Indiana, and Michigan.....	Chicago.
11. Wisconsin, Minnesota, Iowa, and North Dakota.....	St. Paul.
12. Colorado, Utah, and Wyoming.....	Denver.
13. Washington, Idaho, and Montana.....	Seattle.
14. Oregon, northern California, and Nevada.....	San Francisco.
15. Southern California, Arizona, and New Mexico.....	Los Angeles.
16. Texas.....	Houston.

The method of organization thus permits an extreme degree of flexibility, each State being practically autonomous, yet it assures adequate control and protection of the boys. When State organizations already exist for a similar purpose, the reserve will work through such organizations.

The requirements likewise are few and simple, though the standard is set high. Boys are not enrolled under 16 years of age. These boys may be called on for many kinds of service; already their help has been bespoken for agriculture, canning factories, various light manufacturing operations, and the work of the Shipping Board. It would be worse than unwise to enroll boys under 16 for such labor, probably away from parents and home influences. For the same reason, no boy is enrolled until he has passed a physical examination and has presented the written consent of parent or guardian.

Boys who join the reserve, whether individually or as members of the State organization, a Boy Scout troop, a Y. M. C. A. squad, a high-school society, or a boys' club, will be given opportunity to serve, and after proving their fitness by actual work they will be given appropriate bronze service badges bearing the inscription "Boys' Working Reserve, U. S. A." At the close of the season,

upon producing evidence of faithful service each boy will be given a bar with the inscription "Honorable Service" to be attached to the badge.

Young men who serve as leaders and instructors of groups of boys will be given appropriate recognition for a service quite as essential as service at the front. Comparatively few men are competent to give such leadership, which is one of the most important parts of the work.

The first call for the services of the Boys' Working Reserve came from the canning industry. Under the advice of the Department of Labor the National Canners' Association is now conducting a census of all canneries in the United States, the returns of which are being sent to the department, and in a short time arrangements will be made to supply the labor for this industry through the reserve. As soon as the Department of Agriculture is ready to report on the farming situation the second great call will be made, and it is hoped that the boys of America will be ready to respond. Furthermore, 15,000 boys of 19 to 21 years of age, from technical, trade, and manual-training schools, are wanted for Shipping Board work, and the department will soon call for these young men, to engage in the construction of wooden ships.

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#### WAR EMPLOYMENT WORK OF THE UNITED STATES DEPARTMENT OF LABOR.

In executing its task of building hundreds of ships, to transport food, munitions, and perhaps troops from the United States to Europe, the Shipping Board must employ the services of more than a hundred thousand workers, scattered through shipyards in every part of the United States. To secure these workers, the Shipping Board has made an agreement with the United States Employment Service, which has assumed responsibility for furnishing the workers needed.

The Shipping Board's plans first contemplated construction of wooden ships only. Recent developments have expanded this program. It is now probable that many vessels will be constructed of steel, without abandoning the wooden vessel program, but in addition to it. Yards for construction of wooden vessel hulls are being established at many ports on the Atlantic, Gulf, and Pacific coasts. For steel vessels, a very much larger plant is required. Consequently, steel vessels will be built in fewer yards, and few if any new plants will be established to construct such vessels.

When consideration is given to the fact that the wooden shipbuilding industry has been practically dead for 20 years or more and that, as a result, workers have drifted into other fields of industry until

now probably less than 11,000 trained ship carpenters live in the United States, the task of the United States Employment Service may be better appreciated.

Not less than 70,000 workers are needed to man the wooden-ship yards; and not more than 10 per cent of these workers are to be had. For every experienced man, the Employment Service must find, in a labor market already depleted by the demands of every kind of industry, nine adaptable men willing and capable to be trained in the building of ships. The Employment Service has a vastly greater task than that of merely finding and directing candidates for employment to a hundred shipyards. That alone would be a tremendous task. But the problem is vastly more complex, more serious, more important than that. There is a national shortage of agricultural labor. The wheat harvests start next month, in Texas and Oklahoma, and last, progressing northward week by week, to the end of August. There is a demand for workers in the Government service—for thousands of laborers, skilled tradesmen, clerks, stenographers, and technical men. There is a pressure from every contractor filling Government orders, for labor necessary to deliver the goods on time; how heavy this is may be estimated by the statement that one department alone has over 8,000 contractors dealing with it. There is a general industrial demand for labor besides these special demands. These demands are finally focused upon the United States Employment Service. The State and city employment offices are doing most commendable work in placing labor locally, but the only agency capable of transporting labor successfully across State lines is the Federal Government. The Shipping Board's call comes at a most crowded moment. Moreover, as the reports of the Monthly Review show, living costs have risen rapidly during the war, and wages have risen also, unsettling all industry. This forms another element of difficulty and uncertainty in the task of the Employment Service. In such a huge, hurried enterprise, born of an unprecedented situation, it will be difficult to establish and maintain agreements as to wages, hours, and conditions of labor. Disputes must be foreseen and guarded against so far as possible, because work must be rushed at top speed. Delays on account of strikes must be avoided. To the United States Department of Labor will probably fall in large degree the delicate task of adjusting wages, hours, and conditions of labor to changing conditions.

The task of registering workers who may be used in shipbuilding is now being carried on by the agents in the Federal Employment Service more than 20,000 names having thus far been listed. The further stupendous task of selecting the competent men from the incompetent, moving them to the places where needed and training inexperienced but promising men in the shipbuilding crafts remains yet to be done.

## WAR EMPLOYMENT WORK IN OHIO.

BY FRED C. CROXTON, CHAIRMAN, LABOR DIVISION, OHIO BRANCH, COUNCIL OF NATIONAL DEFENSE.

In the present crisis the "man problem" stands out as never before in the history of the country. Men must be secured for the military service, for the factories, for the transportation service, and for the farms. The United States must produce food and other supplies not only for its own people, but it must also substantially aid the people of our allies.

Following the breaking off of diplomatic relations with Germany, Ohio at once adopted plans for making the best possible use of the labor force of the State in all lines of industrial and agricultural work. Early in April the Ohio Institute for Public Efficiency drafted the plan of organization which, with some modifications, was adopted by Gov. Cox and made a part of the general plans of the Ohio branch of the Council of National Defense.

Under this plan Ohio has been divided into 21 employment divisions, with a free employment office in each division. The employment divisions are determined by transportation facilities, although in all cases county lines were followed. The divisions vary in size from two to seven counties. The employment office is located in the principal city in the division. The State already had a labor exchange in each of the seven largest cities—Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown. The plan provides for new offices in Athens, Canton, Chillicothe, Hamilton, Lima, Mansfield, Marietta, Marion, Portsmouth, Springfield, Steubenville, Tiffin, Washington Court House, and Zanesville. Offices have now been established in all of these cities, with the exception of Mansfield, and arrangements are under way for cooperating with local offices which are being established in Newark and Sandusky.

In addition to establishing new offices, additional employees have been placed in the old offices, in order that in each office an agricultural division may be established with at least one office man and one outside man to solicit farm labor, that one or more outside men may be assigned to soliciting industrial labor, and that one or more employees may be kept on duty Saturday afternoons and until 9 o'clock on other evenings.

In every instance where new offices are established, the local authorities—municipal or county—furnish the quarters, office equipment, telephone service, heat, light, and janitor service. The State furnishes the employees printed forms, postage, etc., and supervises the office. The employees are paid from the War Emergency Fund.

The work is being carried on under the direction of the labor division of the Ohio branch of the Council of National Defense. All

permanent employees in the old offices, however, are under the industrial commission and the commission is cooperating in carrying on the work in those offices. The commission has also assigned to the labor division of the council C. H. Mayhugh, who has been designated director of employment offices, and Wilbur Maxwell, who is one of the supervisors of employment offices. Other supervisors are M. B. Hammond, of Ohio State University, formerly a member of the industrial commission, and W. M. Leiserson, of Toledo University, formerly director of employment in Wisconsin. Gardner Lattimer, of the Toledo Commerce Club, also assisted in establishing the new offices. In the case of all five of these men their salary is paid by the organization with which they are permanently employed.

Cooperating with the employment offices are 55 county agricultural agents. These agents are under the supervision of the agricultural division of the Ohio branch of the Council of National Defense and are paid employees. An agent is assigned to each of the principal agricultural counties. In other cases one agent covers two or three counties. The agent's business is to assist the farmers in every possible way and a part of his duties is to learn the farmers' needs as far as help is concerned and then forward his orders to the superintendent of the employment office of the division in which he is located. The county agent is also furnished a card (Form 5) upon which to enter information concerning any farm hand or other worker seeking employment. If he has a call for help and a man who fits the need, he brings the two parties together at once; but where it is necessary either to seek a man for an employer or to seek a job for an applicant for work, he sends the cards to the superintendent of the employment office in that division.

In addition to these paid agricultural agents, the county commissioners have, at the request of the governor, appointed an unpaid food and crop commissioner in each county and he has been asked to appoint township food and crop commissioners. These men work without pay and assist in every way possible in urging increased acreage, surveying conditions, etc.

In order quickly to learn as far as possible the needs of the farmers, several thousand copies of an inquiry sheet (Form X) were distributed. This sheet serves a double purpose, first, it gives a report on acreage of corn and potatoes, and second, it gives labor needs. Of approximately 5,000 already returned, about one-third request help either at once or during harvest. The immediate needs of these farmers are supplied promptly and arrangements are being developed to supply help during the harvest.

Each employment superintendent is furnished with a confidential list of all the employers in his district normally employing five or more persons. The list shows the name, address, nature of business,

and number of employees in each establishment, and covers commercial, manufacturing, and all the other lines of industry.

All of the larger employers in each employment division will be furnished by the superintendent as promptly as possible with a supply of 6 by 4 inch cards (Form 8) upon which they are asked to report to the division superintendent at the close of each day information concerning each employee whose period of employment terminated during the day. The employers living in the immediate vicinity in which the employment office is located will also be asked to give to employees whose period of employment terminates a card of reference to the employment office. This card is not handed out, however, outside of the immediate locality of the employment office, for the reason that it might tend to concentrate labor in the one locality. The employers have also been asked to give the employment offices notice in advance of contemplated reduction in force.

The plan adopted for Ohio will accomplish a number of things:

1. It will materially lessen the time lost by workers in seeking new jobs.

2. It will materially aid the employers in securing help to take the place of those enlisting for military service or of those leaving for other causes or to secure additional help as business expands.

3. It will materially aid farmers in securing help.

4. It will make it possible to give preference in referring help to certain industries producing the goods most needed by our troops or by those of our allies.

5. It will materially lessen the idleness on the part of thousands of floating laborers in the State.

6. It will produce team work among the various localities of the State.

7. It will make it possible to cooperate most effectively with other States and with the Federal Government.

The effectiveness of the plans adopted can be determined only by results. The new offices, with from one to three employees each, were established during the past two weeks. The reports of the offices for the week ending May 12 show 4,301 jobs filled. Three hundred and forty-five farm hands were sent to farm jobs, and although returns of placements of farm help are generally delayed reports had been received that 137 were hired. On the one day, Monday, May 14, 96 farm hands were sent to farmers, and reports were received that 37 were hired. The total number of jobs filled on that day was 884.

The labor division of the Ohio branch of the Council of National Defense up to the present time has consisted only of the chairman. It is planned to add, however, in the near future, an equal number of representatives of employees and of representatives of employers. It is probable that there will also be created in each of the cities in which an employment office is located an advisory committee.

Following are given various forms used by the labor division of the Ohio branch of the Council of National Defense:

APPLICATION FOR EMPLOYMENT				RENEWALS	
Name			Date		
Address			Telephone		
Work desired		Also willing to work as		Willing to work out of city	
Trade, if skilled. If an engineer, fireman, or machinist, state class or kind			Age	Color	
LAST EMPLOYMENT			Birthplace		
For whom		City			
Street			Years in U. S.		Years in city
Occupation		Time employed	Wages	Single Married Widowed (Check one)	
Dependents					
Reason for leaving		How long since leaving		Read	Grade at leaving school
Form 1      References—See other side of card					

	POSITIONS OFFERED			
	Employer	Occupation	Date sent	Result
References				



The Ohio branch of the Council of National Defense, urges you to report to the superintendent of the division employment office in person, by telephone, or by letter to get work without delay, unless you get other work at once. The employment office for this division is located at 246 E. Long St., Columbus, Ohio.  
Form 7.

EMPLOYER'S REPORT OF EMPLOYEES WHOSE PERIOD OF EMPLOYMENT TERMINATES TO-DAY.

Date .....

Name of worker .....

Address .....

Occupation .....

Rate of pay .....

How long with this firm .....

Previous experience .....

Name of firm .....

Address .....

Nature of business .....

The Ohio branch of the Council of National Defense urges every employer to report to the division employment office at the close of each day or shift, the information requested above for each person whose period of employment has terminated during that day or shift.

Please mail to Superintendent, Division Employment Office, City Hall, Cincinnati, Ohio.

Additional blanks can be secured from the superintendent.

Form 8

Form X.

OHIO BRANCH COUNCIL OF NATIONAL DEFENSE.

DO YOU NEED FARM HELP?

1. Name of farmer or trucker.....
2. P. O. address..... 3. County.....
4. How many acres did you plant to corn in 1916?.....
5. How many acres do you expect to plant to corn this year?.....
6. How many acres of corn will you plant if you secure more labor?.....
7. How many acres did you plant to potatoes in 1916?.....
8. How many acres do you expect to plant to potatoes this year?.....
9. How many acres of potatoes will you plant if you can secure more labor?.....
10. In order to increase your production of food to the greatest point, what help can you use this season?.....  
 .....  
 .....  
 Can you use men with families?..... a. If so, at what wages?.....  
 b. Date needed..... c. For how long?.....  
 d. What do you furnish?.....  
 .....  
 e. What, if any, duties do you require of the wife or children?.....
11. Can you use experienced men without families?.....  
 a. If so, at what wages with board?.....  
 b. Date needed..... c. For how long?.....
12. Can you use inexperienced men without families?.....  
 a. If so, at what wages with board?.....  
 b. Date needed..... c. For how long?.....
13. Can you use experienced older boys?.....  
 a. If so, at what wages with board?.....  
 b. Date needed..... c. For how long?.....
14. Can you use inexperienced older boys?.....  
 a. If so, at what wages with board?.....  
 b. Date needed..... c. For how long?.....

(Over.)

15. Can you use day workers?..... a. If so, how many?.....  
 b. At what time?..... c. For how long?.....  
 d. What wages will be paid with board?.....  
 e. What wages will be paid without board?.....  
 f. What is the nature of the work?.....  
 .....

16. Can you use colored men or foreigners?.....  
 a. If foreigners, what nationality preferred?.....  
 .....

17. Do you require your help to do milking.....  
 If so, how many cows?.....

18. Location of your farm and full directions as to how it can be reached from  
 the nearest city, town, or village.....  
 .....

Remarks.....  
 .....

Return this blank at once to the Ohio Branch Council of National Defense,  
 Columbus, Ohio, and every effort will be made to supply help through a competent  
 man located in your county.

TO A FARMER.

(Over.)

**PLANS FOR MOBILIZATION OF FEMALE LABOR IN TIME OF WAR.**

The bureau of registration and information of the National League for Women's Service and its cooperating organizations, under the official indorsement of the United States Department of Labor, is engaged in making a special registration of women and girls trained in industrial, commercial, agricultural, and professional occupations who are ready to serve their country, in order to have a record of workers available for instant service should the present national emergency demand their assistance. This bureau is an agency controlled by a board of directors "chosen from representatives of national organizations and others organized in times of peace for various purposes, but uniting in this effort to render effective assistance to the Government in times of imminent or actual war." Besides the registration of available workers the plan for mobilizing labor contemplates—

Assisting in the distribution of woman labor and providing through local committees of the supporting organizations for the housing, care, and protection of the

groups of wage-earning women who might be called in large numbers for emergency or temporary service away from their home environment; and

Conferring with the Department of Labor or with a committee of mobilization as to whether specified places in industry created by the demands of war or left vacant by enlistment could be filled better by women and girls or by men unqualified for military service and by boys, and as to the conditions of labor which would secure the highest possible physical efficiency of the wage-earning women engaged in industries supplying emergency demands.

All the activities of the bureau which concern the interests of wage-earning women are subject to the approval of the Department of Labor, which has supervision of the information gathered. To date the reports of placements and positions actually secured under this plan have not been received by the Department of Labor, although it appears that Philadelphia has placed 850 women making Army shirts.

During the latter part of April, 1917, an investigator of the bureau of registration and information visited 11 manufacturing establishments in 8 Connecticut cities to determine the need for women workers on Government contracts. The report of this investigation indicates that 3 of these plants are ready now to recruit about 2,000 women workers, while 2 others will want 3,500 more in the event that the Government runs the plants to their full capacity, as the firms expect will be done. These numbers will be greatly increased when men are called out on the first selective draft and if the firms are forced to discharge alien enemy workmen and working women. All the firms appear to be willing to take inexperienced women, which makes "the task of fitting nonworking women into industry very much simpler." The officials of these companies, according to the report, believe that there is even now a shortage of labor, that this shortage is bound to increase in the near future, that they have exhausted all the available sources from which wage-earning women have previously been drawn, and that if more women workers are to be recruited for the present emergency they will have to come from groups or classes of women not hitherto identified with the industrial world.

Several questions of policy raised by the investigation and affecting the work of the bureau are at once suggested and answered in the following statement by the Secretary of Labor in response to an inquiry submitted by the executive secretary of the bureau of registration and information of the National League for Women's Service:

1. The same assistance to secure labor should be given to firms working on war contracts for the allies as is given firms working on contracts for our own Government, unless otherwise directed by the department as special occasions may arise.
2. The first effort should be to provide employment for wage-earning women, even though it may result in difficult housing problems. Women not dependent upon wage earnings should not be brought into the problem until the supply of those in the vicinity dependent upon wages have been exhausted.

3. Whenever the employment of women is dependent upon securing an additional number of men, the subject matter should immediately be brought to the attention of the Federal Employment Service, so that it may utilize its machinery in securing the necessary workmen.

4. So far as the department has been advised, there is no agreement with the Canadian Government or Canadian firms about labor-recruiting campaigns in American munition centers. The Canadian Government undertook this spring to recruit farm labor in the Northwest for Canadian farms, but the campaign was discontinued upon representation of this Government that such a campaign was to the mutual disadvantage of the two Governments.

5. It is not advisable to recommend alien enemies for employment in factories engaged upon Government supplies of any character. Not having engaged in work of this character prior to the breaking out of war, it would be more satisfactory to them and to all parties concerned if their future labor is confined to work that is not intended for Government use.

6. There should be no objection to furnishing "outworkers" provided the work is to be done under conditions that conform to the State laws relative to sanitation, safety, and sweatshop practice.

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#### EMPLOYMENT IN SELECTED INDUSTRIES IN APRIL, 1917.

As shown by reports received from representative manufacturing establishments concerning volume of employment, there was an increase in the number of people on the pay roll in 9 of the 13 industries covered by the inquiry in the month of April, 1917, as compared with April, 1916. The greatest increase was 18.7 per cent in the automobile manufacturing industry. The industries showing a decrease in the number of people employed were cotton manufacturing, silk, car building and repairing, and cigar manufacturing.

The figures in the hosiery and underwear industry are slightly affected by a strike which was on in one establishment during the first part of April. One cigar manufacturing establishment reported that 150 more workers could have been used but were not obtainable. In the men's ready-made clothing industry, one establishment reported that during 1917 the number of its own shops had been increased and the work given out to contractors reduced, while, on the other hand, another establishment in the same industry reported to the contrary, stating that most of the work formerly done in its own shops had been let out to contractors.

With the exception of one industry—car building and repairing—the amount of money paid to employees was greater in all of the 13 industries in April, 1917, than in the same month in 1916. An increase of 35 per cent in automobile manufacturing was the largest, the iron and steel industry running very close to this figure, with an increase of 34.6 per cent.

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COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN APRIL, 1916, AND APRIL, 1917.

Industry.	Establishments to which inquiries were sent.	Establishments reporting for April both years.	Period of pay roll.	Number on pay roll in April—		Per cent of increase (+) or decrease (-).	Amount of pay roll in April—		Per cent of increase (+) or decrease (-).
				1916	1917		1916	1917	
Boots and shoes.....	85	68	1 week..	60,358	63,196	+ 4.7	\$758,987	\$852,255	+12.3
Cotton manufacturing....	89	55	..do....	46,639	46,269	- .8	418,094	482,749	+15.5
Cotton finishing.....	19	15	..do....	12,745	13,366	+ 4.9	148,952	184,171	+23.6
Hosiery and underwear...	82	57	..do....	29,784	29,841	+ .2	285,742	309,189	+ 8.2
Woolen.....	56	43	..do....	36,397	38,409	+ 5.5	431,582	505,466	+17.1
Silk.....	64	48	2 weeks..	19,308	18,337	- 5.0	414,582	430,328	+ 3.8
Men's ready-made clothing.	86	32	1 week..	14,867	16,881	+13.5	203,326	235,818	+16.0
Iron and steel.....	142	117	½ month.	180,210	213,196	+18.3	6,439,591	8,666,768	+34.6
Car building and repairing	78	35	..do....	47,573	45,353	- 4.7	1,506,089	1,483,604	- 1.5
Cigar manufacturing.....	104	57	1 week..	18,711	18,559	- .8	193,603	215,082	+11.1
Automobile manufacturing.	69	36	..do....	104,097	123,528	+18.7	2,042,696	2,758,659	+35.0
Leather manufacturing....	44	33	..do....	17,179	17,827	+ 3.8	257,307	317,629	+23.4
Paper manufacturing.....	78	51	..do....	26,768	29,932	+11.8	341,469	431,221	+26.3

In the following table will be found data showing the number of people actually working on the last full day of the reported pay period in April, 1916, and April, 1917. When using these figures one should note that although each industry is represented, the number of establishments reporting for both years as to this item is small.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON LAST FULL DAY'S OPERATION IN APRIL, 1916, AND APRIL, 1917.

Industry.	Establishments reporting for April both years.	Period of pay roll.	Number actually working on last full day of reported pay period in April—		Per cent of increase (+) or decrease (-).
			1916	1917	
Boots and shoes.....	12	1 week....	6,871	7,423	+ 8.0
Cotton manufacturing....	26	..do....	20,282	21,454	+ 5.8
Cotton finishing.....	8	..do....	5,130	4,995	- 2.6
Hosiery and underwear...	12	..do....	6,577	7,580	+15.3
Woolen.....	19	..do....	19,369	19,562	+ 1.0
Silk.....	20	2 weeks..	10,168	9,321	- 8.3
Men's ready-made clothing	2	1 week..	224	281	+25.4
Iron and steel.....	103	½ month.	144,511	170,015	+17.6
Car building and repairing	31	..do....	38,919	38,322	- 1.5
Cigar manufacturing.....	14	1 week..	2,872	2,639	- 8.1
Automobile manufacturing	17	..do....	64,234	77,443	+20.6
Leather manufacturing....	15	..do....	8,952	9,223	+ 3.0
Paper making.....	18	..do....	10,411	11,339	+ 8.9

The next table shows that in each of the 13 industries there was a decrease in the number of employees on the pay roll in April, 1917, as compared with March, 1917. The greatest decrease was 7.3 per cent in cigar manufacturing.

Furthermore, the figures show a marked decrease in the amount of money paid to employees in April, 1917, in comparison with March, 1917. The greatest decrease here was 9.1 per cent, which

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appears in cigar manufacturing. The totals are slightly affected by a number of establishments being closed down for a holiday on Easter Monday, which fell within the reported pay period.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARCH, 1917, AND APRIL, 1917.

Industry.	Establishments to which inquiries were sent.	Establishments reporting for March and April.	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 (-).
				March, 1917.	April, 1917.		March, 1917.	April, 1917.	
				Boots and shoes.....	85		67	1 week..	
Cotton manufacturing..	89	54	..do.....	47,201	46,932	-.6	500,078	489,373	-2.1
Cotton finishing.....	19	15	..do.....	13,691	13,366	-2.4	188,924	184,171	-2.5
Hosiery and underwear.	82	56	..do.....	30,100	29,358	-2.5	322,155	303,173	-5.9
Woolen.....	56	46	..do.....	42,608	41,454	-2.7	576,142	544,435	-5.5
Silk.....	64	49	2 weeks..	18,646	18,354	-1.6	441,881	430,702	-2.5
Men's ready-made clothing.	86	31	1 week..	16,897	16,885	-.1	253,746	235,639	-7.1
Iron and steel.....	142	116	½ month.	213,018	212,407	-.3	9,224,192	8,633,868	-6.4
Car building and repairing.	78	35	..do.....	48,004	45,841	-4.5	1,645,437	1,509,227	-8.3
Cigar manufacturing....	104	59	1 week..	20,342	18,857	-7.3	239,570	217,782	-9.1
Automobile manufacturing.	69	34	..do.....	124,237	122,247	-1.6	2,830,540	2,741,994	-3.1
Leather manufacturing..	44	30	..do.....	17,499	16,724	-4.4	266,521	250,594	-6.0
Paper making.....	78	50	..do.....	27,139	27,003	-.5	389,872	387,532	-.6

These figures as to shrinkage in manufacturing activity in April, as compared with March, are confirmed by the figures issued by the New York State Department of Labor, page 1008.

A much smaller number of the establishments than is found in the table above, reported as to the number of employees actually working on the last full day of the pay period in March, 1917, and April, 1917. The small number of returns should be taken into consideration when using the figures which appear in the following table:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON LAST FULL DAY'S OPERATION IN MARCH, 1917, AND APRIL, 1917.

Industry.	Establishments reporting for March and April.	Period of pay roll.	Number actually working on last full day of reported pay period in—		Per cent of increase (+) or decrease (-).
			March, 1917.	April, 1917.	
			Boots and shoes.....	23	
Cotton manufacturing..	39	..do.....	32,126	30,724	-4.4
Cotton finishing.....	10	..do.....	6,697	6,597	-1.5
Hosiery and underwear..	17	..do.....	11,426	11,187	-2.1
Woolen.....	37	..do.....	34,098	33,709	-1.1
Silk.....	34	2 weeks..	13,793	13,519	-2.0
Men's ready-made clothing.	5	1 week....	3,311	3,268	-1.3
Iron and steel.....	106	½ month..	177,066	172,307	-2.7
Car building and repairing.	32	..do.....	40,219	38,943	-3.2
Cigar manufacturing....	20	1 week....	4,775	4,506	-5.6
Automobile manufacturing.	17	..do.....	80,061	80,399	+ .4
Leather manufacturing..	14	..do.....	10,947	10,323	-5.7
Paper making.....	16	..do.....	9,983	10,035	+ .5

## CHANGES IN WAGE RATES.

Wage-rate changes during the period March 15 to April 15, 1917, were reported in 11 of the 13 industries from which the bureau receives monthly returns. In the men's ready-made clothing industry and in woolen manufacturing no establishments reported having made any change in wage rates. Quite a number of the establishments to which inquiries were sent failed to state whether or not any changes took place. In such cases, however, it is not likely that any were made. The changes as reported by the several establishments are given below in summary form.

Fifteen establishments reported increases in the iron and steel industry. Six of these gave an increase of 10 per cent to all employees. Five of them granted an increase of 8.5 per cent to puddlers. In one instance an increase of 20 cents per day was given to 10-hour men and 30 cents per day to 12-hour men. In another case, one-third of the force received a 6 per cent increase and the remaining two-thirds an increase of 5 per cent. A 7 per cent increase to per diem employees was reported in one case, and another stated that an increase of 10 per cent was made, affecting 35 per cent of the force.

In leather manufacturing one establishment reported an increase of 10 per cent to all employees, while another gave a 10 per cent bonus to all. A 5 per cent increase was made in two establishments, applying to the whole force in one of them, but only to one-seventh of the force in the other. One establishment gave an increase of 10 cents a day to each person, and another granted an increase of \$1 per week to each person.

The paper-making industry shows several increases in wage rates to employees. An increase of 10 per cent was made in 3 establishments, this applying to 50 per cent of the force in one, all except foremen in the second, and to approximately all in the third. One establishment reported a 5 per cent increase to 90 per cent of the force, and another a 13 per cent increase, affecting about one-fifth of the employees. Increases of 25 cents a day to time workers and 10 per cent to piece workers were given in one establishment. There was an increase of 10 per cent to 8 per cent of the force in another instance. Still another reported an increase of 1.5 per cent, but the proportion of the force affected was not stated.

No less than 13 establishments in the silk industry reported increases. Eight establishments granted an additional dollar per week to each person employed. One cent per hour to weavers was the increase made in one establishment, the weavers constituting about one-half of the working force. In one instance a 5.5 per cent increase was made, affecting 50 per cent of the force, while in another an increase of 5 per cent was made, affecting 4 per cent of

the employees. One other stated that increases of from 7 to 10 per cent were made in different departments.

In the automobile manufacturing industry, an increase of 11 per cent to 10 per cent of the force, who were day laborers, was reported by one establishment. Another granted a 10 per cent increase to laborers and assemblers and a 15 per cent increase to repairers and testers. A third establishment gave a 10 per cent increase to all, while a fourth says that rates are increasing constantly but no general increase was made.

Five car building and repairing establishments reported increases. Two of these gave the same increase: 3 per cent to piece workers on steel cars, 6 per cent to other piece workers, and 2 cents per hour on hourly rates. A third made an increase of 6 per cent to piece workers and of 2 cents per hour to employees on hourly rates. Another gave an increase of 6.8 per cent to 92 per cent of the force, while the fifth establishment made a 7 per cent increase to all employees.

In cotton manufacturing one establishment gave a 5 per cent increase and another a 10 per cent increase, applying to all employees in both cases. In one other instance free house rent was granted to the operatives, which amounts to an increase of about 5 per cent.

In cotton finishing 2 establishments reported increases, the first giving 5 per cent and the second 10 per cent. Ninety per cent of the force was affected in each case. Another establishment gave a 10 per cent bonus to employees working full time.

Two increases were indicated in cigar manufacturing, one establishment giving an 11 per cent increase and the other an increase of 10 per cent, affecting all employees in both instances. Also, two changes were made in the hosiery and underwear industry. One establishment granted a 12.5 per cent increase to approximately 4 per cent of its force, and the second allowed a bonus of 11 per cent. In boot and shoe manufacturing one establishment reported a general increase of 15 per cent, and another stated that a "few increases" were made.

It is significant to note that no decreases in rates are reported in any industry.

#### EMPLOYMENT IN THE STATE OF NEW YORK IN APRIL, 1917.

The labor market of the State of New York is reviewed by the Bureau of Statistics and Information of the New York State Department of Labor in the following summary:

##### MANUFACTURING ACTIVITY IN APRIL.

[As reported by 1,600 representative firms with over 600,000 employees, or one-third of the factory workers in the State, and a weekly payroll of over \$9,000,000.]

There was a decline in manufacturing activity in New York State in April, 1917, as compared with the high record set in the previous month. Returns as to number of employees and amount of wages paid have been received from a large number of

leading factories, representing all of the important industries in the State. As compared with March, there was a decrease of more than 1 per cent in number of employees and more than 3 per cent in amount of wages. In one industry only—stone, clay, and glass products—was there an appreciable increase, due to seasonal activity in brickyards. Shortage of materials was responsible to some extent for these declines, while industrial disputes figured only slightly. The observance of Easter Monday as a holiday also had some effect. In seven of the eleven industrial groups, there were declines both in number of employees and in amount of wages. These seven included all of the larger groups.

As compared with April, 1916, each of the industrial groups reported greater activity, the increase in all industries combined being 5 per cent in number of employees and 15 per cent in amount of wages. As compared with April, 1915, the increases were 28 per cent and 57 per cent, respectively.

The average earnings for one week in April, 1917, of all employees, both male and female, were \$15.50 as compared with \$15.79 in March. The average earnings for one week in April, 1916, were \$14.15, and in April, two years ago, \$12.54.

The *stone, clay, and glass products* group has been referred to above as reporting increased activity in April as compared with the previous month. The increase in number of employees was more than 4 per cent and in amount of wages 2 per cent. More workers were employed and more wages were paid out in this group than in any other month since records have been kept, dating back to June, 1914. This improvement over last month was due to seasonal increases in lime, cement, and plaster mills and in brickyards, the latter especially. The miscellaneous stone and the glass industries reported less activity than in the previous month. As compared with April of last year, the group as a whole employed 10 per cent more workers and paid out 33 per cent more wages.

The *metals, machinery, and conveyances* group employed 1 per cent fewer workers and paid out 2 per cent less wages in April than in March. Eight of the twelve industries in the group, which outweighs any other both in number of employees and amount of wages, reported lessened activity. These eight industries included all but two of the larger ones in the group. The manufacture of automobiles, carriages, and parts, and boat and ship building had more employees and paid out more wages than in March. The group as a whole employed 9 per cent more workers and paid out 20 per cent more wages than in April of last year.

The *wood manufactures* group reported in April 2 per cent decrease in number of employees and also in amount of wages paid as compared with the previous month. The decrease was due to lessened activity in the manufacture of furniture and cabinet work and of musical instruments. Saw and planing mills, and the manufacture of miscellaneous wood and allied products were somewhat more active. As compared with April of last year, the group had 1 per cent more workers and paid out 12 per cent more wages.

The *furs, leather, and rubber goods* group employed in April 2 per cent fewer workers and paid out 5 per cent less wages than in March. Aside from furs and fur goods, which reported a seasonal increase in activity, every other industry in the group was less active. The boot and shoe industry, which dominates the group, reported a seasonal decrease. As compared with April of last year, the group had 4 per cent more employees and paid out 17 per cent more wages.

The *chemicals* group reported increases in April of less than one-half of 1 per cent both in number of employees and in amount of wages. This slight increase established, however, a new high record for this group in both respects, surpassing the previous record made last month. The increase was in the manufacture of drugs and chemicals, other industries being slightly less active.

The *paper* industry reported in April 2 per cent fewer workers but an increase of 2 per cent in wages. The industry employed 12 per cent more workers and paid out 26 per cent more wages than in April of last year.

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The *printing and paper goods* group reported in April a decrease of nearly 4 per cent in both employees and wages as compared with March. This decrease was shared by each of the three industries in the group. As compared with April of last year, the group as a whole had 2 per cent more workers and paid out 6 per cent more wages.

The *textiles* group employed 3 per cent fewer workers and paid out 6 per cent less in wages in April than in the previous month. This decrease was shared by each of the industries in the group, the manufacture of silk and silk goods least, and the manufacture and finishing of miscellaneous textiles most of all. As compared with April of last year, the group employed 1 per cent more workers and paid out 11 per cent more wages.

The *clothing, millinery, and laundering* group reported in April a decrease of more than 1 per cent in employees, and of 10 per cent in wages as compared with March. Each of the seven industries in the group paid out less wages. This decrease was in large part seasonal, especially in women's clothing, millinery, and miscellaneous sewing. As compared with April, 1916, the group as a whole had 1 per cent more employees and paid out 4 per cent more wages.

The *food, liquors, and tobacco* group reported in April a decrease of 2 per cent in number of employees and of 1 per cent in amount of wages as compared with March. Bakeries reported nearly 1 per cent decrease in wages and slightly more than 1 per cent in employees. Miscellaneous groceries reported 2 per cent increase in wages. The cigar and tobacco industry had 4 per cent fewer employees and paid out 6 per cent less in wages. The confectionery industry reported a loss of 7 per cent in employees and 9 per cent in wages. The group as a whole employed 2 per cent more workers and paid out 13 per cent more wages than in April of last year.

The *water, light, and power* industry was almost stationary from March to April, having had an increase of one-half of 1 per cent in number of employees and a similar decrease in amount of wages paid. As compared with a year ago, there were 5 per cent more employees and 14 per cent more wages.

### BUILDING ACTIVITY IN PRINCIPAL CITIES.

[As reported by building departments.]

The estimated cost of building work (of which new construction constituted 85 per cent), including alterations and repairs, for which permits were issued in April, 1917, in the 10 cities of the first and second class in New York State, was 15 per cent less than in March and 34 per cent less than in April of last year. As compared with last month increases were reported in seven of the cities, but these were offset by decreases in New York City, Rochester, and Troy. As compared with April, one year ago, five cities reported increases, while Albany, New York City, Rochester, Troy, and Yonkers reported decreases.

### WORK OF STATE AND MUNICIPAL EMPLOYMENT OFFICES IN THE UNITED STATES AND OF PROVINCIAL EMPLOYMENT BUREAUS IN CANADA.

In the table which follows data are presented showing the operations of public employment offices for April, 1916, and April, 1917. For the United States the table shows information for State employment bureaus in 17 States, municipal employment bureaus in 8 States, State-city employment bureaus in 2 States, and a city-private employment bureau in 1 State. Figures for 2 Canadian employment offices are also presented.

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OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, 1916 AND 1917.

UNITED STATES.

State and city.	Applica- tions from employ- ers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to po- sitions.	Positions filled.
			New registra- tions.	Renew- als.		
<b>California (municipal):</b>						
Berkeley—						
April, 1916.....	205	218	61	307	215	215
April, 1917.....	256	281	93	357	272	272
Fresno—						
April, 1916.....	365	( <sup>1</sup> )	350	293	402	344
April, 1917.....	472	( <sup>1</sup> )	433	111	478	459
Sacramento—						
April, 1916.....	217	355	56	( <sup>1</sup> )	355	355
April, 1917.....	168	241	46	( <sup>1</sup> )	241	241
<b>California (State-city):</b>						
Los Angeles—						
April, 1916.....	( <sup>1</sup> )	7,614	1,972	( <sup>1</sup> )	7,709	6,879
April, 1917.....	3,422	6,974	2,377	( <sup>1</sup> )	6,195	5,478
<b>California (State):</b>						
Oakland—						
April, 1916.....	524	692	680	154	788	590
April, 1917.....	979	1,261	562	582	1,280	1,007
Sacramento—						
April, 1916.....	214	481	553	38	431	384
April, 1917.....	406	983	498	282	803	659
San Francisco—						
April, 1916.....	760	1,971	2,127	299	1,785	1,513
April, 1917.....	2,192	4,394	2,334	1,508	3,928	2,741
<b>Total:</b>						
April, 1916.....					11,685	10,280
April, 1917.....					13,197	10,857
<b>Colorado (State):</b>						
Colorado Springs—						
April, 1916.....	( <sup>1</sup> )	617	718	( <sup>1</sup> )	556	( <sup>1</sup> )
April, 1917.....	( <sup>1</sup> )	750	631	( <sup>1</sup> )	( <sup>1</sup> )	588
Denver No. 1—						
April, 1916.....	( <sup>1</sup> )	297	257	( <sup>1</sup> )	185	( <sup>1</sup> )
April, 1917.....	( <sup>1</sup> )	673	530	( <sup>1</sup> )	( <sup>1</sup> )	493
Denver No. 2—						
April, 1916.....	( <sup>1</sup> )	316	376	( <sup>1</sup> )	267	( <sup>1</sup> )
April, 1917.....	( <sup>1</sup> )	666	548	( <sup>1</sup> )	( <sup>1</sup> )	431
Pueblo—						
April, 1916.....	( <sup>1</sup> )	485	394	( <sup>1</sup> )	353	( <sup>1</sup> )
April, 1917.....	( <sup>1</sup> )	489	490	( <sup>1</sup> )	( <sup>1</sup> )	470
<b>Total:</b>						
April, 1916.....					1,361	( <sup>1</sup> )
April, 1917.....					( <sup>1</sup> )	1,982
<b>Connecticut (State):</b>						
Bridgeport—						
April, 1916.....	( <sup>1</sup> )	741	2,891	( <sup>1</sup> )	( <sup>1</sup> )	674
April, 1917.....	( <sup>1</sup> )	745	2,972	( <sup>1</sup> )	( <sup>1</sup> )	676
Hartford—						
April, 1916.....	( <sup>1</sup> )	830	2,988	( <sup>1</sup> )	( <sup>1</sup> )	546
April, 1917.....	( <sup>1</sup> )	1,385	2,153	( <sup>1</sup> )	( <sup>1</sup> )	1,061
New Haven—						
April, 1916.....	( <sup>1</sup> )	565	2,665	( <sup>1</sup> )	( <sup>1</sup> )	436
April, 1917.....	( <sup>1</sup> )	989	2,121	( <sup>1</sup> )	( <sup>1</sup> )	836
Norwich—						
April, 1916.....	( <sup>1</sup> )	273	2,335	( <sup>1</sup> )	( <sup>1</sup> )	259
April, 1917.....	( <sup>1</sup> )	263	2,280	( <sup>1</sup> )	( <sup>1</sup> )	245
Waterbury—						
April, 1916.....	( <sup>1</sup> )	204	2,307	( <sup>1</sup> )	( <sup>1</sup> )	158
April, 1917.....	( <sup>1</sup> )	190	2,169	( <sup>1</sup> )	( <sup>1</sup> )	113
<b>Total:</b>						
April, 1916.....						2,073
April, 1917.....						2,931
<b>Illinois (municipal):</b>						
Chicago—						
April, 1916.....	58	2,030	500	( <sup>1</sup> )	2,030	778
April, 1917.....	43	2,005	250	( <sup>1</sup> )	2,005	759

<sup>1</sup> Not reported.

<sup>2</sup> Number applying for work.

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OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, 1916 AND 1917—Continued.

UNITED STATES—Continued.

State and city.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to po- sitions.	Positions filled.
			New registra- tions.	Renew- als.		
<b>Illinois (State):</b>						
Chicago—						
April, 1916.....	6,536	(1)	(1)	(1)	(1)	5,841
April, 1917.....	5,535	14,327	14,690	1,306	15,138	12,189
East St. Louis—						
April, 1916.....	1,603	(1)	(1)	(1)	(1)	1,220
April, 1917.....	379	854	353	394	728	701
Peoria—						
April, 1916.....	1,345	(1)	(1)	(1)	(1)	1,002
April, 1917.....	996	1,423	172	906	1,049	1,044
Rockford—						
April, 1916.....	1,152	(1)	(1)	(1)	(1)	831
April, 1917.....	780	1,181	649	264	858	808
Rock Island-Moline—						
April, 1916.....	781	(1)	(1)	(1)	(1)	637
April, 1917.....	619	1,282	522	317	377	648
Springfield—						
April, 1916.....	605	(1)	(1)	(1)	(1)	512
April, 1917.....	565	675	202	427	594	553
Total:						
April, 1916.....					(1)	10,821
April, 1917.....					20,749	16,702
<b>Indiana (State):</b>						
Evansville—						
April, 1916.....	(1)	153	2 207	(1)	142	134
April, 1917.....	192	357	591	(1)	409	357
Fort Wayne—						
April, 1916.....	(1)	463	2 360	(1)	330	306
April, 1917.....	429	620	112	462	717	574
Indianapolis—						
April, 1916.....	183	654	2 720	(1)	628	548
April, 1917.....	1,430	1,430	1,366	64	(1)	(1)
South Bend—						
April, 1916.....	(1)	731	2 549	(1)	480	447
April, 1917.....	145	565	474	46	520	445
Total:						
April, 1916.....					1,580	1,435
April, 1917.....					3 1,646	2 1,376
<b>Iowa (State):</b>						
Des Moines—						
April, 1917.....	68	357	111	19	113	77
<b>Kansas (State):</b>						
Topeka—						
April, 1916.....	38	51	114	1	64	43
April, 1917.....	143	165	185	10	156	141
<b>Kentucky (city-private):</b>						
Louisville—						
April, 1916.....	(1)	285	405	735	213	124
April, 1917.....	(1)	639	340	546	511	206
<b>Kentucky (State):</b>						
Louisville—						
April, 1916.....	139	139	268	(1)	139	139
April, 1917.....	261	261	2 343	(1)	261	261
Total:						
April, 1916.....					352	263
April, 1917.....					772	467
<b>Massachusetts (State):</b>						
Boston—						
April, 1916.....	2,561	2,870	4 1,262	(1)	5 3,724	1,743
April, 1917.....	2,323	2,614	4 1,356	(1)	5 3,495	1,552
Fall River <sup>6</sup> —						
Springfield—						
April, 1916.....	1,036	1,258	4 512	(1)	5 1,460	913
April, 1917.....	1,139	1,428	4 466	(1)	5 1,560	1,030
Worcester—						
April, 1916.....	1,247	1,710	4 698	(1)	5 1,553	779
April, 1917.....	1,110	1,465	4 700	(1)	5 1,601	806
Total:						
April, 1916.....					6,737	3,435
April, 1917.....					6,656	3,388

<sup>1</sup> Not reported.

<sup>2</sup> Number applying for work.

<sup>3</sup> Exclusive of Indianapolis, not reported.

<sup>4</sup> Number who were registered.

<sup>5</sup> Number of offers of positions.

<sup>6</sup> Office discontinued April 1, 1917.

MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 1013

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, 1916 AND 1917—Continued.

UNITED STATES—Continued.

State and city.	Applica- tions from employ- ers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to po- sitions.	Positions filled.
			New registra- tions.	Renew- als.		
<b>Michigan (State):</b>						
Battle Creek—						
April, 1916 .....	168	313	1 255	(2)	231	193
April, 1917 .....	114	160	1 119	(2)	114	114
Bay City—						
April, 1916 .....	82	110	1 106	(2)	104	100
April, 1917 .....	69	126	1 89	(2)	70	70
Detroit—						
April, 1916 .....	1,336	6,371	1 5,881	(2)	(2)	5,717
April, 1917 .....	826	7,977	(2)	(2)	(2)	7,751
Flint—						
April, 1916 .....	433	980	1 708	(2)	708	708
April, 1917 .....	948	948	1 948	(2)	948	948
Grand Rapids—						
April, 1916 .....	483	1,085	1 1,072	(2)	1,065	1,065
April, 1917 .....	574	980	1 978	(2)	943	943
Jackson—						
April, 1916 .....	396	925	1 878	(2)	853	834
April, 1917 .....	516	941	1 939	(2)	926	918
Kalamazoo—						
April, 1916 .....	415	431	1 440	(2)	431	431
April, 1917 .....	294	396	1 410	(2)	394	394
Lansing—						
April, 1916 .....	74	366	1 280	(2)	258	258
April, 1917 .....	62	328	1 171	(2)	171	171
Muskegon—						
April, 1916 .....	77	235	1 193	(2)	186	178
April, 1917 .....	99	271	1 121	(2)	114	103
Saginaw—						
April, 1916 .....	126	868	1 741	(2)	741	741
April, 1917 .....	138	728	1 619	(2)	619	619
<b>Total:</b>						
April, 1916 .....					3 4,577	10,225
April, 1917 .....					3 4,299	12,031
<b>Minnesota (State):</b>						
Duluth—						
April, 1916 .....	(2)	(2)	(2)	(2)	(2)	976
April, 1917 .....	(2)	(2)	(2)	(2)	(2)	942
Minneapolis—						
April, 1916 .....	2,347	(2)	(2)	(2)	(2)	2,245
April, 1917 .....	(2)	(2)	(2)	(2)	(2)	2,071
St. Paul—						
April, 1916 .....	(2)	(2)	(2)	(2)	(2)	1,394
April, 1917 .....	(2)	(2)	(2)	(2)	(2)	1,285
<b>Total:</b>						
April, 1916 .....					(1)	4,615
April, 1917 .....					(1)	4,298
<b>Missouri (State):</b>						
Kansas City—						
April, 1917 .....	1,157	2,168	977	1,033	2,010	1,794
St. Joseph—						
April, 1917 .....	1,276	(2)	1 1,067	(2)	1,065	1,065
St. Louis—						
April, 1917 .....	415	1,115	397	8	405	393
<b>Total:</b>						
April, 1917 .....					3,480	3,252
<b>Montana (Municipal):</b>						
Butte—						
April, 1916 .....	404	(2)	548	(2)	194	371
April, 1917 .....	(2)	360	520	(2)	400	350
<b>New York (Municipal):</b>						
New York City—						
April, 1916 .....	2,248	2,509	2,094	(2)	2,988	1,871
April, 1917 .....	2,663	3,051	2,307	2,342	3,885	2,189

<sup>1</sup> Number applying for work.

<sup>2</sup> Not reported.

<sup>3</sup> Exclusive of Detroit, not reported.

1014 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, 1916 AND 1917—Continued.

UNITED STATES—Continued.

State and city.	Applica- tions from employers.	Persons asked for by employ- ers.	Persons applying for work.		Persons referred to posi- tions.	Position filled.
			New registra- tions.	Renew- als.		
<b>New York (State):</b>						
Albany—						
April, 1916 .....	507	649	464	250	638	312
April, 1917 .....	728	1,028	605	309	1,041	597
Brooklyn—						
April, 1916 .....	1,422	2,126	1,456	349	2,093	1,164
April, 1917 .....	1,934	2,506	1,499	1,761	2,702	1,698
Buffalo—						
April, 1916 .....	909	1,152	466	251	1,029	673
April, 1917 .....	1,493	2,397	1,875	157	2,566	1,727
Rochester—						
April, 1916 .....	1,204	1,814	808	280	1,473	751
April, 1917 .....	1,874	2,616	977	571	2,192	1,325
Syracuse—						
April, 1916 .....	893	1,093	599	102	996	716
April, 1917 .....	1,536	2,336	865	274	1,672	1,231
<b>Total:</b>						
April, 1916 .....					9,217	5,487
April, 1917 .....					14,058	8,767
<b>Ohio (State-City):</b>						
Akron—						
April, 1916 .....	(1)	1,905	556	1,226	1,384	1,141
April, 1917 .....	(1)	2,542	766	1,509	1,945	1,710
Cincinnati—						
April, 1916 .....	(1)	2,410	1,695	2,933	2,061	1,312
April, 1917 .....	(1)	2,697	1,645	2,717	2,264	1,662
Cleveland—						
April, 1916 .....	(1)	9,258	2,208	7,079	6,651	5,511
April, 1917 .....	(1)	8,105	2,655	8,655	7,089	5,943
Columbus—						
April, 1916 .....	(1)	2,819	745	2,297	2,437	2,011
April, 1917 .....	(1)	3,137	717	2,603	2,709	2,330
Dayton—						
April, 1916 .....	(1)	1,258	717	1,195	1,041	893
April, 1917 .....	(1)	1,589	772	1,112	1,318	1,115
Toledo—						
April, 1916 .....	(1)	3,764	1,103	2,118	2,516	2,176
April, 1917 .....	(1)	3,219	1,132	3,269	2,853	2,415
Youngstown—						
April, 1916 .....	(1)	1,267	648	918	1,112	974
April, 1917 .....	(1)	1,520	735	986	1,402	1,267
<b>Total:</b>						
April, 1916 .....					17,202	14,018
April, 1917 .....					19,580	16,442
<b>Oklahoma (State):</b>						
Enid—						
April, 1916 .....	105	(1)	2 132	(1)	(1)	99
April, 1917 .....	156	156	134	(1)	129	129
Muskogee—						
April, 1916 .....	163	(1)	2 187	(1)	(1)	170
April, 1917 .....	250	262	2 383	(1)	262	262
Oklahoma City—						
April, 1916 .....	311	(1)	2 283	(1)	(1)	247
April, 1917 .....	253	449	2 451	(1)	447	404
Tulsa—						
April, 1916 .....	337	(1)	2 324	(1)	(1)	246
April, 1917 .....	742	1,312	2 1,194	(1)	1,194	1,194
<b>Total:</b>						
April, 1916 .....					(1)	762
April, 1917 .....					2,032	1,989
<b>Oregon (municipal):</b>						
Portland—						
April, 1916 .....	(1)	1,655	795	(1)	(1)	1,345
April, 1917 .....	1,118	2,534	898	(1)	(1)	2,130

<sup>1</sup> Not reported.

<sup>2</sup> Number applying for work.

## MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 1015

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, 1916 AND 1917—Continued.

UNITED STATES—Continued.

State and city.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to po- sitions.	Positions filled.
			New registra- tions.	Renew- als.		
<b>Pennsylvania (State):</b>						
Altoona—						
April, 1916.....	(1)	213	103	(1)	67	53
April, 1917.....	(1)	164	37	19	29	24
Harrisburg—						
April, 1916.....	(1)	436	146	46	286	246
April, 1917.....	(1)	366	276	111	299	269
Johnstown—						
April, 1916.....	(1)	306	117	79	101	44
April, 1917.....	(1)	145	71	13	70	58
Philadelphia—						
April, 1916.....	(1)	438	709	119	366	243
April, 1917.....	(1)	1,009	643	476	767	655
Pittsburgh—						
April, 1916.....	(1)	1,488	612	11	495	455
April, 1917.....	(1)	1,436	584	161	636	553
<b>Total:</b>						
April, 1916.....					1,315	1,041
April, 1917.....					1,801	1,559
<b>Rhode Island (State):</b>						
Providence—						
April, 1916.....	359	456	294	283	(1)	456
April, 1917.....	243	364	302	146	(1)	364
<b>Texas (municipal):</b>						
Dallas—						
April, 1916.....	144	195	45	(1)	218	195
April, 1917.....	211	468	273	9	479	407
Fort Worth—						
April, 1916.....	82	115	127	63	93	88
April, 1917.....	159	343	1,193	69	214	204
<b>Total:</b>						
April, 1916.....					311	283
April, 1917.....					693	611
<b>Virginia (municipal):</b>						
Richmond—						
April, 1916.....	198	359	572	(1)	387	159
April, 1917.....	246	378	451	(1)	468	194
<b>Washington (Federal-municipal):</b>						
Tacoma <sup>4</sup> .....						
<b>Washington (municipal):</b>						
Everett—						
April, 1916.....	(1)	(1)	(1)	(1)	(1)	408
April, 1917.....	(1)	(1)	(1)	(1)	(1)	360
Seattle—						
April, 1916.....	2,898	4,993	(1)	(1)	5,126	4,589
April, 1917.....	4,259	6,829	(1)	(1)	6,936	6,344
Spokane—						
April, 1916.....	2,460	2,460	40	(1)	2,154	2,154
April, 1917.....	2,016	2,968	(1)	(1)	2,942	2,899
<b>Total:</b>						
April, 1916.....					(1)	7,151
April, 1917.....					(1)	9,573

<sup>1</sup> Not reported.

<sup>2</sup> Includes 172 transient applicants.

<sup>3</sup> Includes 963 unwritten registrations.

<sup>4</sup> Figures for this office are carried regularly in the REVIEW under the subject "Federal employment work of the Department of Labor," to which the reader is referred.

1016 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, 1916 AND 1917—Concluded.

UNITED STATES—Concluded.

State and city.	Applica- tions from em- ployers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to po- sitions.	Positions filled.
			New registra- tions.	Renew- als.		
Wisconsin (State):						
La Crosse—						
April, 1916.....	192	254	1 299	( <sup>2</sup> )	225	112
April, 1917.....	185	223	283	( <sup>2</sup> )	182	109
Milwaukee—						
April, 1916.....	2,239	3,901	1 2,840	( <sup>2</sup> )	3,014	2,110
April, 1917.....	2,284	3,906	3,196	( <sup>2</sup> )	3,389	2,435
Oshkosh—						
April, 1916.....	256	324	1 296	( <sup>2</sup> )	234	180
April, 1917.....	199	249	215	( <sup>2</sup> )	149	97
Superior—						
April, 1916.....	325	443	1 557	( <sup>2</sup> )	473	300
April, 1917.....	329	681	639	( <sup>2</sup> )	640	177
Total:						
April, 1916.....					3,946	2,702
April, 1917.....					4,360	2,818

CANADA.

Quebec (Province):						
Montreal—						
April, 1917.....	349	987	3 360	( <sup>2</sup> )	556	461
Quebec—						
April, 1916.....	( <sup>2</sup> )	81	3 152	( <sup>2</sup> )	( <sup>2</sup> )	66
April, 1917.....	( <sup>2</sup> )	247	3 175	( <sup>2</sup> )	( <sup>2</sup> )	120
Total:						
April, 1916.....					( <sup>2</sup> )	( <sup>2</sup> )
April, 1917.....					( <sup>2</sup> )	581

<sup>1</sup> Number of registrations.

<sup>2</sup> Not reported.

<sup>3</sup> Number applying for work.

FEDERAL EMPLOYMENT WORK OF THE DEPARTMENT OF LABOR.

Inclusive of activities in cooperation with various State and municipal employment offices, the Division of Information of the Bureau of Immigration of the Department of Labor placed 36,459 persons in employment during March, 1917, as compared with 18,367 during February, 1917. Incomplete returns for April—reports from the offices in Newark, N. J., and Jacksonville, Fla., and their subbranches not having been received in time to be tabulated—show a total of 49,702 persons placed during the month.

The following statement of the work of the 19 different zones, covering the whole country, gives details for February and March, 1917.

MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 1017

SUMMARY OF ACTIVITIES OF UNITED STATES EMPLOYMENT SERVICE FOR THE MONTHS OF FEBRUARY AND MARCH, 1917.

Zone number and office.	Opportunities received.				Applications for employment.					
	Applications for help.		Persons applied for.		Applications received.		Referred to employment.		Number actually employed	
	February.	March.	February.	March.	February.	March.	February.	March.	February.	March.
1. Boston, Mass. ....	5	6	157	16	48	52	5	6	5	6
2. New York, N. Y. <sup>1</sup> .....	5,306	9,822	8,443	12,978	7,944	11,124	7,687	12,983	4,855	8,390
Buffalo, N. Y. <sup>2</sup> .....	798	1,220	1,779	790	2,010	1,292	1,571	1,907	1,131	1,357
Total .....	6,104	11,042	10,222	13,768	9,954	12,416	9,258	14,890	5,986	9,747
2a. Newark, N. J. ....	1,004	( <sup>3</sup> )	3,443	( <sup>3</sup> )	2,443	( <sup>3</sup> )	2,123	( <sup>3</sup> )	2,060	( <sup>3</sup> )
Orange, N. J. ....	179	( <sup>3</sup> )	473	( <sup>3</sup> )	319	( <sup>3</sup> )	246	( <sup>3</sup> )	195	( <sup>3</sup> )
Jersey City, N. J. ....	41	( <sup>3</sup> )	608	( <sup>3</sup> )	611	( <sup>3</sup> )	487	( <sup>3</sup> )	431	( <sup>3</sup> )
Total .....	1,224	( <sup>3</sup> )	4,524	( <sup>3</sup> )	3,373	( <sup>3</sup> )	2,856	( <sup>3</sup> )	2,686	( <sup>3</sup> )
3. Philadelphia, Pa. ....	192	198	602	466	890	608	794	597	739	526
Pittsburgh, Pa. ....	39	33	1,439	746	700	777	429	439	350	354
Wilmington, Del. ....	19	39	( <sup>3</sup> )	63	154	144	174	171	148	145
Total .....	250	270	2,041	1,275	1,744	1,529	1,397	1,207	1,237	1,025
4. Baltimore, Md. ....	106	111	629	159	319	300	174	203	174	203
5. Norfolk, Va. ....	18	15	277	20	99	91	85	70	26	15
6. Jacksonville, Fla. ....	1	1	1	50	11	22	1	2	1	2
Miami, Fla. ....	1	4	2	11	34	40	2	11	2	11
Savannah, Ga. ....	2	4	6	25	17	51	4	22	4	18
Charleston, S. C. ....	2	2	2	7	35	37	21	18	21	18
Mobile, Ala. ....					15	4				
Total .....	6	11	11	93	112	154	28	53	28	49
7. New Orleans, La. ....	61	55	120	250	320	303	315	330	75	59
Gulfport, Miss. ....		3		3	68	57				
Memphis, Tenn. ....	17	24	30	414	27	239	17	205		
Total .....	78	82	150	667	415	599	332	535	75	79
8. Galveston, Tex. ....	5	4	6	7	16	31	13	13	13	13
Houston, Tex. ....					41	33				
El Paso, Tex. ....					2					
Big Springs, Tex. ....		1		1						
Albuquerque, N. Mex. ....	1		50							
Total .....	6	5	56	8	59	64	13	13	13	13
9. Cleveland, Ohio. ....	50	48	94	72	79	88	75	64	21	19
10. Chicago, Ill. ....	522	759	2,977	3,987	2,657	3,297	2,392	3,024	2,136	2,905
In cooperation with Illinois Free Employment Office .....		4,977		11,161		12,775		12,119		9,033
Detroit, Mich. ....	92	85	373	361	323	318	323	318	323	318
Sault Ste. Marie, Mich. ....	5	4	17	419	51	56	22	25	21	21
In cooperation with Michigan Free Employment Office .....		345		3,640		3,595		3,595		3,595
Indianapolis, Ind. ....	190	264	355	511	620	603	351	493	278	456
Total .....	809	6,434	3,722	20,079	3,651	20,644	3,088	19,574	2,758	16,328
11. Minneapolis, Minn. ....	29	67	35	79	28	204	11	26	11	26
12. St. Louis, Mo. ....	296	585	831	1,086	435	503	634	581	617	537
Kansas City, Mo. ....	484	984	923	1,737	807	939	834	1,598	674	1,403
Omaha, Nebr. ....	466	597	663	1,122	786	1,209	721	1,113	579	989
Total .....	1,246	2,166	2,417	3,945	2,028	2,651	2,189	3,292	1,870	2,929
13. Denver, Colo. ....	17	10	17	8	102	96	35	25	15	6

<sup>1</sup> Inclusive of activities in cooperation with the State and municipal employment offices.

<sup>2</sup> Inclusive of activities in cooperation with the State employment office.

<sup>3</sup> Not reported.

1018 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

SUMMARY OF ACTIVITIES OF UNITED STATES EMPLOYMENT SERVICE FOR THE MONTHS OF FEBRUARY AND MARCH, 1917—Concluded.

Zone number and office.	Opportunities received.				Applications for employment.					
	Applications for help.		Persons applied for.		Applications received.		Referred to employment.		Number actually employed	
	February.	March.	February.	March.	February.	March.	February.	March.	February.	March.
14. Helena, Mont. ....	5	1	5	1	15	4	5	.....	5	.....
Moscow, Idaho .....	3	3	3	4	16	2	3	1	3	1
Total .....	8	4	8	5	31	6	8	1	8	1
15. Seattle, Wash. ....	104	185	151	322	1,328	1,427	125	208	108	198
Aberdeen, Wash. ....	7	9	44	38	202	152	47	38	44	38
Bellingham, Wash. ....	123	224	303	418	298	306	299	332	275	299
Everett, Wash. ....	2	11	2	22	16	17	2	4	1	3
North Yakima, Wash. ....	244	451	343	689	608	875	343	660	308	594
Spokane, Wash. ....	81	124	127	186	374	309	110	169	105	168
Tacoma, Wash. ....	299	603	840	1,352	1,054	1,443	816	1,271	801	1,257
Walla Walla, Wash. ....	75	175	95	250	516	477	95	225	78	138
Total .....	935	1,782	1,905	3,277	4,396	5,006	1,837	2,907	1,720	2,695
16. Portland, Oreg. ....	693	1,126	896	1,379	1,075	1,631	766	1,449	728	1,377
Astoria, Oreg. ....	9	20	18	39	380	206	10	35	9	33
Total .....	702	1,146	914	1,418	1,455	1,837	776	1,484	737	1,410
17. San Francisco, Cal. ....	385	397	496	596	760	894	487	639	323	389
Sacramento, Cal. ....	.....	5	.....	7	.....	86	.....	7	.....	6
Reno, Nev. ....	26	50	38	99	38	99	40	100	38	99
Total .....	411	452	534	702	798	1,079	527	746	361	494
18. Los Angeles, Cal. ....	43	12	52	13	283	127	42	19	25	9
San Diego, Cal. ....	426	577	717	917	727	763	801	1,280	611	909
Phoenix, Ariz. ....	.....	1	.....	5	.....	5	.....	5	.....	5
Total .....	469	590	769	935	1,010	895	843	1,304	636	923
19. Washington, D. C. ....	.....	114	.....	567	.....	724	.....	510	.....	491
Grand total .....	12,473	24,355	28,482	47,093	29,701	48,435	23,537	46,910	18,367	36,459

CONCILIATION WORK OF THE DEPARTMENT OF LABOR, APRIL 16 TO MAY 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 April 16, 1917, and May 15, 1917, in 42 labor disputes. The companies involved, the number of employees affected, and the results secured, so far as information is available, were as follows:

MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 1019

STATEMENT SHOWING NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, SUBSEQUENT TO APR. 15, 1917.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Threatened strike, teamsters, Philadelphia, Pa.			Pending.
Strike, boiler makers and helpers, Grasselli Chemical Co., Grasselli, N. J.			Do.
Controversy, machinists, Pittsburgh, Pa.			Do.
Threatened strike of paper hangers, painters, and decorators (130 firms involved), Philadelphia, Pa.	400		Adjusted.
Threatened strike, machinists and other shop trades, Nickel Plate R. R., Cleveland, Ohio.	500	1,007	Do.
Strike, railway clerks and baggage men, Washington Terminal Co., Washington, D. C.	43		Pending.
Controversy, marine trades, New York, N. Y.			Do.
Strike, Western Drop Forge Co., Marion, Ind.	300		Adjusted.
Strike, aluminum workers, Aluminum Ore Co., East St. Louis, Ill.	700	1,300	Pending.
Controversy, shoe manufacturers and unions, Lynn, Mass.	{ 8,000-		Do.
Strike, Llewellyn Iron & Steel Co., Torrance, Cal.	9,000		Do.
Threatened strike, molders, Downington Manufacturing Co., East Downington, Pa.	300		Do.
Threatened strike of building trades, Clarksburg, W. Va.	24	150	Do.
Threatened strike, iron and steel workers, Whitaker-Glessner Co., Martins Ferry and Portsmouth, Ohio, and Wheeling, W. Va.			Adjusted.
Controversy, Baltimore & Ohio R. R. Co. and its machinists, Baltimore, Md.			Do.
Threatened strike, Atlantic Works, East Boston.	50	275	Do.
Controversy, Lehigh Sewer Pipe & Tile Co., Lehigh, Iowa, and Plymouth Clay Products Co., Fort Dodge, Iowa, and several other clay products concerns in Iowa.	800		Unable to adjust.
Strike of boys, McKee Glass Co. and Westmoreland Specialty Co., Jeannette, Pa.	900	2,000	Adjusted.
Strike, Locomobile Co. of America, Bridgeport, Conn.			Pending.
Threatened strike, pattern makers, Westinghouse shops, Cleveland, Ohio, and Trafford City, Pa.			Do.
Threatened strike, boiler makers, helpers, and other employees, Standard Oil Co. refining works, Cleveland, Ohio.	150	150	Do.
Controversy, Vermont Central R. R. Co. and its maintenance of way employees, St. Albans, Vt.			Adjusted.
Controversy, American Locomotive Co., Schenectady and Dunkirk, N. Y.			Do.
Strike of coal miners, 6 mines owned by Hoffa Bros. Coal Co., Chapman Coal Mining Co., Hampshire Big Vein Coal Co., the Caledonia Coal Co., the Phoenix & Georges Creek Coal Mining Co., West Virginia.	325		Do.
Strike of dye sinkers, Dodge Bros. plant, Detroit, Mich.	60		Pending.
Strike, mechanical employees, Boston & Albany R. R. Co., Boston and vicinity.			Do.
Controversy, New York, New Haven & Hartford R. R. Co. and its clerks, New Haven, Conn.	2,250		Adjusted.
Strike, The Vulcan Detinning Co., Streator, Ill.	49		Adjusted (settled before arrival of commissioner).
Strike of bakers, Philadelphia, Pa.			Pending.
Controversy between Drawn Steel Co. and its employees, Beaver Falls, Pa.	1,200		Adjusted.
Lockout, Imperial Works, Oil City, Pa.			Pending.
Strike of boiler makers and helpers, contract shops, Duluth, Minn., and Superior, Wis.			Do.
Controversy between Newport News Shipbuilding & Dry Dock Co. and its machinists, Newport News, Va.			Do.
Threatened strike, General Electric Co., Schenectady, N. Y.			Do.
Strike, car workers, New York Central R. R. Co., Clearfield, Pa.	185		Do.
Controversy between Washington Steel & Ordnance Co., Giesboro Point, D. C.			Do.
Threatened strike, coal miners, Minga Hollow, Claiborne, Tenn.			Do.
Strike, Riverdale plant, Hales-Edwards Co., Chicago, Ill.			Do.
Controversy, Anaconda Copper Co. and boilermakers and iron workers, Anaconda, Butte, and Great Falls, Mont.			Do.

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STATEMENT SHOWING NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR, THROUGH ITS COMMISSIONERS OF CONCILIATION, SUBSEQUENT TO APR. 15, 1917—Concluded.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Strike of coal miners, West Virginia:			
Flemington field—			
Maryland Coal Co., Wendell.....	1,200	.....	Adjusted.
Simpson Creek Coal Co., Simpson.....			
Stafford Gas Coal Co., Simpson.....			
Pitts Vein Coal Co., Flemington.....			
White Horse Coal Co., Flemington.....			
Robinson & Phillips—			
Delmar mine.....			
Davis mine.....			
Rosemont Coal Co., Rosemont.....			
Harrison Coal Co., Rosemont.....			
Thin Vein field—			
Merchant's Coal Co., Tunnelton.....	800	.....	Do.
Allbright Smokeless Coal Co., Tunnelton.....			
Austin Coal & Coke Co., Austin.....			
Gorman Coal & Coke Co., Austin.....			
Hiorra Coke Co., Hiorra.....			
Virginia-Maryland Coal Co., Newburg.....			
Horchler Coal Mining Co., Newburg.....			
Preston Coal Co., Independence.....			
Gordon B. Lake Coal Co., Hardman.....			
(Names of 2 or more firms representing small operations in field about Tunnelton have not been secured.)			
Strike, Liberty Lace & Netting Works, New York, N. Y.....			Pending.

The following cases have been disposed of:

- Strike at Harland & Hollingsworth plant, Wilmington, Del. Unable to adjust.
- Strike, Rex & Co., Philadelphia, Pa. Adjusted.
- Controversy between Omaha World Herald and International Pressmen and Assistants' Union. Adjusted.
- Strike, cement workers, La Salle and Oglesby, Ill. Unable to adjust.
- Strike, machinists, New Haven, Conn. Unable to adjust.
- Strike, mechanical department, Boston & Albany Railroad, Boston, Mass. Adjusted.
- Controversy between Missouri Pacific Railroad and signal men, St. Louis. Adjusted.
- Controversy between Great Northern Railroad Co. and its carmen, St. Paul. Unable to adjust.
- Lockout, Indianapolis Street Railway Co., Indianapolis, Ind. Unable to adjust.
- Strike, Hightstown Rug Co., Hightstown, N. J. Adjusted.
- Lockout, Clark Bros. Machine Shop, Olean, N. Y. (Company out of business.)
- Strike, McAlester-Edwards Coal Co., McAlester, Okla. Unable to adjust.
- Controversy between Gulf & Ship Island Railroad Co. and its carmen, Gulfport, Miss. Adjusted.
- Strike, Robt. Palmer Shipyards, Noank, Conn. Strike declared off.
- Controversy, M. K. & T. Railroad Co. and carmen, Denison, Tex. Adjusted.
- Strikes, porcelain works (10 potteries), Trenton, N. J. Two adjusted.
- Strike, pattern makers, New London Ship & Engine Co., New London, Conn. Strike averted.
- Controversy between Electrical Contractors and International Brotherhood of Electrical Workers, Richmond, Va. Adjusted.
- Strike of pattern makers, Crane Co., Chicago, Ill. Adjusted.
- Controversy, tin-plate department of Wheeling Steel & Iron Co., Wheeling, W. Va. Adjusted.

Strike, pattern makers, Otis Steel Co., Cleveland, Ohio. Adjusted.

Strike, garment workers, Chicago, Ill. Adjusted.

Strike of fishermen, Gloucester and other points in Massachusetts. Adjusted.

## IMMIGRATION IN MARCH, 1917.

The number of immigrant aliens admitted to the United States during the year 1916 was 355,767, as compared with 258,678 for the year 1915, an increase of 97,089, or 37.5 per cent. There was also an increase from month to month during 7 of the 12 months in 1916. During the current year the figures for the first three months show a considerable decrease from month to month. The decrease from the preceding month for January, February, and March, 1917, is 19.9, 22.3, and 19.4 per cent, respectively. During April, however, the number of immigrant aliens admitted shows an increase of 32.3 per cent over the number admitted in March. These facts are brought out in the following table:

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES IN SPECIFIED MONTHS, 1913 TO 1917.

Month.	1913	1914	1915	1916	1917	
					Number.	Per cent increase over preceding month.
January.....	46,441	44,708	15,481	17,293	24,745	<sup>1</sup> 19.9
February.....	59,156	46,873	13,873	24,740	19,238	<sup>1</sup> 22.3
March.....	96,958	92,621	19,263	27,586	15,512	<sup>1</sup> 19.4
April.....	136,371	119,885	24,532	30,560	20,523	32.3
May.....	137,262	107,796	26,069	31,021	.....	.....
June.....	176,261	71,728	22,598	30,764	.....	.....
July.....	138,244	60,377	21,504	25,035	.....	.....
August.....	126,180	37,706	21,949	29,975	.....	.....
September.....	136,247	29,143	24,513	36,398	.....	.....
October.....	134,440	30,416	25,450	37,056	.....	.....
November.....	104,671	26,298	24,545	34,437	.....	.....
December.....	95,387	20,944	18,901	30,902	.....	.....

<sup>1</sup> Decrease.

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Classified by races, the number of immigrant aliens admitted to and emigrant aliens departing from the United States during March, 1916 and 1917, was as follows:

IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTING FROM THE UNITED STATES, MARCH, 1916 AND 1917.

Race.	Admitted.		Departed.	
	March, 1916.	March, 1917.	March, 1916.	March, 1917.
African (black).....	148	358	97	70
Armenian.....	139	41	6	1
Bohemian and Moravian.....	56	5	3	1
Bulgarian, Serbian, Montenegrin.....	342	93	1	2
Chinese.....	126	115	169	121
Croatian and Slovenian.....	92	19	8	.....
Cuban.....	98	202	78	65
Dalmatian, Bosnian, Herzegovinian.....	5	23	.....	.....
Dutch and Flemish.....	456	198	40	41
East Indian.....	4	4	2	3
English.....	2,584	1,730	413	150
Finnish.....	547	170	27	28
French.....	1,909	1,235	175	92
German.....	1,070	644	49	21
Greek.....	2,913	593	338	93
Hebrew.....	1,210	528	3	11
Irish.....	1,131	760	114	25
Italian (north).....	426	191	97	67
Italian (south).....	3,810	1,103	312	245
Japanese.....	647	841	53	20
Korean.....	23	13	2	1
Lithuanian.....	64	11	.....	.....
Magyar.....	95	21	39	1
Mexican.....	2,209	1,644	24	31
Pacific Islander.....	.....	3	.....	.....
Polish.....	457	126	10	.....
Portuguese.....	1,107	1,198	135	25
Roumanian.....	100	35	5	4
Russian.....	.....	222	202	102
Ruthenian (Russniak).....	69	100	1	1
Scandinavian.....	2,033	410	207	146
Scotch.....	989	643	101	29
Slovak.....	46	2	5	.....
Spanish.....	904	1,676	176	226
Spanish-American.....	148	225	38	40
Syrian.....	39	84	16	9
Turkish.....	5	13	1	1
Welsh.....	61	49	11	2
West Indian (except Cuban).....	36	93	12	36
Other peoples.....	839	91	42	17
Not specified.....	.....	.....	473	591
Total.....	27,586	15,512	3,485	2,318

OFFICIAL PUBLICATIONS RELATING TO LABOR.

UNITED STATES.

CALIFORNIA.—*Seventeenth Biennial Report of the Bureau of Labor Statistics, 1915, 1916. Sacramento, 1917.* 386 pp.

This report is noted on pages 900 to 902 of this issue of the REVIEW.

COLORADO.—*State Inspector of Coal Mines, fourth annual report, 1916. Denver, 1916.* 63 pp.

During the year 1916 there were 44 fatal accidents in coal mines, 39 of which were underground and 5 surface accidents. The number killed per 1,000 employed was 3.35 in 1916, as against 5.10 in 1915, 7 in 1914, and 8.60 in 1913. There were 889 non-fatal accidents during the year, of which 183 were classed as serious, 202 as minor, and 504 as trivial.

CONNECTICUT.—*Department of Factory Inspection. Fifth biennial report, for the two years ending September 30, 1916. Hartford, 1916. 98 pp.*

The following statement shows the activities of the department for the two years, 1915 and 1916:

	1915	1916
Total factories inspected.....	2,135	2,830
Factory inspections and reinspections.....	3,218	3,942
Employees in factories inspected.....	305,359	320,597
Bakeshop inspections and reinspections.....	695	724
Mercantile elevator inspections.....	749	801
Mercantile establishments inspected.....	2,145	2,390
Female employees in mercantile establishments inspected.....	9,376	9,808
<b>Orders issued to factories by male deputies:</b>		
Fire protection.....	61	166
Improvements in building.....	105	139
Sanitation and hygiene.....	492	833
Safeguards for machinery.....	725	1,018
Factory elevators.....	129	278
Miscellaneous.....	45	86
Total.....	1,557	2,520
Orders issued to factories by woman deputy.....	195	258
Orders for bakeshops.....	369	652
Orders for mercantile elevators.....	286	288
Orders for mercantile establishments.....	142	196

During the two years the department investigated 250 complaints as to working conditions or illegal employment. Many of these were anonymous and many had no basis. Seventeen prosecutions were brought. No general statistics are given as to the workings of the compensation law, as the compensation commissioners are charged with the duty of compiling such statistics.

The department recommended the passage of laws requiring that notice be given to the factory-inspection department before an elevator is put into operation, with penalty for operating elevators before they are inspected; that suction-threading shuttles be prohibited in weaving industries; that standard length of cut in cotton mills be established, so as to give fair basis for determining wages; that nominal charge be made for bakeshop certificates and that they be made valid for one year only; that doors in manufacturing, mechanical, and mercantile establishments open outward; that new hazardous employments into which children have been brought as a result of the war be included among prohibited trades; that lists of prohibited occupations be printed on school certificates in order to guard against illegal employment of children; that inasmuch as the present law has been construed to the contrary, manufacturing and mechanical establishments be put on the same basis as mercantile establishments regarding nightwork of women and children; that separate toilets be provided for men and women in manufacturing and mechanical establishments.

DISTRICT OF COLUMBIA.—*Board of Commissioners. Committee on supply of food. Report. [Washington, 1917.] 16 typewritten pages.*

This report is noted on pages 957 to 959 of this issue of the MONTHLY REVIEW.

IDAHO.—*Department of Farm Markets. Laws governing the Farm Markets Department as amended and passed by the Fourteenth Session of the Idaho Legislature, 1917. Boise, April 5, 1917. 16 pp.*

— *Second Annual Report of the Director of Farm Markets. Boise, December 15, 1916. 27 pp.*

This department conducts a market-news service for the purpose of assisting growers to get a better understanding of market conditions, how prices are made up, the influence of factories on price making, and such other educational information along these lines as will develop in growers a better knowledge of the market.

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IDAHO.—*Eighteenth Annual Report of the Mining Industry of Idaho, for the year 1916.* pp. 56.

The greater part of this report is devoted to chapters reviewing mining progress and metallurgical advancements; metal productions for 1916 by counties; and annual output for Idaho since 1898. During the calendar year 1916 there were reported to the State mine inspector's office 13 fatal accidents as against 23 during 1915, a reduction of 43 per cent for the year. Based on a working force of 6,500 men, this represents a loss of two men per thousand employed during the year. A text statement regarding each of the fatal accidents occurring in 1916 is given. There were also reported to the inspector of mines during the year 219 serious accidents involving the loss of over 14 days to each of the victims and 672 minor injuries involving loss of 1 to 14 days.

INDIANA.—*State Board of Education. Educational bulletin No. 18. Indiana survey series No. 3. Report of the Richmond, Indiana, survey for vocational education, conducted cooperatively by the Indiana State Board of Education, the Board of Education of Richmond, and Indiana University. Indianapolis, Dec. 1, 1916. 599 pp. Illustrated.*

This report will be reviewed in the next issue of the MONTHLY REVIEW.

KANSAS.—*Inspector of Coal Mines. Report of the inspection of coal mines and coal production, July 1, 1914, to December 31, 1915. Topeka, 1916. 186 pp.*

During the fiscal year ending June 30, 1915, there were 28 fatal accidents and 703 nonfatal accidents in and around the coal mines of Kansas. In the six months from July 1, 1915, to January 1, 1916, there were 15 fatal accidents, or 1 fatal accident for every 243,419 tons of coal produced. In the same six months there were 459 nonfatal accidents, an average of 1 for every 7,955 tons of coal produced. Detailed accounts are given of each of these accidents, but no summary is made indicating the severity of the nonfatal accidents.

MASSACHUSETTS.—*Bureau of Statistics. Labor injunctions in Massachusetts, with compilation of statutes relating to labor disputes. Labor Bulletin No. 117, Boston, 1916. 254 pp.*

A review of this bulletin is given on pages 911 and 912 of this number of the MONTHLY REVIEW.

— *Report of the commission on the cost of living. February, 1917. [Boston, 1917.] 14 pp.*

A digest of this report appears on pages 959 and 960 of this issue of the MONTHLY REVIEW.

— *Report of the special committee on social insurance, February, 1917. House No. 1850. 311 pp.*

A digest of this report appeared in the MONTHLY REVIEW for March, last, pages 426 to 430, but since it was prepared from advance copy no statement was included of the scope of the appendixes which were later made a part of the report. Appendix A is the text of a proposed health insurance act, followed by a report on health insurance provisions among labor unions and fraternal organizations, based on replies to a questionnaire sent out to 1,425 of the former and 314 of the latter. Of the 399 labor unions replying, 32.3 per cent paid some sort of sickness benefit, and of 113 fraternal societies replying 64.6 per cent paid sickness benefits. The average benefit paid by the unions was \$4.30 per week for 14.5 weeks. The proposed bill makes the amount approximately \$7.23 for 26 weeks. This appendix also includes a report on accident insurance in Massachusetts during 1915, a report on investigations made by Dr. R. W. Walcott on health insurance in Massachusetts, a report of a study of plans and types of establishment funds and employees' benefit associations in the Middle West, and a descriptive account of national health insurance systems in foreign countries. Appendix B is an account of national old-age pension systems in foreign countries, and Appendix C is an act to establish a State board of employment, followed by a statement of unemployment in the organized industries in Massachusetts, 1908-1916.

Appendix D contains a proposed act to regulate hours of labor in continuous industries, followed by a descriptive account of unemployment insurance in foreign countries.

MASSACHUSETTS.—*Report of the State Board of Labor and Industries relative to the investigation of prevailing conditions in hotels and restaurants. House No. 1533. 17 pp. Bill accompanying the petition of the Massachusetts State Branch of the American Federation of Labor to provide for one day's rest in seven for employees of hotels and restaurants. House No. 51. 1 p. [Boston, 1917.]*

This report is noted on pages 905 to 907 of this issue of the MONTHLY REVIEW.

—*Special report of the Board of Education relative to training for injured persons, February, 1917. House No. 1733. Boston, 1917. 62 pp.*

A digest of this report may be found on pages 848 to 851 of this issue of the MONTHLY REVIEW.

MINNESOTA.—*Fifteenth Biennial Report of the Department of Labor and Industries of the State of Minnesota, 1915-1916. Minneapolis, 1916. 195 pp.*

A review of Part I of this report, which relates to the administration of the workmen's compensation law, will appear in the next issue of the MONTHLY REVIEW. Other sections of the report deal with occupational diseases in Minnesota, apprenticeship in Minneapolis, factory and mine inspections, report on women and children, public employment offices, labor organizations, the division for the deaf connected with the department, and special investigations relating to private employment agencies, wage collections by the department, State institutions, and boarding camps.

The investigation of occupational diseases did not show any alarming situation in the State as far as industrial poisonings were concerned, although industrial poisonings, particularly from lead, exist to some extent. The results of the study in connection with the Minneapolis survey for vocational education are given in Part III of the report. As a result of this report the Dunwoody School of Minneapolis effected arrangements with a number of trades to combine school with shop training as a substitute for the existing systems of apprenticeship. These understandings were of two types: (1) Those which provide for the training of the boy in day school and placing him in trade; (2) those which provide for the training of the boy who has already become an apprentice.

The bureau of factory inspection made inspections of 8,027 establishments. The blockings in switches, frogs, and guardrails of 924 railroad yards and terminal points were also inspected. There were 870 elevators inspected outside of the three large cities, besides 501 special inspections of scaffolding, ladders, and other apparatus on building operations. The creamery inspectors inspected the machinery in 497 creameries.

The bureau of women and children inspected 2,888 establishments in 108 cities and towns, especial attention being given to the needs of the women and children employed. In addition to this, the bureau of women and children made 1,554 of the 3,216 special investigations which were made on complaints received or upon the initiative of the department. The following orders were issued by the bureau of factory inspection and the bureau of women and children:

To safeguard machinery.....	10,573
Platforms, stairs, and passageways.....	1,328
Elevators and hoistways.....	549
Fire protection.....	829
Corn shredders and corn huskers.....	29
Sanitation and hygiene.....	709
Miscellaneous.....	1,454
Orders issued on recommendation of creamery inspectors.....	459
Orders issued in manual training departments of schools.....	190

The section relating to women and children deals with conditions of employment of women; child labor permits; truancy; street trades; and welfare work. A number

of recommendations were made by the superintendent of the bureau of women and children to remedy certain of the conditions pointed out. During the two years 1914 to 1916, 46,287 positions were secured by the public employment offices for males, and 40,605 for females.

The chapter on labor organizations gives statistics of membership, working hours, and wages, together with statistics of strikes and lockouts.

MONTANA.—*Second biennial report of the Department of Labor and Industry, 1915-1916. Helena. 76 pp.*

A considerable portion of this report is devoted to statistics of manufactures in the State, covering capital invested, yearly output, number of skilled and unskilled employees, hours of labor, and average daily wages. Statistics showing the operations of free employment offices of the State are also given. In 176 metalliferous mines inspected in 1915, employing 15,000 men, there were 39 fatal and 25 nonfatal accidents; in 180 mines employing 16,500 men in 1916 there were 62 fatal and 28 nonfatal accidents. Fatal accidents per 1,000 men employed thus showed an increase from 2.60 to 3.75 in the two years.

NEBRASKA.—*Fifteenth biennial report, Bureau of Labor and Industrial Statistics, 1915-1916. Lincoln, November, 1916. 243 pp.*

Presents sections relating to the gathering of statistics; board of mediation and intervention; child labor commission; minimum wage commission; the labor movement; assessed valuations; classification of mortgages; casualty, surety and miscellaneous insurance; commercial banks; surplus shipments of State products; manufacturing statistics; the workmen's compensation law; regulation of employment agencies.

Since the passage of the law creating the board of mediation and arbitration no request had been made up to the time of the report for mediation or intervention in a strike or lockout, nor had there been any meetings of the child labor commission. According to reports filed in 1914, there were 225 children under 16 years of age employed in the industries of the State, and in 1915 there were 119 such children. No appropriation was made originally for the administration of the minimum wage law, passed in 1913, but \$500 was appropriated in 1915. No meeting of the minimum wage commission, however, has ever been held and no complaint has been filed with that commission.

The section on the labor movement gives a brief account of labor organization in Nebraska, and of the more important labor difficulties that have occurred in the State.

The following statement is taken from the manufacturing statistics as reported to the bureau in 1914 and 1915:

	1914	1915
Establishments reporting.....	1,300	864
Capital invested.....	\$46,428,992.45	\$59,757,325.07
Total male employees.....	19,367	16,603
Total female employees.....	3,894	3,521
Total paid in wages.....	\$15,898,798.87	\$13,460,273.01
Average daily wage, males.....	\$2.42	\$2.29
Average daily wage, females.....	\$1.49	\$1.42
Total value of stock used.....	\$133,636,536.34	\$129,452,316.65
Total value of production.....	\$161,972,974.38	\$186,852,100.54

A considerable section of the report is devoted to the operation of the workmen's compensation law, which became effective December 1, 1914. This will be treated in a special article in the MONTHLY REVIEW for July.

NEW JERSEY.—*Workmen's Compensation Aid Bureau. Report for the year 1916. Trenton, 1916. 25 pp.*

A review of this report will appear in the MONTHLY REVIEW for July.

NEW YORK.—*Department of Labor. Court decisions on workmen's compensation law, July 1, 1914, to August 1, 1916. Special bulletin No. 81, issued under the direction of the Industrial Commission. March, 1917. 406 pp.*

This report will be reviewed in the next issue of the MONTHLY REVIEW.

NEW YORK.—*Department of Labor. Industrial Commission. Special bulletin. Fatal accidents due to falls in building work, their frequency, causes and prevention. Prepared by the Bureau of Statistics and Information. No. 80. March, 1917. [Albany, 1917.] 26 pp.*

A digest of this bulletin appears on pages 979 and 980 of this issue of the REVIEW.

— *State Department of Education. Division of Agricultural and Industrial Education. The Rochester plan of immigrant education. Albany, 1916. 26 pp.*

As suggested in the title, this report describes the Rochester plan of immigrant education as conducted in the evening schools, the purpose being to teach prospective Americans to speak, read, and write English, to give practical information and safety suggestions, to prepare for intelligent and patriotic American citizenship, and to make the foreign born familiar with our laws, customs, and home ideals, with our great Americans, and with the fundamental facts of our history.

— (NEW YORK CITY).—*Department of Education. Eighteenth Annual Report of the City Superintendent of Schools, 1915-16. Reports on high schools for the year ending July 31, 1916, October 25, 1916, 50 pp.; Report on evening schools for the year ending July 31, 1916, December 13, 1916, 110 pp.; Kindergartens, music, sewing, cooking, modern languages in elementary schools, January 10, 1917, 62 pp.; Community and recreation centers, vacation schools, vacation playgrounds, February 5, 1917, 47 pp.; Preparation for trades, February 14, 1917, 44 pp.; Art in the high schools, February 28, 1917, 58 pp.; Drawing in elementary schools, shop work in elementary schools, March 28, 1917, 26 pp.; Continuation and part-time cooperative classes, March 28, 1917, 168 pp.; Organization and extension of prevocational training in elementary schools, March 28, 1917, 150 pp.; Reports on special classes, March 28, 1917, 138 pp.*

From these reports the following facts are gathered: (1) There were 9 evening trade schools with a total enrollment of 12,377 and an average attendance of 2,956. (2) There were 73,462 pupils under instruction in cooking classes in 12 prevocational schools; 11,561 girls were graduated from the sewing classes. (3) There were 24 vacation schools with 148 teachers, an enrollment of 7,176 children, and an aggregate attendance of 191,595. (4) In the Manhattan Trade School for Girls the average enrollment was 722, with an average attendance of 632; most of the girls took courses in dressmaking. Of 283 who completed the courses 190 were placed at dressmaking positions, 131 of these beginning work with a wage of \$6 per week. (5) The average daily attendance at the vocational school for boys was 672; the pupils who graduated in 1915-16 received an initial average wage in trades of \$9.82. (6) In June 1915, 472 girls were taking prevocational training in the elementary schools. (7) At the close of the school year, 1916, there were 482 pupils in the part-time cooperative classes, the amount of money earned by these pupils being \$56,666.28.

— — *Department of Health. Division of Industrial Hygiene. Industrial poisons and irritants originating in dusty trades. 1916.*

This is a large chart prepared by E. H. Lewinski-Corwin on the basis of Dr. W. Gilman Thompson's work on Occupational Diseases, and put out by the New York City Department of Health, Division of Industrial Hygiene. Irritant dusts and fibers are scheduled under three general heads: (I) Insoluble inorganic dusts, including cement, asphalt, diamonds, and other precious stones, glass, meerscham, metal filings, stones and earths, carbon, pumice, sand, silica; (II) Soluble inorganic dusts, including oxalic acid and ultramarine; and (III) Organic dusts and fibers, including ashes and street dust, carpet dust, cotton, feathers, felt, flax and hemp, fur, grain and flour, horn, bone, and shell; celluloid combs, horsehair and other hair, jute, rags and paper, straw and broom, sugar, tobacco, wood, and wool. The chart indicates the industries in which these dusts prevail, showing the effects produced by them upon the respiratory system and, where any effect is produced, upon the nervous system, the gastrointestinal, cardiovascular, hæmatogenous, and genitourinary functions, and upon the skin and mucous membrane, the bones and muscles, and the eyes and ears. Some general effects produced are also noted.

OREGON.—*Seventh biennial report of the Board of Inspectors of Child Labor of the State of Oregon, 1915-1916. Salem, 1917. 13 pp.*

During the two years 1915 and 1916 age and schooling certificates (working permits) were issued to 783 children under 16 years of age, 614 permits were refused, 649 vacation and 21 special permits granted, and 1,011 age records were verified by the inspectors. There were 262 business firms which employed children under 16.

PENNSYLVANIA.—*Report of the Department of Mines, 1915. Part I, Anthracite. Harrisburg, 1916. 594 pp.*

Contains detailed report of the production of anthracite mines, accidents, and other information, by districts, following a brief statement in which it is noted that the total production of coal in Pennsylvania in 1915 was 246,797,774 net tons (2,000 pounds), 89,377,706 being by anthracite mines and 157,420,068 by bituminous mines. This is an increase in the total production over 1914 of 9,823,603 net tons. There were 588 fatal accidents (12 less than in 1914) and 995 nonfatal accidents (46 less than in 1914) in anthracite mines. The number of employees inside and outside the mines was 177,339, or 3,560 less than in the preceding year, and the average days worked were 221. The lives lost per 1,000 employees in 1915 was 3.32, the same as in 1914, and 0.14 less than the average for the 17-year period ending with 1915. The lives lost per 1,000,000 tons mined was 6.58, or 0.81 less than the average for the 17-year period; and the production of coal per life lost was 152,003, or 16,775 more than for the average for the 17-year period. Most of the fatal accidents were caused, as usual, by falls of slate and roof and by cars, 50.9 per cent being due to the former and 15.4 per cent to the latter. There were 51 minors killed at the mines, 39 being inside and 12 outside.

SOUTH DAKOTA.—*Third biennial report of the Commissioner of Immigration for the State of South Dakota. 1916. 32 pp.*

Reports the work done by the board of immigration during the two years beginning July 1, 1914, and ending June 30, 1916. The department of immigration is designed to be the advertising agency of the State and the development medium as far as the State may work along that line, and also the bureau, aside from the State college, for compiling and disseminating agricultural data. Inasmuch as the State has no labor department, labor employment matters are referred to the department of immigration.

Under the head "Labor legislation" the report states that South Dakota has probably less of what is known as "labor legislation" than any other State. The only statute of this kind that South Dakota has covers hours for the employment of women and sanitary regulations.

TEXAS.—*Fourth biennial report. Bureau of Labor Statistics, 1915-1916. Austin, 1917. 119 pp.*

This report gives a brief text statement of the more important work of the bureau, dealing with a variety of topics, such as unemployment; employment and unemployment agencies; laws relating to woman and child labor; State aid for manufacturing; factory inspection; cost of living, etc. The main portion of the report is made up of statistical tables of wages, hours, cost of living, etc. Data of wages and hours for the most important industries are given by cities of more than 25,000 population, excepting El Paso, where conditions were abnormal, due to border troubles. Data for all industries surveyed and not given by cities are shown in a general table, which includes cities of 10,000 or more population.

Tables are also given showing monthly earnings and cost of living. These are based on data collected during the month of May, 1915, at a time when all business and industrial enterprises were feeling the full force of the industrial depression that swept over the State at that time, and they show the effect of the depression on labor.

Other tables show monthly earnings and cost of living of unmarried males and females. Data for these were taken at random in various parts of the State, and furnish a reasonable average of the living expenses and earnings of both males and females who are entirely dependent upon themselves, but who have no dependents.

WEST VIRGINIA.—*Report of the State Compensation Commissioner to June 30, 1916.* 139 pp.

This report will be reviewed in the next issue of the MONTHLY REVIEW.

WISCONSIN.—*Notice of hearing before the Wisconsin Railroad Commission and the Wisconsin Industrial Commission, re investigation and hearing on motion of the commissions with reference to standards for the construction and operation of electric systems.* Madison, February, 1917. 26 pp.

This notice presents a brief set of rules covering in a general way the National Electrical Safety Code recently issued by the United States Bureau of Standards for consideration at a public hearing in Milwaukee, held March 16, 1917.

UNITED STATES.—*Annual report of the Commissioner of Internal Revenue for the fiscal year ended June 30, 1916, with statistical tables.* Washington, 1916. 254 pp.

Particular attention is here directed to that portion of this report dealing with personal income tax, the amount collected from this source being \$67,943,594.63 as against \$41,046,162.09 for the preceding year, and \$28,253,534.85 for the fiscal year 1914. The total number of returns filed by and for individuals was 374,652 for the tax year 1915 as against 357,515 for the tax year 1914. The report comments on the difficulties experienced in the administration of the act and suggests some changes that might be made to remedy the situation, in the following words:

\* \* \* The Government can not rely entirely upon a taxpayer's declaration as to his own tax liability; that the laws and regulations for the collection of customs duties and internal taxes have uniformly made provision by which the Government may secure the fullest information; that the income tax law alone has failed to provide this necessary aid to a proper collection of the Government's revenues; that "withholding at the source" is valuable chiefly for the information it supplies; that for the successful enforcement of the income-tax law it is essential that further provision be made for locating the individuals who have taxable incomes and for ascertaining the taxable amounts; that a shifting of the requirements of individual returns from a basis of net income to that of gross income would be of material aid to administrators; that it is not practicable to rely wholly upon the income-tax field force to secure information that will disclose complete tax liability; but that in the absence of an extended authority for securing information and requiring returns of gross income it is essential to a completely satisfactory collection of income tax under existing methods that adequate facilities be granted by a further increase of the field personnel.

Definite amendments to the income-tax law noted in the report include the following:

To require returns of annual gross income of \$3,000 or over instead of annual net incomes of like amounts.

To require that returns of income be filed in the district in which the person making the return or for whom the return is made has his legal residence.

To provide authority to enable United States consular officers to make, under the direction of the commissioner, examinations and inquiries concerning the incomes of American citizens residing within their respective consular districts and compel attendance and testimony within the power of the United States similar to the provisions applicable to examinations and investigations provided to be made by internal-revenue agents.

That the provisions of law requiring the withholding of the normal income tax at the source of the income be repealed, except as to the income of nonresident alien individuals and corporations received from sources in the United States, and that a provision for information at the source be provided.

UNITED STATES.—*Congress. House. Amendment of the Seamen's Act. Hearings before the Committee on the Merchant Marine and Fisheries on H. R. 10026, to amend sections 2, 13, and 14 of an act entitled "An act to promote the welfare of American seamen," etc., approved March 4, 1915.* Washington, 1916. 131 pp.

— *House Committee on Labor. Hearings on H. J. Res. 354, authorizing and directing the Department of Labor to conduct an investigation of wages and labor conditions in the coal-mining industry, and to report thereon to Congress as early as possible.* Washington, 1917. 21 pp.

UNITED STATES.—*Congress. Senate. Hearing before the Committee on Agriculture and Forestry, United States Senate (65th Cong., 1st sess.), relative to the proposal for increasing the production, improving the distribution, and promoting the conservation of food supplies in the United States. Washington, 1917. Part 1. 73 pp. Part 2. 198 pp.*

— — — *Safety of employees and travelers on railroads—railway clearance. Hearings before the subcommittee of the Committee on Interstate Commerce on S. 3194. April 25, 27, and May 3, 1916. Washington, 1916. 87 pp.*

— *Department of the Interior. Bureau of Mines. Technical Paper 82. Oxygen Mine Rescue Apparatus and physiological effects on users, by Yandell Henderson and James W. Paul. Washington, 1917. 102 pp. Illustrated.*

The purpose of this report is to show the inherent limitations of present types of oxygen breathing apparatus and to indicate improvements in design that will more nearly meet the requirements of use against poisonous or irrespirable gases; to explain how by relatively slight changes of adjustment the present types of apparatus may be made more efficient and much safer; and to present the results of practical tests and of actual use of breathing apparatus. It has been prepared from the viewpoint of the engineer and the physiologist in the accumulation of material, and in theoretical and practical tests of the conclusions reached. The bureau found that the wearing of the present-day self-contained breathing or rescue apparatus, some including helmets, involves grave danger owing to the fact that the makers have as yet failed to meet certain mechanical and physiological needs in construction. Particularly the bureau aims in the report to end the demand for helmets, at least in their present form. It is expected that the publication of the report will lead to early and marked improvements, since it makes available to inventors and manufacturers the physiological information essential to the construction of better types of apparatus. It also aims to show the purchasers of apparatus the qualities requisite for efficiency and reliability and the methods of testing these qualities, and will thus lead the users of apparatus to an intelligent demand for improvement in the instruments upon which their lives depend. After two years of experimentation, the bureau has devised an apparatus to be used in mine rescue work which, while it must be subjected to continued practical usage in mines by rescue corps to insure mechanical durability and efficiency under these conditions before it is officially approved, has been found to meet physiological requirements, that is, the supply of oxygen, the absorption of carbon dioxide, and the elimination of objectionable heat. The report gives the general requirements for breathing apparatus and concludes with some recommendations for improving present devices.

— — — *Technical Paper 106. Asphyxiation from Blast-furnace Gas, by Frederick H. Willcox. Washington, 1916. 69 pp. Illustrated.*

To increase safety and efficiency in metallurgical industries, this pamphlet has been issued by the Bureau of Mines. It discusses the nature and causes of poisoning from blast-furnace gas, which contains 20 to 30 per cent by volume of carbon monoxide; itemizes the places where gas may be expected to be encountered, suggests safeguards, and points out the precautions to be taken in working about gaseous places. Blast-furnace gas, it is stated, is peculiar in that it is very poisonous and under certain conditions, as when it has been cleaned, is without color or odor by which it may be detected.

Gas is practically always present about the top and bottom of the furnaces, frequently in such small proportion that it is not evident to the physical senses, but at the same time in sufficient volume to cause asphyxiation if breathed for 20 or 30 minutes. Proportions sufficient to cause asphyxiation or gassing also occur with more or less frequency all along the route of the gas, at the stoves and boilers, when they are taken off for cleaning or repairs, inside of gas mains, downcomers, and other parts of the gas-main system, at sand or goggle valves, and during repairs to the charging equipment and stock line. \* \* \*

Though poisoning by blast-furnace gas usually results in nothing more serious than illness and severe headache, it may cause unconsciousness and even death, and

realization of the dangers and a strict observance of every precaution is essential in undertaking any work in an atmosphere contaminated by furnace gas, or in sending men into confined places, from which it would be difficult to escape, in proximity to material emitting gas or difficult to ventilate.

It is stated that of the fatal accidents at blast-furnace plants approximately 14 per cent, and of nonfatal accidents but 4 per cent, are caused by asphyxiation. The average time lost per accident for all nonfatal accidents is approximately five days, and for asphyxia alone is less than two days.

UNITED STATES.—*Department of Labor. Children's Bureau. Administration of child labor laws. Part 2. Employment certificate system of New York, by Helen L. Sumner and Ethel E. Hanks. Bureau Publication No. 17. 164 pp.*

A digest of this publication is given on pages 985 to 987 of this number of the MONTHLY REVIEW.

— — — — *Maternal mortality from all conditions connected with childbirth, by Grace L. Meigs, M. D., Bureau Publication No. 19. 1917. 66 pp.*

A digest of this report appears on pages 985 to 987 of this number of the MONTHLY REVIEW.

#### FOREIGN COUNTRIES.

AUSTRALIA.—*Invalid and old-age pensions. Statement for the 12 months ended June 30, 1916. [Melbourne] 1917. 10 pp.*

Shows a total of 91,783 old-age pensions current on June 30, 1916, as compared with 90,892 current on June 30, 1915, an increase of 9.8 per cent. During the year 10,222 new pensioners were admitted, 58.1 per cent being women. On June 30, 1916, the number of invalid pensions current was 23,439, an increase of 3,022, or 14.8 per cent, over the preceding year. Here most of the new pensioners admitted during the year were men, 55.1 per cent. The total expenditure for all pensions was £2,859,765 13s. 1d. (\$13,917,049.56), and the cost of administration was £44,401 (\$216,077.47), or 15.5 per cent of the benefits paid. It is stated that the number of old-age pensioners per 10,000 of population, on June 30, 1916, was 186.1, and the number of invalid pensioners was 47.5. Eighty-seven per cent of the old-age pensioners and 93.7 per cent of the invalid pensioners were receiving the maximum of £26 (\$126.53) per annum.

— *Maternity allowances. Statement showing number of claims granted and rejected, expenditure, and cost of administration during the twelve months ended June 30, 1916. Melbourne, March 1, 1917. 3 pp.*

Shows a total of 131,943 claims paid, the amount granted being £659,715 (\$3,210,503.05), involving an administrative cost of £12,165 (\$59,200.97), or £1 16s. 11d. (\$8.98), for every £100 (\$486.65) of maternity allowance paid. In 1915 the claims paid amounted to 138,855, with a total expenditure of £694,275 (\$3,378,689.29) and an administrative cost of £12,900 (\$62,777.85).

BRAZIL (SÃO PAULO).—*Secretaria da Agricultura, Commercio e Obras Publicas do Estado de Sao Paulo. Boletim do Departamento Estadual do Trabalho, No. 21. Sao Paulo, 1917. 551-741 pp. 1 folder.*

The principal chapters of this bulletin are rural hygiene, labor exchanges, proposed compensation laws, safety and hygiene in labor, eight-hour day in Uruguay (the law and decree), accidents in Sao Paulo, prices of prime necessity, labor market, etc.

CANADA.—*Department of Agriculture. Patriotism and production. Ottawa, 1915. 157 pp.*

This "agricultural war book," published six months after the beginning of the war by direction of the minister of agriculture for the use of instructors and the press, is an appeal to the farmers of Canada to make the wisest use of every acre under their control. The volume consists of addresses by authorities in the various Provinces, of short surveys of the countries of the world, and of articles on such subjects as cereals, dairying, live stock, seed, finance, and farm labor.

In a consideration of Germany's resources it is stated that "Germany may truly be called a garden. The science of plant nutrition has been mastered, and its farms have a greater producing capacity per acre of almost every staple crop than any other country enjoys."

The report contains many production and other statistical tables.

CANADA.—*Department of the Secretary of State. Copies of proclamations, orders in council and documents relating to the European war. Ottawa, 1915. 209 pp., appendixes, 142 pp. First supplement, 1915, pp. 210-526, appendixes, pp. 143-350. Second supplement, 1916, pp. 527-1050, appendixes, pp. 351-537.*

A compilation for the convenience of persons dealing with such matters as contraband, trading with the enemy, and allied subjects. The initial volume contains proclamations, orders, and despatches appearing in the Canada Gazette and those of interest to Canadians appearing in the London Gazette. The first supplement includes unpublished orders, and the second contains all orders in council relating to the war, published or unpublished, which have general application. Included (pp. 788-790) is the order in council establishing the Military Hospitals Commission mentioned in pamphlets reviewed below. The 21 appendixes give the public documents referred to in the various orders and proclamations, including several of special interest, and there is a chronological index of the whole.

—*House of Commons Debates. Care of returned soldiers—proposed parliamentary committee. Vol. LI, No. 14, February 5, 1917. pp. 483-500.*

With what success the machinery suggested in the report of the Military Hospitals Commission noted below is meeting the situation is here described in parliamentary debate by the prime minister and a member of the soldiers' aid commission of Ontario. The course taken with regard to a man from the time he becomes invalided or wounded until his rehabilitation is outlined.

Of the approximately 300,000 men who have left Canada, about 10,600 had returned to date and about 12,000 were invalided in England. The statement is made that there are practically no returned soldiers out of employment; and, further, that "not more than 3 per cent have expressed their willingness to go on the farm."

A federal committee to deal with the subject was promised by the prime minister.

—*Military Hospitals Commission. The provision of employment for members of the Canadian expeditionary force on their return to Canada. Ottawa, 1915. 53 pp.*

This pamphlet contains a report to the president of the Canadian Military Hospitals Commission, October, 1915, on the proposed means of providing employment and a new start in life for returned soldiers and sailors. Local committees, convalescent homes, trade instruction, a credit system, land grants, the cooperation of employers and of the press, each has its place in the constructive plan. The question of farming is dealt with at some length. "Large numbers of men who previously followed an indoor occupation \* \* \* will, after their long open-air life in the trenches, desire to find employment on the land. If one-tenth of those who come back are willing to become farmers or market gardeners, the returns from their labors during the first three years will more than compensate the country as a whole for any expense that may be incurred on their behalf."

The several appendixes describe the excellent work being done for the blind or those otherwise disabled in England and on the Continent.

An article on "Vocational training for disabled soldiers in Canada," as provided by the Military Hospitals Commission, is given on pages 867 to 874 of this number of the MONTHLY REVIEW.

CANADA.—*Order of his excellency the administrator in council of the 10th of November, 1916, respecting the high cost of living, as amended by order in council of 29th November, 1916. [Ottawa, 1916.] 3 pp.*

Consists of regulations respecting the price, sale, control, storage, transport, etc., of the necessities of life.

CANADA.—*Pensions granted and money allowances made to members of Canadian expeditionary forces since beginning of war to February 16, 1917. Sessional paper No. 185. Ottawa, 1916. 83 pp.*

This report is digested on pages 874 to 876 of this issue of the MONTHLY REVIEW.

CHILE.—*Oficina del Trabajo. Año IV, Nos. 8 and 9, 1914; No. 10, 1915. Santiago de Chile.*

No. 8, 1914.—Report of the parliamentary commission on the needs of the Provinces of Tarapaca and Antofagasta; conditions of living and labor of employees in the salt works; the problem of increased cost of bread; organization of labor exchanges; report of an investigation on workmen's dwellings; industrial accidents, 1913 and first quarter of 1914; strike statistics; industrial statistics; labor of mines, metallurgical establishments, and salt works; accidents on public works; discussion of amendments to the accident law; legislation; salaries and wages of officials and employees of State-owned railroads; foreign notes.

No. 9, 1914.—Labor and living conditions in Iquique; activities of labor exchanges; cost of living; labor accidents; compensations for accidents in public work; day labor in the service of State railroads; industrial statistics; general report of accidents in 1914; accident insurance legislation; foreign notes.

No. 10, 1915.—Operations of labor exchanges; unemployment, results of an investigation; accidents in public work; general report of accidents; cost of living; legislation; foreign notes.

FRANCE.—*Ministère du Travail et de la Prévoyance Sociale. Statistique générale de la France. Resultats statistiques du recensement général de la population effectué le 5 Vol. 1, part 3. Population active. Paris, 1916. 183 pp. mars, 1911. Vol. 1, part 3. Population active. Paris, 1916. 183 pp.*

This volume contains the results of the occupational census of France taken in 1911. It will be discussed in a special article in the next number of the MONTHLY REVIEW.

GREAT BRITAIN.—*Defense of the Realm Regulations [monthly edition]. Edited by Alexander Pulling. London, March, 1917. 72 pp.*

This pamphlet reproduces as a single code the whole of the defense of the realm regulations in force March 31 of the present year. The orders relate to the occupation and control of land and buildings, the control of food supplies, securities, war material and means of production.\*

JAPAN.—*Department of Agriculture and Commerce. Thirty-second statistical report. [1915.] Three maps and 894 pp.*

Is solid tabular matter, giving statistics as to agriculture; commerce, industries, fisheries, mining, and forests. Also gives data relating to patents, utility models, designs and trade-marks; cooperative societies; trade association of staple articles; estimated expenditure for agricultural and industrial encouragement of local governments.

— *Cabinet Impérial. Bureau de la Statistique Générale. Résumé Statistique de l'Empire du Japon. 31 Année. Tokio, 1917. 227 pp. and charts.*

This volume contains the statistical information usually found in yearbooks. The tables are generally for a period of years, the more recent being 1914 and 1915.

NETHERLANDS.—*Centraal Bureau voor de Statistiek. Maandschrift. The Hague.*

February, 1917.—Review of the labor market, building trades, laundry, etc., fishing and dock labor, and the employment of interned soldiers to supply the demands for laborers; unemployment; operations of the labor bureau's labor exchange; labor disputes; employers' and laborers' organizations; minimum wages in government employment; prices and cost of living; report of the labor inspection bureau; accident and invalidity insurance; laborers' dwellings; judicial proceedings; foreign notes.

**SOUTH AUSTRALIA.**—*Statistical Register, 1915-16. Compiled from official records. Adelaide, 1916. 504 pp. [in 9 parts and sections, each pagged anew].*

Excepting only a very few pages, consists entirely of tabular matter relating to the following subjects: Population; production; interchange; law, crime, etc.; revenue and expenditure; religious, educational, and charitable institutions.

**SPAIN.**—*Boletín del Instituto de Reformas Sociales. Publicación Mensual. Madrid.*

*February, 1917.*—Report of the secretary's office and of the special divisions of that office; minutes of miners' association, and of the central commission of household necessities (distribution of coal); legislation, prohibiting increase in price of articles of prime necessity, regulating the price of bread, etc.; proposed legislation; foreign notes; strikes and lockouts in Great Britain; requiring mercantile and manufacturing establishments operating during the war period to pay families of mobilized persons a portion of their usual wages.

*March, 1917.*—Report of the secretary's office and of the special divisions; minutes of railroad workers' union, of the National Federation of Miners, and of the central commission of household necessities (the subjects discussed were price of bread, beer as an article of prime necessity, tax on wheat, requisition of the merchant marine, bread prices by amount of daily production, etc.); legislation; requisition of grain; proposed legislation; foreign notes; strikes and lockouts in France and Great Britain; civil service in Germany; proposed labor code in Cuba.

**SWEDEN.**—*Pensionsstyrelsen. År 1915. Stockholm, 1917. 75 pp.*

The main features of the general law on old-age pensions appear in the April, 1916, MONTHLY REVIEW, p. 106. This law was amended by an act promulgated June 8, 1915, and made applicable to those who on January 1, 1914, had reached the age of 67 years, or were 15 years of age at that date and who during 1913 had received 4 months' assistance from public, benevolent, or private funds, beginning with January 1, 1916. The present report covers the operations of the Swedish National Retirement Fund for the year 1915.

A census taken in 1914 shows that in the kingdom there were 3,425,900 persons from 15 to 66 years of age. Of these 1,659,600 were males and 1,766,300 were females; 963,300 resided in cities and 2,462,600 in rural districts. Approximately 186,000 were exempt from the provision of the law. Preliminary reports indicate the receipts from basic premiums paid by the insured persons to be 9,684,000 kr. (\$2,594,508) and 4,822,000 kr. (\$1,292,296) as additional premiums, a total of 14,506,000 kr. (\$3,886,804).

Under the voluntary provision of the law there were 538 persons who paid in premiums during the year 11,509 kr. (\$3,084.41). This sum is supplemented by one-eighth by the Government.

Pensions were granted during the years 1914 and 1915 to 103,394 persons, and the amount disbursed as pensions or as assistance was 6,211,715 kr. (\$1,664,639.62). The marked increase in the number of applications for pension during the last half of the year 1915 is due to the recent amendment of the law. The following table shows the number of pensions granted and the amount paid out as pensions since the establishment of the fund.

## NUMBER AND AMOUNT OF PENSIONS GRANTED SINCE THE ESTABLISHMENT OF THE SWEDISH NATIONAL RETIREMENT FUND.

Year.	Males.			Females.			Total.		
	Num-ber.	Amount of pension.	Aver- age pen- sion per person.	Num-ber.	Amount of pension.	Aver- age pen- sion per person.	Num-ber.	Amount of pension.	Aver- age pen- sion per person.
Under the law of 1913:									
1914.....	8, 645	\$132, 807	\$15. 36	19, 751	\$288, 636	\$14. 61	28, 396	\$421, 443	\$14. 84
1915.....	1, 667	31, 234	18. 74	2, 997	52, 716	17. 60	4, 664	83, 950	15. 29
Total.....	10, 312	164, 641	15. 91	22, 738	341, 352	15. 01	33, 060	505, 393	15. 29
Under the law of 1915:									
1916.....	25, 537	424, 432	16. 62	44, 797	734, 914	16. 40	70, 334	1, 159, 346	16. 48
Total.....	35, 849	588, 473	16. 41	67, 545	1, 076, 266	15. 94	103, 394	1, 664, 739	16. 08

SWEDEN.—*Sociala Meddelanden utgivna av K. Socialstyrelsen. Series F. Vol. XI, No. 2. Stockholm, 1917. pp. 147-259.*

Review of the labor market; report of the States' committees on unemployment, and on expenditures for living; unemployment in labor organizations, October, November, and December, 1916; opinions on the poor-relief laws; rents in Norway during the war; retail prices and cost of living in Sweden, Christiania, and Copenhagen; report of the labor inspection office, including industrial accidents; retail prices, cattle market, consumption of meat, etc.

SWITZERLAND (CANTON OF ZURICH).—*Kantonalen statistischen bureau. Die Berufswahler im Frühjahr 1916 aus der Volksschule ausgetretenen Schüler. Winterthur, 1917. 62 pp. (Statistische Mitteilungen betreffend der Kanton Zürich, Hft. 125.)*

Study by the statistical office of the Canton of Zurich relative to the choice of occupation by children leaving school during the year 1915-16.

## UNOFFICIAL PUBLICATIONS RELATING TO LABOR.

ARBUTHNOT, C. C. *Women's economic service in time of war. Western Reserve University. Bulletin, Vol. XX, No. 3, Cleveland, Ohio, April, 1917. 16 pp.*

An address delivered before the College for Women, Western Reserve University, April 14, 1917.

BENNETT, HELEN M. *Women and work. The economic value of college training. Appleton, New York, 1917. 286 pp.*

Discusses the relation of the college-educated woman to business and professional work. The author is convinced that one great difficulty in vocational work has been too intense study of fields of work and insufficient study of individuals. She therefore pleads for a consideration of the psychology of the girl as related to her occupation. The book is intended to aid employment managers, vocational advisers, social workers, and all who work with girls and young women; also young college graduates and other girls who are trying to decide upon a vocation.

BUREAU OF RAILWAY NEWS AND STATISTICS.—*Railway statistics of the United States of America for the year ending June 30, 1916. Prepared by Slason Thompson. Chicago, 1917. 148 pp.*

A summary of data submitted by 441 operating companies, comprising about 97 per cent of the operated mileage and over 98 per cent of the traffic. The traffic handled was 17 per cent greater in 1916 than in 1915, with an increase of less than 6 per cent in the number of persons employed. The 294,401 train-service employees received an average compensation of \$1,331 for the year; two large classes—260,255

section men and 16,150 crossing flagmen and gatemen—received, respectively, an average of \$477 and \$482 per man. Of the 441 roads making returns to the bureau, 302 report no passengers killed in train accidents in 1916, in spite of the enormous increase—almost 100,000,000—in the number of passengers carried. Notwithstanding an increase in the number of trainmen killed during the year, the lessening hazard is shown in the fact that in 1906 there was 1 trainman killed for each 124 employed; in 1911, 1 killed for each 182 employed; and in 1916, 1 killed for each 274 employed.

CHICAGO BOARD OF TRADE.—*Fifty-ninth annual report of the trade and commerce of Chicago, for the year ended December 31, 1916. Chicago, 1917. I-XXXV, and 1-194 pp.; also appendix with index, 1-141 pp.*

Gives detailed statistics of the trade and commerce of the city of Chicago in flour, grain, provisions, live stock, seeds, hides, wool, lumber, etc., with the daily current prices of the leading speculative products for the year 1916.

CLARK, LINDLEY D. *Constitutionality and construction of workmen's compensation laws. 1917. Washington, D. C. 138 pp.*

This pamphlet is a reprint of a portion of Bulletin No. 203 of the United States Bureau of Labor Statistics, with an added note on the recent decisions of the Supreme Court sustaining the laws of Iowa, New York, and Washington. It is a compact and comprehensive summary of the judicial determinations on the subject, and cites some 270 cases, including all of leading importance up to the time of issue. Numerous rulings of administrative commissions are also noted.

COLUMBIA UNIVERSITY. DIVISION OF INTELLIGENCE AND PUBLICITY.—*Columbia War Papers. Series I.*

No. 1. *Enlistment for the Farm, a message on how school children can aid the nation, by John Dewey. 10 pp.*

No. 2. *German Subjects Within Our Gates, some notes on the possibilities of internment, by the National Committee on Prisons and Prison Labor. 6 pp.*

No. 3. *Mobilize the Country-Home Garden, by Roscoe C. E. Brown. 6 pp.*

No. 4. *Our Headline Policy, an appeal to the press, by Henry B. Mitchell. 7 pp.*

No. 5. *Deutsche Reichsangehörige hier zu Lande (German subjects within our gates), vom National-Ausschuss für Gefängnisse und Gefängnisarbeit. 11 pp. (German and English.)*

No. 6. *Food Preparedness, by Henry R. Seager and R. E. Chaddock. 23 pp.*

No. 7. *How to Finance the War, by E. R. A. Seligman and R. M. Haig. 37 pp.*

No. 8. *Farmers and Speculators, a discussion of prices as a stimulant to production, and of the uses of speculation in war finance, by B. M. Anderson, jr. 8 pp.*

No. 10. *City Gardens, by Henry G. Parsons. 10 pp.*

No. 12. *Rural Education in War, how to organize high-school boys for farm work, by Warren H. Wilson. 8 pp.*

DEBATERS' HANDBOOK SERIES. *Selected articles on national defense, including compulsory military service. Volume II. Compiled by Agnes Van Valkenburgh. The H. W. Wilson Co., White Plains, N. Y., and New York City, 1917. 204 pp.*

Volume I was published in September, 1915. Volume II contains the best of the material published since Volume I was issued. The bibliography and reprints have been arranged in two divisions, national defense and compulsory military service. A brief is included for compulsory military service. Due to the great amount of material the bibliography is selected rather than exhaustive.

DUBLIN, LOUIS I. *Application of the statistical method to public-health research. Reprinted from American Journal of Public Health, Vol. 7, No. 1. 24 pp.*

This address on errors in statistical method follows the sequence of the usual investigation, from planning to analysis, and its rules may be applied to other than health research. A discussion by Earle B. Phelps, of the United States Public Health Service, is included in the pamphlet.

— *Increasing mortality after age 45. Reprinted from the Quarterly Publication of the American Statistical Association, March, 1917. 53 pp.*

In this paper the author endeavors to prove that the alleged increase in the death rate from so-called degenerative diseases is due to changes in race composition of the

population and in statistical practice. Data are presented which show the much higher death rate among the foreign than among the native born, and the decrease in the returns of ill-defined diseases in favor of specific and definite diagnosis.

DUBLIN, LOUIS I. *Present status of birth registration in American cities, and its relation to the infant mortality rate. Reprinted from the Transactions of the American Association for Study and Prevention of Infant Mortality. 1917. 14 pp.*

An address by the statistician of the Metropolitan Life Insurance Co. pointing out the incompleteness and defectiveness of present-day birth registration, as evidenced by a study of reports received from 144 representative cities.

FETTER, FRANK A. *Modern Economic Problems. New York, Century, 1917. 490 pp.*

This text book, by the professor of economics at Princeton University, discusses practical problems in economics, simply and in a nonpartisan way for the benefit of teachers, students, and lay readers. The contents are grouped under six general heads: Part I, Resources and economic organization; Part II, Money and prices; Part III, Banking and insurance; Part IV, Tariff and taxation; Part V, Problems of the wage system; Part VI, Problems of industrial organization.

Parts V and VI, of more interest than the others to the student of labor problems, among many things touch upon the following: Methods of remuneration, defining time, task, and piecework, premiums, and profit sharing; legislation regulating hours, wages, working conditions, child labor, housing and strikes; social insurance; immigration; agricultural problems; transportation; industrial monopoly, and socialism.

GIBBS, WINIFRED STUART. *The minimum cost of living. Macmillan, New York, 1917. 93 pp.*

This is a study of the household accounts of 75 families of limited income in New York City. The cost of rent, food, fuel, lighting, clothing, and sundries is given in detail for each family, and there is also a detailed study of the 75 dietaries. The conclusions drawn are significant because they are based on the actual expenses and needs of real families.

HAWAIIAN ALMANAC AND ANNUAL FOR 1917. *Compiled by Thomas G. Thrum. Honolulu, 1916. 205 pp.*

NATIONAL ASSOCIATION OF CLOTHIERS. *Proceedings of the twenty-first annual convention. New York, January 16 and 17, 1917. 124 pp.*

NATIONAL INSTITUTE OF SOCIAL SCIENCES. *Journal. Vol. III, January, 1917. 262 pp.*

Among the 20 or more papers by members included in this volume are Some problems in prison reform, by William J. Homer, describing the honor system under which the Great Meadow Prison, of which the author is agent and warden, is conducted, and Vocational guidance, by Lillian D. Wald, in which the head resident of Henry Street Settlement explains the giving of scholarships to children between 14 and 16 years of age, whereby they are enabled to learn a trade during these two "wasted years," \$3 a week being given from a fund subscribed to by persons interested in the work. This amount is somewhat less than the children might earn, but 150 boys and girls took advantage of the opportunity last year, and the number will be increased as funds permit.

Marcus M. Marks, president of the Borough of Manhattan, discusses briefly the joint trial board and other measures of cooperation between employer and employees in the borough government.

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION. *Bulletin No. 23. What is the Smith-Hughes bill providing Federal grants to vocational education? And what must a State do to take advantage of the Federal vocational education law? New York, March, 1917. 48 pp.*

This bulletin first presents a series of questions and answers covering the topic "What is the national vocational education act?" This is followed by a copy of the Smith-Hughes vocational education bill. Tables are given showing the Federal funds

available for each State, and there are chapters on the principles and policies of vocational education as a means for the educational conservation of children and the principles and policies that should underlie State legislation for a State system of vocational education. A form of bill for enactment by a State accepting the vocational education act of Congress of February 23, 1917, is also given.

ROBINSON, EMILY. *Vocational education and guidance of youth. Study outline series. H. W. Wilson Co., White Plains, N. Y., and New York City. 1917. 66 pp.*

Topics covering the subject of vocational education and guidance of children of public school age are given in outline and lists of books are appended from which information in connection with each topic may be obtained. The subjects treated include legislation, industrial education, industrial training for girls, cooperation of various agencies, commercial education, agricultural education, household arts, vocational guidance in public schools, vocational surveys, and the local program.

UNITED STATES STEEL AND CARNEGIE PENSION FUND. *Manager's sixth annual report, for 1916. 8 pp.*

Reports 3,002 active pension cases January 1, 1916, and 3,013 a year later, the amount disbursed for pensions during the 12 months being \$711,130, and 48 active benefit cases, reduced to 46 during the year, the disbursements amounting to \$15,811. The total disbursements during the year, including expense of administration, amounted to \$743,163. The administrative cost was 2.18 per cent of total disbursements.

WALTER, HENRIETTE R. *Munition workers in England and France. A summary of reports issued by the British Ministry of Munitions, Russell Sage Foundation, April, 1917. 48 pp. Price 20 cents.*

Gives a short account of the industrial difficulties in Great Britain following the outbreak of the war and leading to the creation of the Ministry of Munitions, the passage of the munitions of war act, and the appointment of the Health of Munition Workers Committee. Special consideration of the memoranda submitted by this committee is given. These memoranda have been analyzed in preceding numbers of the MONTHLY REVIEW, and are given in full in Bulletins 221, 222, and 223, just issued by the bureau. An account is also given of the report of the British mission appointed by the director general of recruiting for munitions work on the output of munitions in France, published in 1916 and analyzed in the MONTHLY REVIEW for June, 1916.

WILLIAMS, JOHN M. *An actual account of what we have done to reduce our labor turnover. 1917. 14 pp.*

In this address the secretary of Fayette R. Plumb (Inc.), of Philadelphia and St. Louis, outlines the establishment, operation, and results of the employment department inaugurated by his firm in July, 1916. "We have decreased our working force 10 per cent, reduced our working time almost 9 per cent, and increased our total shop production 10 per cent." Forty dollars, mentioned by various authorities as the average cost of replacing an experienced man by one who must be trained, is said to be much below the actual figure, this being in the case of one department described, \$100. A set of the forms used is included in the pamphlet.

WOOD, JUNIUS B. *The Negro in Chicago. Reprinted from the Chicago Daily News, 1916. 31 pp.*

A first-hand study, by a member of the staff of the Chicago Daily News, of the colored people of that city in business, the professions, and politics; of housing, vice, education, handicap, and opportunity; of employment, wages, and various labor conditions. The average weekly wage of the colored worker in the United States is said to be \$8.63, and Chicago attracts the negro on account of its higher standard. The canvass made by the Daily News showed that several classes of work in which numerous colored men or women are employed pay from \$10 to \$30 a week.

The Pullman Co., for years the largest single employer of colored labor in the United States, now is being approached by the stockyards, which employed more than 5,000 in 1916 and were daily adding to the number.

Though the American Federation of Labor has declared itself in favor of admitting colored men to the unions, few negroes are permitted to join local organizations in Chicago. The colored laborer, therefore, is eligible as a strike breaker, and where he has secured a foothold he generally remains.

There are said to be about 75,000 colored persons in Chicago, or about 3 per cent of the total population. The recent large emigration from the South has resulted in strenuous protests from that section, and the writer states that it is now "almost as difficult for a colored man to leave some parts of the South as it was in the day of the 'underground railroad' of 60 years ago."